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**2020-2021 CATALOG**

**LCCC’s Response to COVID-19**

To protect the safety of the LCCC community and best ensure compliance with local, state, and federal directives related to the COVID-19 pandemic, LCCC’s Spring 2020 courses were moved to remote delivery methods beginning on March 10, 2020.

This rapid response resulted in several shifts in LCCC’s standard operations, including movement of all courses and student services into remote delivery. LCCC acknowledges the impact of the COVID-19 pandemic on students’ own health and wellbeing, employment, and family responsibilities.


While these changes were implemented in the 2019-2020 LCCC catalog year, their impact may carry over into students progressing into the 2020-2021 academic year, and thus presented in this catalog for reference.

**Welcome to Lorain County Community College’s 2020-2021 Annual Catalog. This is the official Catalog of Lorain County Community College.**

At LCCC, we believe every student’s dream matters and it is our mission to help students achieve their goals. LCCC recognizes its students are juggling multiple roles while attending College, and offers services that support students from connection through completion using an integrated and holistic approach. We welcome students to not only use this resource as a guide, but also to reach out to us for assistance in accessing the services, exploring programs and navigating the policies listed within the Academic Catalog.

**About the Catalog**

**Assignment of Catalog**

The academic requirements for each student’s program of study is based on the catalog in effect when the student is initially admitted to Lorain County Community College. Catalog requirements are in place for a maximum of eight years.

Students may elect to complete their work under a more recent catalog than originally assigned, but must comply with all of the new requirements relevant to their program since that time.

Students who extend their study more than eight years from the date of initial admission will be subject to a new Catalog. Upon completion of the eighth catalog year, the student will be assigned to the most recent catalog and an additional eight years to complete their study under this new catalog.

Students who intend to earn a degree from Lorain County Community College are urged to complete their programs within five years from the time they begin. Currency of skill and knowledge is crucial for success. Some technical programs require completion within a shorter period because of accreditation, certification or licensure requirements. Consult with Enrollment Services or the academic division for more information about the time completion requirements for your program.

Students transferring to Lorain County Community College who maintain continuous enrollment (defined as attending at least two terms in an academic year) in a public higher education institution will have the option to select the course equivalencies documented and certified in Transferology (https://www.transferology.com/) as of the point of initial enrollment or at the point of transfer.
ABOUT LORAIN COUNTY COMMUNITY COLLEGE

Founded in 1963, Lorain County Community College is dedicated to providing quality, affordable training and education to meet the needs of our community.

Whether the goal is an associate degree, additional workforce training or an advanced degree, LCCC has a program to meet those needs.

LCCC is proud to serve as a cornerstone for Lorain County. The College provides the opportunity for students to complete:

- Associate degrees
- Short-term and one-year certificates
- Applied bachelor's degree
- Workforce training

Through LCCC's University Partnership, students can earn a bachelor's or master's degree from 14 Ohio universities and colleges.

LCCC keeps tuition low – currently one of the lowest tuition rates in Ohio – so students can graduate with the skills needed for employment – and not a lot of debt.

Your Success is Our Goal

An LCCC education puts graduates in position to succeed. In 2018 LCCC was named the top community college in the country for Excellence in Student Success by the American Association of Community Colleges (AACC). Achieving the Dream named LCCC a Leader College of Distinction in 2019 and awarded LCCC the Leah Austin Meyer Award (https://www.achievingthedream.org/awards-recognition/leah-meyer-austin-award/), the highest distinction awarded within the Achieving the Dream network, in 2020. These honors indicate that LCCC focuses on every aspect of student success, from redesigned advising models to creating program and career pathways that help our students complete their degree efficiently and cost effectively. Our goal is to make sure our students are successful – no matter how big their dreams.

President's Message

Let me be the first to welcome you to Lorain County Community College. Since 1963, we have been the community's college and I am proud to continue that tradition. Here at LCCC, you will find the programs you're looking for and the support you need to reach your goals. It's my philosophy that every student's dream matters, and I encourage you to reach for your dreams at your community college.

LCCC was established as Ohio's first community college with the goal to provide high quality, affordable and accessible education to all residents of Lorain County and the region. It's a mission we take seriously. Over the past 57 years, LCCC one in four Lorain County residents has been served by LCCC, impacting more than 50% of county households.

Your success is our first priority, and we understand that your journey is unique. With our flexible class options, specialized advising and many support services, we are ready to meet you where you are and help you get where you want to be. It's that holistic approach to student success that earned LCCC the Leah Meyer Austin Award in 2020, the highest distinction a college in the Achieving the Dream Network can earn for student success while reducing equity gaps. In 2018, LCCC was named First in the Nation for Student Success by the American Association of Community Colleges, and in 2019 LCCC was named one of the Top 150 Community Colleges in the country by the Aspen Institute.

LCCC's Vision 2025 Strategic Plan includes a goal we call 10,000 Degrees of Impact. That's our promise that by 2025, there will be 10,000 more people in Lorain County who earned degrees or certificates from LCCC. I am eager to see you accomplish your goals and for you to join that group of LCCC graduates.

If an advanced degree is on your list, LCCC's University Partnership program delivers more than 10 bachelor's and master's degrees from 14 Ohio colleges and universities – all available on our campus at a fraction of the cost. We are also proud to deliver the first applied bachelor's degree in microelectronic manufacturing, one of our many programs designed with direct input from local employers. Those connections allow LCCC students to form meaningful relationships with employers in their field, leading to good paying jobs close to home. In fact, more than 85% of LCCC graduates live and work in the region. Many students secure jobs before they graduate through internships and co-ops built into many academic programs that provide real-world experience.

Our caring team at LCCC is here for you, from your first time on campus, through graduation and into your career. Our campus is the hub of our entire community, and I hope you take some time to explore all that LCCC has to offer. I encourage you to get involved at your college and in your community. When we all work together, it's amazing what can be achieved.

On behalf of the entire LCCC family, I welcome you to your community college. Let's get started on your story today.

Marcia J. Ballinger, Ph.D.
President
Lorain County Community College

P.S. I want to hear from you! Please connect with me on Twitter and Instagram (@PresBallinger), and feel free to email me at president@lorainccc.edu.

Board of Trustees

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Accreditation and Memberships

For the most current accreditation and membership information, visit www.lorainccc.edu/about/lccc-accreditations-and-memberships/.

The Higher Learning Commission of the North Central Association of Colleges and Schools accredits Lorain County Community College to award the associate of arts, the associate of science, the associate of arts in teacher education, the associate of applied business, the associate of applied science, the associate of individualized studies, the associate of technical studies, the bachelor of applied science, competency-based education and certificates.

The Higher Learning Commission is located at:

230 South LaSalle Street, Suite 7-500
Chicago, IL 60604
Phone (800) 621-7440
Fax (312) 263-7462
Email at info@hlcommission.org, or visit www.ncahlc.org (https://www.hlcommission.org/).

- Lorain County Community College is accredited by the Higher Learning Commission through the Open Pathway.
- The associate degree nursing program is fully approved by the Ohio Board of Nursing (OBN), 17 South High Street Suite 660, Columbus, OH 43215-3947.
- The practical degree nursing is fully approved by the Ohio Board of Nursing (OBN), 17 South High Street Suite 660, Columbus, OH 43215-3947.
- The associate degree and practical nursing programs are accredited by Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road, NE, Suite 850, Atlanta, GA 30326, (404) 975-5020 or visit www.acenursing.org (http://www.acenursing.org/).
- The Nurse Aide Training Competency Evaluation Program (NATCEP) is approved by the Ohio Department of Health, 246 North High Street, Columbus, OH 43215-1204, (614) 752-8285 or email at natcep@odh.ohio.gov.
- The clinical laboratory science technology program is fully accredited by the National Accrediting Agency For Clinical Laboratory Science (NAACLS), 5600 North River Road, Ste. 720, Rosemont, IL 60018, (773) 714-8880 or visit https://www.naacls.org.
- The phlebotomy program is approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Road, Ste. 720, Rosemont, IL 60018, (773) 714-8880 or email at info@naacls.org.
- The radiologic technology program is fully accredited by the Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182, (312) 704-5300 or visit http://www.jrcert.org.
- The diagnostic medical sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.CAAHEP.org (http://www.caahep.org/)) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography, Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350 or visit http://www.caahep.org.
- Surgical technology programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 35 East Wacker Dr., Ste 1970, Chicago, IL 60601-2208, (312) 533-9355 or visit www.caahep.org (http://www.caahep.org/).
- The medical assisting program at Lorain County Community College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org (http://www.caahep.org/)) upon the recommendation of the curriculum review board of The American Association of Medical Assistants Endowment (AAMAE), Commission on Accreditation of Allied Health Education Programs, 20 North Wacker Drive, Ste 1575, Chicago, IL 60606-2903, (800) 228-2262.
- The emergency medical services courses (EMSB and EMSP) are accredited by the Ohio Department of Public Safety, Charles D. Shiple Building, 1970 West Broad Street, P.O. Box 182081 182073, Columbus, OH 43218-2081 2073, (614) 466-9447 or email at askems@dps.state.oh.us.
- The Physical Therapist Assistant Program at Lorain County Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314; telephone: (703) 706-3245; email: accreditation@apta.org; website: http://www.capteonline.org (http://www.capteonline.org/). If needing to contact the program/institution directly, please call (440) 366-7881 or email jmyers@lorainccc.edu.
- The occupational therapy assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929, (301) 652-2682 or visit www.acoteonline.org (http://www.aota.org/Education-Careers/Accreditation.aspx).
- The dental hygiene program is accredited by the Commission on Dental Accreditation of The American Dental Association, 211 E. Chicago Avenue, Chicago, IL 60611-2678, (312) 440-4653 or visit www.ada.org/100.aspx (http://www.ada.org/en/coda/accreditation?source=VanityURL/).
- The art program is accredited by the National Association of Schools of Art and Design Commission on Accreditation, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190, (703) 437-0700, email at info@arts-accredit.org (info%40arts-accredit.org?subject=). The computer maintenance and networking major is accredited by the Engineering Technology Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201, (410) 347-7700, or visit www.abet.org (http://www.abet.org/).
- The applied electronics major is accredited by the Engineering Technology Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201, (410) 347-7700, or visit www.abet.org (http://www.abet.org/).

The College holds memberships with:
- American Association of Collegiate Registrars and Admissions Officers;
- American Association of Community Colleges;
- American Library Association;
- American Society of Microbiology;
• American Society for Quality;
• Association of College Unions-International;
• Association on Higher Education and Disability (AHEAD);
• Association of Institutional Research;
• Association of Performing Arts Presenters;
• Association of Title IX Administrators (ATIXA);
• Council for Adult and Experiential Learning (CAEL);
• Community Colleges for International Development, Inc. (CCID);
• Council for Higher Education Accreditation;
• Council on Competitiveness;
• Institute for International Education (IIE);
• Midwest ACE (MWACE);
• Midwest Institute of International/Intercultural Education (MIIIE);
• NAFSA: Association of International Educators; National Academic Advising Association (NACADA);
• National Association for Campus Activities;
• National Association of College and Admissions Counselors;
• National Association of College Stores;
• National Association of Colleges and Employers (NACE);
• National Association for Community College Entrepreneurship (NACCE);
• National Association of Schools of Art and Design (NASAD);
• National Association of Student Financial Aid Administrators (NASFAA);
• National Association of Student Personnel Administrators;
• National Behavioral Intervention Team Association (NaBITA);
• National Career Development Association (NCDA);
• National Center of Academic Transformations;
• National Center for Welding Education and Training;
• National Coalition of Advanced Technologies Centers (NCATC);
• The National Council of LaRaza;
• National Council for Marketing and Public Relations (NCMPR);
• The National Council for Workforce Education;
• National Cyberwatch Center;
• National Junior College Athletic Association (NJCAA);
• National League of Nursing;
• National Science Teachers Association;
• National Institute for Staff and Organizational Development (NISOD);
• North Central Association;
• Northeast Consortium for Career Advancement;
• Ohio Academy of Science;
• Ohio Arts Presenters Network;
• Ohio Association for College Admission Counseling;
• Ohio Association of Community Colleges (OACC);
• Ohio Association of Community Colleges Human Resources;
• Ohio Association on Higher Education and Disability (Ohio AHEAD);
• Ohio Association for Institutional Research and Planning (OAIRP);
• Ohio Association of Student Financial Aid Administrators (OASFAA);
• Ohio Association of Two-Year Colleges;
• Ohio Campus Compact (OCC);
• Ohio Career Development Association (OCDA);
• Ohio Chief Student Affairs Officers (OCSSAO);
• Ohio Coalition of Associate Degree Early Childhood Programs;
• The Ohio Cooperative Education Association (OCEA);
• Ohio News Media Association;
• Ohio Peace Officer Training Academy;
• Phi Theta Kappa Society;
• Regional Information Technology Engagement Board;
• Society for Human Resources (CUPA-HR);
• Society of Manufacturing Engineers (SME);
• Society of Professional Journalists;
• United States Fab Lab Network (USFLN);
• The United States Institute of Theater Technology (USITT);
• University System of Ohio.

All 14 colleges and universities in Lorain County Community College's University Partnership are accredited through the Higher Learning Commission of the North Central Association of Colleges and Schools.

The College is authorized by the U.S. Department of Homeland Security, Immigration and Customs Enforcement to issue certification for non-immigrant students who wish to study in the United States.

Mission, Vision, Values and Priorities

Vision 2025
A New Strategic Plan for Lorain County Community College

10,000 Degrees of Impact
By 2025, 10,000 individuals will earn a LCCC degree or credential that will...

Impact Individuals and Families by
• Increasing earning potential.
• Providing opportunities to succeed in careers of interest and passion.
• Providing access to affordable higher education with no debt.
• Increasing personal growth and capacities to thrive in life and careers.
• Increasing economic mobility and financial security.
• Creating inspirational and aspirational ripple effect.

Impact Economy and Community by
• Making Lorain County a talent destination by increasing educational attainment that outpaces region and fuels economy.
• Providing business and industry access to work-ready talent and growth resources.
• Helping all communities prosper by increasing household incomes and home ownership, and engaging citizens.
• Advancing Lorain County as a valued place to live, learn, work and play.

Five Areas of Focus

1. Student Focused – Expand Participation
Prepare Working-Age Adults for New Economy
Expand outreach to increase the number of working age adults pursuing education and training in order to have access to and succeed in high-demand, good paying jobs.

Prepare Next Generation
Collaborate with K-12 to increase the number of high school students who graduate with college credit, reducing college debt and increasing their success as they pursue a college/career path after high school graduation.

2. Success Focused – Increase Completion and Academic Success

Offer Pathways to Emerging and In-Demand Jobs and Industries
Enhance existing and develop new programs and pathways to align with in-demand jobs and industries such as: advanced trades, advanced manufacturing, information technology, creative economy, artificial intelligence, healthcare, agriculture and the internet of things.

Ensure Equity for All Students – Break Down Barriers and Create Opportunities
Through a caring campus culture, meet students where they are and remove barriers while creating rich opportunities to help students reach their full potential.

Prepare Students with Future Ready and Soft Skills
Provide broad educational experiences to prepare students with capacities and skills to thrive in a changing world. Focus areas include lifelong learning, entrepreneurial mindset, creativity, strong communication and problem solving abilities, social responsibility, application of digital and technology skills, and an ability to adapt and change.

Make Education and Training More Accessible and Flexible
Deliver programs in flexible, affordable, accessible and intentional ways to meet diverse learning needs. Leverage technology to deliver education in multiple ways, locations, and at a pace adaptable to each individual student. Construct alternative, flexible scheduling options to meet student needs and expectations.

3. Future Focused – Foster Future Success

Expand Earn and Learn Models
Collaborate with employers to embed internships and apprenticeships into programs ensuring experiential learning for students.

Enhance Career and Job Placement Services
Facilitate connections between students, graduates, and employers. Help employers find qualified, highly skilled talent to meet workforce needs.

Expand Clear, Affordable Pathways to Bachelor’s and Graduate Degrees
Reduce students’ time and cost by expanding efficient, intentional transfer pathways and services, leading to University Partnership or other transfer partners. Expand LCCC’s applied bachelor’s degree programs for greater savings.

4. Work Focused – Improve Economic Competitiveness

Elevate Skills of Workforce as Economy Shifts
Expand continuing education and customized training opportunities to quickly retool and reskill the workforce to keep people, communities and business/industry relevant as the economy changes.

Stimulate Innovation and Entrepreneurship
Leverage LCCC services and facilities to support innovation within business and industry, foster growth of new clusters and economies and accelerate invention, commercialization and entrepreneurship.

5. Community Focused – Enhance Quality of Life

Partner with Community Organizations to Address Common Community Challenges and Opportunities
Partner appropriately with other organizations and entities that are leading efforts to address common community areas of importance such as: transportation, digital connectivity, food insecurity, health and wellness and drug addiction.

Leverage LCCC as a Community Resource
Bring value to the entire community by leveraging amenities and programs to expand personal enrichment and lifelong learning opportunities including the cultural and culinary arts, entertainment, and health and wellness.

Vision
Create a vibrant community for all where...
- All students achieve academic and career success.
- Industry talent needs are met and businesses start, locate, and grow.
- People connect and prosper.

Mission
Provide opportunities for...
- Individuals to succeed through quality education.
- Economies to grow through innovation.
- Communities to thrive through rich cultural experiences.

Values
We value our role as the community’s college and the opportunity to build the community’s trust in order to educate, adapt, lead and inspire. We value our role to create a better, more equitable future for our community.

LCCC Student Success Priorities

LCCC Student Success Priorities
At Lorain County Community College (LCCC), we believe every student’s dream matters. We strive to provide excellent support services, a warm and welcoming campus culture, and a student-centered approach to learning.

Under the college's current strategic plan, Vision 2025, LCCC is committed to helping individuals, families, local economy and community by providing opportunities that align with five areas of focus: student-focused, success-focused, future-focused, work-focused and community-focused. Read more about LCCC’s vision (https://www.lorainccc.edu/about/vision-2025/).

Our work across these five areas ultimately supports students in achieving their academic, career and personal dreams. This can include a certificate, an associate degree, bachelor’s or higher degree, and/or a living wage job and career. Our ongoing efforts are to improve student access to higher education while ensuring equitable outcomes for all student groups and paving the way for easy and accessible transfer to a four-year university. Our student completion efforts are evidence-based, data-informed and in partnership with national programs like Achieving the Dream (ATD), Guided Pathways and Frontier Set, each of which are
Students at LCCC experience a number of services and programs directly aligned with the college’s commitment to student success, which are fully highlighted in LCCC’s Completion Plan (https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/completion/plans/2018/LCCC%20Completion%20Plan%20%28combined%29.pdf). Notable programs include:

- The Advocacy and Resource Center’s (ARC) (http://www.lorainccc.edu/arc/) primary purpose is to ensure our students are able to access basic needs while completing their certificate or degree at LCCC. The ARC provides free, caring, confidential support and connection to campus and community resources to help with any issues students face, including food and income assistance programs, utility assistance, childcare services, mental health and addiction services, transportation, housing insecurity, legal services, support for domestic violence and sexual assault victims, and access to the college’s Career Closet.

- The Students Accelerated in Learning (SAIL) Program (https://www.lorainccc.edu/admissions-and-enrollment/sail-information-sessions/), which provides structured support services for real college students with real-world obstacles. SAIL’s cohort-based model provides students with both financial and academic support to graduate with associate degree within three years. SAIL places student success as the center of its support services, and includes regular and supportive academic advising, personalized career counseling, tutoring, priority pre-registration and workshops.

- LCCC’s Assigned Advisor Model provides each student with a central point of contact from connection through completion. In this model, students receive personalized academic advising, degree progress monitoring and program exploration within LCCC’s nine academic pathways. Academic advisors are organized into teams around these nine pathways to provide students with expert advice and guidance on the programs of their choice. Assigned advisors can be found in the MyCampus portal. Students can make an appointment online at www.lorainccc.edu/advising. (http://www.lorainccc.edu/advising/)

- Program and Career Pathways allow students to explore career options or get on track to the career they already have in mind. Whether the student intends to earn a certificate or degree from LCCC or transfer to a University Partnership program or another college or university, program and career pathways is a great place to start.

- LCCC’s University Partnership (p. 323) program, its Bachelor of Applied Science in Microelectronic Manufacturing (p. 70), and its development of its Ohio Guaranteed Transfer Pathways (p. 31) support seamless and affordable paths to bachelor’s degrees.

- To meet the needs of adult learners, LCCC has developed 16 accelerated pathways (p. 46), which allow students to earn a degree in as little as 15 months. Whether a student’s goal is career advancement or seamless transfer, LCCC’s accelerated pathways will help students achieve their academic and career goals more quickly than ever before.

- LCCC’s Success Messaging delivers personalized, interactive, in-time text messages to enrolled students. Throughout each semester, students will receive positive reinforcement and nudging towards support services, as well as reminders about upcoming registration periods.

- Innovative, student-centered technology tools like Degree Map and Schedule Planner make the enrollment experience easy, friendly and informative. Degree Map helps students chart the best plan for success by showing requirements completed and those courses still remaining. Students can explore majors or minors and search local and national career opportunities.

- The college’s Developmental Education co-requisite approach to developmental math and English courses saves students time and money towards their degree, as well as provide direct support in foundational subjects.

- The Mentoring Vibrant People of Color (MVP) program launched in 2019, and provides an internal network of individuals committed to helping students of color and other underrepresented groups access resources and navigate the college environment.

LCCC is recognized as a national leader in student success:

AACC First in the Nation for Student Success (2018) In 2018, LCCC was named First in the Nation for Student Success by the American Association of Community Colleges (AACC). This recognition is granted to a community college that has demonstrated, through evidence, a sustained commitment to and proactively advances the cause of student success at a community college.

Achieving the Dream

LCCC is also proud to be recognized as an Achieving the Dream Leader College since 2015, and was named an ATD Leader College of Distinction in 2019. This recognition is based upon LCCC’s student success improvements which were anchored by Vision 2025. Both ATD distinctions not only signify the progress LCCC is making but also provides enhanced grant opportunities to support more student success initiatives.

In 2020, LCCC earned the top distinction through Achieving the Dream, winning the prestigious Leah Meyer Austin Award for designing and providing a holistic approach to student success.

Aspen Institute Top 150 Community Colleges (2019)

In 2019, LCCC was named among the top 150 community colleges in the United States, an honor that provides recognition of high achievement and performance in supporting student outcomes in learning, completion rates, employment rates and earnings.

Frontier Set Member Institution (2017) (https://postsecondary.gatesfoundation.org/frontier-set-fact-sheet/) is a national collaborative of 29 colleges and universities and two state systems of higher education. Established in 2017 and supported by funding from the Bill & Melinda Gates Foundation, its purpose is to identify, understand and share what works to accelerate student success, especially for low-income and first generation students, students of color and working adults. LCCC is proud to have been selected to participate and have the opportunity to be involved in innovative practices at the national level.

Student Equity

Lorain County Community College is committed to equity, the idea that students from marginalized and underrepresented populations have access to resources that empower student success and close completion achievement gaps. Equity is based upon the principle of fairness and is distinct from equality. While equality involves treating everyone the same way, equity provides each individual or group what they need to have an equal opportunity to succeed. A commitment to equity also includes identifying and removing structural barriers faced by underrepresented students. As a campus community, we will adopt practices that promote equity, grow the culture of inclusion, demand social justice and use that power to ensure success for all students.
Achieving the Dream (https://www.achievingthedream.org/focus-areas/equity/) provides some examples of historically underrepresented students. These include but are not limited to: first-generation and low-income students; students of color; adult students; marginalized orientations, gender identities, and intersex students; students with second-language backgrounds; undocumented students; veterans; students with disabilities; students with dependents; foster care youth; and formerly and currently incarcerated students.

LCCC students are encouraged to take advantage of other support services (https://www.lorainccc.edu/support-services/) including, but not limited to:

- Advocacy and Resource Center (https://www.lorainccc.edu/support-services/arc/)
- Accessibility Services (https://www.lorainccc.edu/accessibility-services/)
- Campus Security (https://www.lorainccc.edu/security/)
- Children’s Learning Center (https://www.lorainccc.edu/support-services/childrens-learning-center/)
- LGBTQA+ Community (https://www.lorainccc.edu/lgbtqa/)
- Personal Counseling (https://www.lorainccc.edu/support-services/personal-counseling/)
- Ride Share Program (https://www.lorainccc.edu/student-life/student-ride-share/)
- Suicide Prevention Services (https://www.lorainccc.edu/support-services/suicide-prevention-services/)
- Veterans Services (https://www.lorainccc.edu/veterans/)

LCCC is committed to student success and to providing excellent service. We encourage students to provide feedback by completing a quick five-question survey at www.lorainccc.edu/survey (http://www.lorainccc.edu/survey/).

Campus Security

Campus Security has staff on duty 24 hours per day, seven days per week. Campus Security is dedicated to serving the College community by striving to provide a safe and secure environment for students, faculty, staff and visitors. Specific elements of the Campus Security mission include: accident investigations, incidents, crime investigation, crime prevention, vehicle assists, parking and traffic enforcement, and emergency training and response.

Rave Mobile Safety

As part of our ongoing efforts to enhance safety and security on all of our campuses, LCCC sends emergency notifications to students using Rave Mobile Safety. Rave allows us to send emergency text messages and emails through the Rave Alert software.


No action is required by students to receive alerts. We use the phone and email information currently on file to send these emergency notifications.

Location

The Campus Security office is located on the first floor of the Library/Community Resource Center (LC 106) and may be reached from anywhere on campus by calling (440) 366-4053 or TDD (440) 366-4136.

For on-campus emergencies, dial extension 4444 from a regular college telephone or (440) 366-4444 from a cellular phone.

Visit www.lorainccc.edu/security (http://www.lorainccc.edu/security/) to view emergency procedures.

To file an incident report, visit www.lorainccc.edu/report (http://www.lorainccc.edu/report/) (anonymous reporting is available).

Email campus security at safe@lorainccc.edu.

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act

Consistent with federal law, LCCC publishes an annual security report on or before October 1 of each year. The report includes statistics for the previous three years concerning reported crimes that occurred on any LCCC campus and on public property within or immediately adjacent to and accessible from the campuses. The report also includes information on reporting crimes and other emergencies, security of and access to facilities, campus law enforcement authority, as well as other related matters.

- View LCCC crime statistics. (https://www.lorainccc.edu/security/annual-security-report/)

To obtain a hard copy of the report, please contact the Director of Security in LC 106, at extension 7738 or (440) 366-7738.

In an effort to provide the best service for the LCCC campus community, we have provided a link to the Lorain County Sheriff’s Department list of convicted sexual predators (http://www.loraincountysheriff.com/page.aspx?id=159/).

Ohio’s ESCORN site (http://www.icrimewatch.net/index.php?AgencyID=55149&disc) provides links to databases of sexual offenders for all 88 Ohio counties.

Booklets containing registered Lorain County sex offenders and daily crime-log information for the LCCC campus are available for public viewing in LC 106.

Emergency Notification System

Lorain County Community College’s EMERGENCY NOTIFICATION SYSTEM (ENS) is designed to provide instant mobile, audible, and voice notifications to students, faculty and staff of emergency closures or imminently dangerous conditions. Notification of said events may be announced by the following methods:

- Internal public address system.
- External siren.
- Rave emergency notifications.
Local resources to students from any major, alumni and faculty, so they can gain experience in entrepreneurship. Our consulting is an ongoing process conveniently based on members' schedules. Clients can gain learn-as-you-go information in a confidential, supportive environment.

Community Outreach

Community Resource Connection

The Advocacy and Resource Center's (ARC) primary purpose is to ensure our students are able to access basic needs while completing their certificate or degree at LCCC. The ARC provides free, caring, confidential support and connection to campus and community resources to help with any issues students face, including food and income assistance programs, utility assistance, childcare services, mental health and addiction services, transportation, housing insecurity, legal services, support for domestic violence and sexual assault victims, and access to the college's Career Closet. (www.lorainccc.edu/arc (http://www.lorainccc.edu/arc/))

Commitment to Community

Through the Arts and Humanities division, students and community members may participate in LCCC's theater, orchestra, concert band or choral performance groups. It is a wonderful way to bring students and community members together and it brings about extraordinary efforts in the arts. Vocal music opportunities are plentiful. The Civic Chorale is made up of students, community members, experienced vocalists and those who sing just for the enjoyment of it. The Civic Chorale performs representative choral works of all periods. There are no fees or auditions required to participate. The Civic Orchestra presents representative orchestral works of all periods. The Civic Concert Band performs a wide range of music of various periods for string, brass and woodwind combinations. Participation in theatre requires auditions for acting roles, but positions in all sorts of technical personnel capacities are also available.

Stocker Humanities and Fine Arts Center

www.stockerartscenter.com

The Stocker Arts Center features a 994-seat theater, 219-seat lecture hall, 219-seat cinema hall, 125 (+ or -) flexible seating studio theater, a dance studio, rehearsal hall and art gallery. The Center presents performances by professional dance, theater and music attractions, as well as a fine arts film series and art gallery exhibitions. The Stocker Arts Center is also the home of the Arts and Humanities division, which includes the Civic Orchestra, Civic Chorale, Civic Concert Band, Civic Jazz Band and theater. These organizations perform numerous events at the center annually.

Spitzer Conference Center

www.spitzerconferencecenter.com (http://www.spitzerconferencecenter.com)

The John A. Spitzer Conference Center, dedicated in honor of John A. Spitzer, 1917-1992, is the community's gathering place for conferences, weddings, trade shows, seminars, social events or workshops. Guests have access to advanced technologies and comfortable, executive-level appointments catered by award-winning chefs. All events include complimentary event planning assistance and free parking. Spitzer Conference Center's team of dedicated, experienced professionals is committed to providing the ultimate guest experience.

Learning Centers

Lorain County Community College brings educational programs and services to the community with learning centers throughout the area.

- LCCC Community Learning Center at Lorain High School (https://www.lorainccc.edu/orlainatlhs/) 2600 Ashland Avenue Lorain, Ohio 44054
  This full-service LCCC learning center provides access to college classes and improves career opportunities for the community of Lorain.
- LCCC Lorain Learning Center at City Center (https://www.lorainccc.edu/lorain/) 201 West Erie Avenue Lorain, Ohio 44052
  This downtown Lorain location provides programs and services in a convenient, accessible location. Prospective, new and continuing students can take advantage of the programs and services offered through the learning center.
- LCCC University Partnership Ridge Campus (https://www.lorainccc.edu/ridge/) 32121 Lorain Road North Ridgeville, Ohio 44039
  The University Partnership Ridge Campus provides local residents with what they need to succeed in the 21st century - easy access, high quality and affordable associate and bachelor's degrees.
- LCCC Wellington Center (https://www.lorainccc.edu/wellington/) 151 Commerce Drive Wellington, Ohio 44090
  The LCCC Wellington Center brings classes and services to southern Lorain County and surrounding areas. Day and evening classes are taught on-site and via distance learning from LCCC's main campus. Comprehensive student services are available from this convenient location.

LCCC Learning Centers bring quality education closer than ever to residents throughout the area.

Business and Entrepreneurial Support

NEOLaunchNET

NEO LaunchNET (http://www.lccclaunch.com/) is a program funded by the Burton D. Morgan Foundation of Hudson, Ohio, which supports the free enterprise system by investing in organizations and institutions that foster entrepreneurial spirit.

NEO LaunchNET offers guidance, mentoring, coaching and access to local resources to students from any major, alumni and faculty, so they

• Emails and on-campus voicemails.
• Broadcast alerts on local television and radio stations.
• Emergency announcements posted on the LCCC website (https://www.lorainccc.edu).
• Electronic marquis at main entrances.
• Fliers posted at facility entryways.
• Campus Security officers, Physical Plant personnel and other college officials.

Commitment to Community
The Campana Center for Ideation and Invention
www.lorainccc.edu/campana (http://www.lorainccc.edu/campana/)

The Patsie C. and Dolores Jeneé Campana Center for Ideation and Invention features state-of-the-art digital manufacturing labs equipped with high-tech equipment for fabrication, automation, 3D printing and more. It’s surrounded by collaboration space and services to facilitate the full spectrum of product development — from initial ideation to prototyping, through assembly and packaging. The Center offers hands-on education for students, through college courses and K-12 programs, while giving community inventors, entrepreneurs and existing companies access to cutting-edge digital manufacturing capabilities.

The Culinary Arts Institute
www.lorainccc.edu/culinary-institute (http://www.lorainccc.edu/culinary-institute/)

The Culinary Arts Institute of Lorain County Community College is a collaboration between visionary chefs, a talented student pool, and farm-to-table initiatives. As Northeast Ohio’s destination for culinary arts, the Culinary Arts Institute provides a place where business and industry leaders find the best professional development offerings, where entrepreneurs create opportunities to expand businesses and skills, and where members of our community come together to learn, cook and eat.

Recreation Opportunities

All of the Ewing Activities Center recreation facilities are available to the public through enrollment in NPER 189. Youth under the age of 18 must have a guardian complete a waiver form. Youth under the age of 13 must be accompanied and actively supervised by a parent or a guardian. Youth 9 years old and younger are not permitted in any HPER facilities or hallway unless enrolled in a class for youth activities.

The Ewing Activities Center provides facility rental to corporate and the general public groups. The ropes course experience, which includes team-building activities, low and high ropes course elements, is also available to public and corporate groups.

LCCC has also partnered with SilverSneakers (r), Renew Active and Prime to offer insurance-based fitness plans. All program participants have access to the fitness center, field house, gym (during open hours) and track — all free of charge.

Map and Directions to LCCC

Lorain County Community College
1005 North Abbe Road
Elyria, OH 44035
(800) 995-5222
(440) 365-5222
info@lorainccc.edu

Google Map and Directions to LCCC (https://www.google.com/maps/place/1005+N+Abbe+Rd,+Elyria,+OH+44035/@41.4107851,41.4126058,82.07358958,15.757z/data=!4m5!3m4!1s0x88309a26033dbb61:0x7593bcd5a605ea538m234d41.41078514d-82.0710156/)
Continuing Education

Continuing Education and Non-Credit Courses

LCCC students and our community can benefit from education and training at LCCC without pursuing a degree or certificate. Non-credit and continuing education courses offer a convenient way to improve job skills, become certified in a specialty or just enjoy the experience of learning something new.

Both credit and non-credit programs provide valuable job skills for a great career. Classes taken in credit programs, however, can often be used as a stepping stone toward an associate or bachelor's degree.

Explore continuing education programs and course offerings at www.lorainccc.edu/noncredit (http://www.lorainccc.edu/noncredit/).

LCCC reserves the right to repeal, change or amend rules, regulations, and fees; to withdraw, add to or modify courses listed within; and to change instructor assignments. See Credit Class Schedule for information on LCCC accreditation, accommodations for persons with disabilities and nondiscrimination statement.
ACADEMIC CALENDAR

Academic Calendar 2020-2021

For the most up-to-date Academic Calendar, visit www.lorainccc.edu/calendar (http://www.lorainccc.edu/calendar/).

University Partnership colleges and universities follow the academic calendar of their institution found in their individual college catalog and website.

Fall Semester 2020-2021 – August 24 to December 13, 2020

Convocation Day limited services available Wednesday August 19
Last day for 100 percent refund for fall semester courses Sunday August 23
Fall semester full-term, first eight-week and first five-week term classes begin Monday August 24
Last day for schedule adjustments for fall semester first five-week classes Tuesday August 25
Senior adult learner registration fall semester first five-week classes Wednesday August 26
Last day for 80 percent refund for fall semester first five-week classes Wednesday August 26
Senior adult learner registration fall semester full-term and first eight-week classes Wednesday August 26
Last day for schedule adjustments first eight-week classes Wednesday August 26
Last day for 80 percent refund for fall semester first eight-week classes Thursday August 27
Last day to choose audit option for fall semester first five-week classes Thursday August 27
Last day for 40 percent refund for fall semester first five-week classes Friday August 28
Annual All College Picnic – classes in session Friday August 28
Last day to choose audit option for fall semester first eight-week classes Friday August 28
Last day for schedule adjustments for fall semester full-term Sunday August 30
Last day for 40 percent refund for fall semester first eight-week classes Sunday August 30
Last day for 80 percent refund for fall semester full-term classes Monday August 31
Last day to choose audit option for fall semester full-term classes Monday September 4
Labor Day Holiday – no classes, campus closed Monday September 7
Last day for 40 percent refund for fall semester full-term classes Monday September 7
Campus re-opens – classes resume Tuesday September 8
Financial Aid Fall Term Census Date Tuesday September 8
Patriot Day Event (Student Life) Friday September 11
Last day to choose S/U option for fall semester first five-week classes Friday September 11
Fall Semester financial aid ends in the bookstore Monday September 14

Last day to choose S/U option for fall semester first eight-week classes Friday September 18
Last day to complete withdrawal from classes and receive a W for fall semester first five-week classes Friday September 18
Fall semester (first five-week term) classes end (including final examination) Sunday September 27
Last day for 100 percent refund for fall semester 10-week and second five-week classes Sunday September 27
Fall semester 10-week and second five-week classes begin Monday September 28
Last day for schedule adjustments for second five-week classes Tuesday September 29
Senior adult learner registration fall semester, second five-week term Wednesday September 30
Last day for 80 percent refund for fall semester second five-week classes Wednesday September 30
Senior adult learner registration fall semester, 10-week term Thursday October 1
Last day to choose audit option for second five-week classes Thursday October 1
Last day for schedule adjustments for 10-week classes Thursday October 1
Last day to complete withdrawal from classes and receive a W for fall semester first eight-week classes Friday October 2
Last day for 80 percent refund for fall semester 10-week classes Friday October 2
Last day for 40 percent refund for fall semester second five-week classes Monday October 5
Last day to choose audit option for fall semester 10-week classes Monday October 5
Last day for 40 percent refund for fall semester 10-week classes Tuesday October 6
Registration for spring semester begins (credit) Monday October 12
Last day to choose S/U option for fall semester full-term and second five-week classes Friday October 16
Last day to appeal previous semester academic dismissal Friday October 16
Last day to apply for fall semester graduation Friday October 16
Fall semester first eight-week term ends (including final examination) Sunday October 18
Last day for 100 percent refund for fall semester second eight-week classes Sunday October 18
Fall semester second eight-week classes begin Monday October 19
Senior adult learner tuition-free registration Wednesday October 21
Last day for schedule adjustments for second eight-week classes Wednesday October 21
Last day for 80 percent refund for fall semester second eight-week classes Thursday October 22
Last day to complete withdrawal from classes and receive a W for fall semester second five-week classes

Last day to choose audit option for second five-week classes

Last day for 40 percent refund for fall semester second eight-week classes

Last day to choose S/U option for fall semester 10-week classes

Fall semester second five-week term ends (including final examination)

Last day for 100 percent refund for third five-week classes

Fall semester third five-week classes begin

Last day for schedule adjustments for third five-week classes

Election Day

Senior adult learner registration fall semester for third five-week term

Last day for 80 percent refund for fall semester third five-week classes

Last day to choose audit option for third five-week classes

Last day for 40 percent refund for fall semester third five-week classes

Last day to complete withdrawal from classes and receive a W for fall semester second five-week classes

Last day to choose S/U option for fall semester second eight-week classes

Last day to complete withdrawal from classes and receive a W for fall semester second eight-week and third five-week classes

Last day to choose S/U option for fall semester third five-week classes

Thanksgiving Holiday – no classes – campus closed

Last day to complete withdrawal from classes and receive a W for fall semester third eight-week and third five-week classes

Campus re-opens – classes resume

Fall semester full-term, 10-week, second eight-week and third five-week classes end (follow final examination schedule)

Final examination period

Last Day of fall semester

Holidays – campus closed

Holidays - campus closed

Spring semester financial aid begins in the bookstore

Last day for 100 percent refund for spring semester full-term, first eight-week and first five-week courses

Note: Registration schedule may be staggered to allow easy access for all students.

University Partnership colleges and universities follow the academic calendar of their institution found in their individual college Catalog and website.

Spring Semester 2020-2021 – January 19 to May 14, 2021

Martin Luther King, Jr. Day – campus closed

Spring semester for full-term, first eight-week and first five-week classes begin

Last day for schedule adjustments for first five-week classes

Senior adult learner registration spring semester first five-week term

Senior adult learner registration spring semester full-term and first eight-week classes

Last day for 80 percent refund for spring semester first five-week classes

Last day for schedule adjustments for first eight-week classes

Last day for 80 percent refund for spring semester first eight-week classes

Last day to choose audit option for spring semester first five-week

Last day for 40 percent refund for spring semester first five-week classes
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Last day for schedule adjustments for full-term classes²</td>
<td>Monday January 25</td>
</tr>
<tr>
<td>Last day for 40 percent refund for spring semester first eight-week classes</td>
<td>Monday January 25</td>
</tr>
<tr>
<td>Last day for 80 percent refund for spring semester full-term classes</td>
<td>Tuesday January 26</td>
</tr>
<tr>
<td>Last day to choose audit option for spring semester full-term classes³</td>
<td>Saturday January 30</td>
</tr>
<tr>
<td>Financial aid census date</td>
<td>Monday February 1</td>
</tr>
<tr>
<td>Last day for 40 percent refund for spring semester full-term classes</td>
<td>Tuesday February 2</td>
</tr>
<tr>
<td>Last day to choose S/U option for spring semester first five-week classes⁴</td>
<td>Friday February 5</td>
</tr>
<tr>
<td>Spring semester financial aid ends in the bookstore</td>
<td>Monday February 8</td>
</tr>
<tr>
<td>Financial Aid release aid</td>
<td>Thursday February 11</td>
</tr>
<tr>
<td>Last day to choose S/U option for spring semester first eight-week classes⁴</td>
<td>Friday February 12</td>
</tr>
<tr>
<td>Last day to complete withdrawal from classes and receive a W for spring semester first five-week classes⁵</td>
<td>Friday February 12</td>
</tr>
<tr>
<td>Black History Month Event</td>
<td>Wednesday February 17</td>
</tr>
<tr>
<td>Last day for 100 percent refund for spring semester 10-week and second five-week classes</td>
<td>Sunday February 21</td>
</tr>
<tr>
<td>Spring semester first five-week classes end (including final examination)</td>
<td>Sunday February 21</td>
</tr>
<tr>
<td>Spring semester 10-week and second five-week classes begin</td>
<td>Monday February 22</td>
</tr>
<tr>
<td>Last day for schedule adjustments for second five-week classes²</td>
<td>Tuesday February 23</td>
</tr>
<tr>
<td>Senior adult learner registration spring semester second five-week term¹</td>
<td>Wednesday February 24</td>
</tr>
<tr>
<td>Senior adult learner registration spring semester 10-week term¹</td>
<td>Wednesday February 24</td>
</tr>
<tr>
<td>Last day for 80 percent refund for spring semester second five-week classes</td>
<td>Wednesday February 24</td>
</tr>
<tr>
<td>Last day to choose audit option for spring semester second five-week classes³</td>
<td>Thursday February 25</td>
</tr>
<tr>
<td>Last day for schedule adjustments for 10-week classes²</td>
<td>Thursday February 25</td>
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<tr>
<td>Last day to complete withdrawal from classes and receive a W for spring semester first eight-week classes⁵</td>
<td>Friday February 26</td>
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<tr>
<td>Last day for 80 percent refund for spring semester 10-week classes</td>
<td>Friday February 26</td>
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<tr>
<td>Last day for 40 percent refund for spring semester second five-week classes</td>
<td>Friday February 26</td>
</tr>
<tr>
<td>Last day to choose audit option for spring semester 10-week classes³</td>
<td>Monday March 1</td>
</tr>
<tr>
<td>Last day for 40 percent refund for spring semester 10-week classes</td>
<td>Tuesday March 2</td>
</tr>
<tr>
<td>Last day to appeal previous semester academic dismissal</td>
<td>Friday March 12</td>
</tr>
<tr>
<td>Last day to choose S/U option for spring semester full-term and second five-week classes⁴</td>
<td>Friday March 12</td>
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<tr>
<td>Last day to apply for spring semester graduation</td>
<td>Friday March 12</td>
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<tr>
<td>Spring Break – no classes – campus open</td>
<td>Sunday March 14-20</td>
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<tr>
<td>Campus re-opens – classes resume</td>
<td>Sunday March 21</td>
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<tr>
<td>Last day for 100 percent refund for spring semester second eight-week classes</td>
<td>Sunday March 21</td>
</tr>
<tr>
<td>Spring semester first eight-week classes end (including final examination)</td>
<td>Sunday March 21</td>
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<tr>
<td>Spring semester second eight-week classes begin</td>
<td>Monday March 22</td>
</tr>
<tr>
<td>Registration for summer and fall semesters begin (credit)</td>
<td>Monday March 22</td>
</tr>
<tr>
<td>Senior adult learner registration spring semester second eight-week term²</td>
<td>Wednesday March 24</td>
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<tr>
<td>Last day for schedule adjustments for second eight-week classes²</td>
<td>Wednesday March 24</td>
</tr>
<tr>
<td>Last day for 80 percent refund for spring semester second eight-week classes</td>
<td>Thursday March 25</td>
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<tr>
<td>Last day to complete withdrawal from classes and receive a W for spring semester second five-week classes⁵</td>
<td>Friday March 26</td>
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<tr>
<td>Last day to choose audit option for second eight-week classes³</td>
<td>Friday March 26</td>
</tr>
<tr>
<td>Last day for 40 percent refund for spring semester second eight-week classes</td>
<td>Sunday March 28</td>
</tr>
<tr>
<td>Last day to choose S/U option for spring semester 10-week classes⁴</td>
<td>Friday April 2</td>
</tr>
<tr>
<td>Last day for 100 percent refund for spring semester third five-week courses</td>
<td>Sunday April 4</td>
</tr>
<tr>
<td>Spring semester second five-week classes end (including final examination)</td>
<td>Sunday April 4</td>
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<tr>
<td>Spring semester third five-week classes begin</td>
<td>Monday April 5</td>
</tr>
<tr>
<td>Last day for schedule adjustments for third five-week classes²</td>
<td>Tuesday April 6</td>
</tr>
<tr>
<td>Senior adult learner registration spring semester third five-week term¹</td>
<td>Wednesday April 7</td>
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<tr>
<td>Last day for 80 percent refund for spring semester third five-week classes</td>
<td>Wednesday April 7</td>
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<tr>
<td>Last day to choose audit option for spring semester third five-week classes³</td>
<td>Thursday April 8</td>
</tr>
<tr>
<td>Last day for 40 percent refund for spring semester third five-week classes</td>
<td>Friday April 9</td>
</tr>
<tr>
<td>Last day to complete withdrawal from classes and receive a W for spring semester full-term classes⁵</td>
<td>Friday April 16</td>
</tr>
<tr>
<td>Last day to choose S/U option for spring semester second eight-week classes²</td>
<td>Friday April 16</td>
</tr>
<tr>
<td>Last day to choose S/U option for spring semester third five-week classes³</td>
<td>Friday April 23</td>
</tr>
<tr>
<td>Last day to complete withdrawal from classes and receive a W for spring semester (10-week classes)⁴</td>
<td>Friday April 23</td>
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<tr>
<td>Event</td>
<td>Date</td>
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<tr>
<td>Last day to complete withdrawal from classes and receive a W for spring semester second eight-week classes and third five-week classes</td>
<td>Friday, April 30</td>
</tr>
<tr>
<td>Spring semester full-term, 10-week, second eight-week, and third five-week classes end (follow regular examination schedule)</td>
<td>Friday, May 7</td>
</tr>
<tr>
<td>Final examination period</td>
<td>Saturday-Friday, May 8-14</td>
</tr>
<tr>
<td>Commencement</td>
<td>Saturday, May 15</td>
</tr>
<tr>
<td>Summer semester financial aid begins in the bookstore</td>
<td>Friday, May 21</td>
</tr>
</tbody>
</table>

1 Instructional fees are waived for qualified older adults when they register for credit classes on an audit (no credit received) basis. Students must be at least 60 years old and have lived in Ohio for at least one year. Tuition fee waivers on credit courses for qualifying older adults are processed on a space-available, first come, first served basis.

2 Schedule adjustment and add/drop for a given course must be completed prior to the second meeting of that course but before the end of the schedule adjustment period.

3 Audit means to take a course without receiving college credit or a grade. Courses taken on this basis are not included in the computation of cumulative grade point average and are not applicable to graduation requirements. An audit cannot be reversed once the semester is in session. Courses taken for audit are not covered by Financial Aid or used for calculating course load.

4 A student may elect the S/U grading option in no more than three courses for the associate degree and not more than one course a semester. The S/U option cannot be reversed to a letter grade once the semester is in session. The S/U option for credit may be used only for electives within a degree or certificate program. S means satisfactory and indicates credit was earned. U means unsatisfactory and indicates no credit was earned.

5 Failure to withdraw from a course or courses will result in an F grade(s).

Note: Registration schedule may be staggered to allow easy access for all students.

University Partnership colleges and universities follow the academic calendar of their institution found in their individual college Catalog and website.

### Summer Semester 2020-2021 – May 24 to August 1, 2021

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Last day for 100 percent refund for summer semester first term courses (5A, 10-week and 12-week)</td>
<td>Friday, May 23</td>
</tr>
<tr>
<td>First five-week, 10 week and 12 week summer semester classes begin</td>
<td>Monday, May 24</td>
</tr>
<tr>
<td>Schedule adjustment ends for summer semester first five-week classes</td>
<td>Tuesday, May 25</td>
</tr>
<tr>
<td>Senior adult learner registration summer semester first five-week classes</td>
<td>Wednesday, May 26</td>
</tr>
<tr>
<td>Last day for 80 percent refund for summer semester first five-week classes</td>
<td>Wednesday, May 26</td>
</tr>
<tr>
<td>Last day to choose audit option for summer semester 10-week and 12-week classes</td>
<td>Wednesday, May 26</td>
</tr>
<tr>
<td>Last day for schedule adjustments for summer semester first five-week classes</td>
<td>Thursday, May 27</td>
</tr>
<tr>
<td>Last day for schedule adjustments for summer semester 10-week classes</td>
<td>Thursday, May 27</td>
</tr>
<tr>
<td>Last day for schedule adjustments for summer semester 12-week classes</td>
<td>Friday, May 28</td>
</tr>
<tr>
<td>Last day for 40 percent refund for summer semester first five-week classes</td>
<td>Friday, May 28</td>
</tr>
<tr>
<td>Last day for 80 percent refund for summer semester 10-week classes</td>
<td>Friday, May 28</td>
</tr>
<tr>
<td>Last day for 80 percent refund for summer semester 12-week classes</td>
<td>Saturday, May 29</td>
</tr>
<tr>
<td>Memorial Day – no classes – campus closed</td>
<td>Monday, May 31</td>
</tr>
<tr>
<td>Campus re-opens</td>
<td>Tuesday, June 1</td>
</tr>
<tr>
<td>Last day to choose audit option for summer semester 10-week classes</td>
<td>Tuesday, June 1</td>
</tr>
<tr>
<td>Last day for 40 percent refund for summer semester 10-week classes</td>
<td>Tuesday, June 1</td>
</tr>
<tr>
<td>Last day to choose audit option for summer semester 12-week classes</td>
<td>Wednesday, June 2</td>
</tr>
<tr>
<td>Last day for 40 percent refund for summer semester 12-week classes</td>
<td>Thursday, June 3</td>
</tr>
<tr>
<td>Summer semester (8A) classes begin</td>
<td>Monday, June 7</td>
</tr>
<tr>
<td>Financial aid census date</td>
<td>Monday, June 7</td>
</tr>
<tr>
<td>Senior adult learner registration summer semester eight week (8A) classes</td>
<td>Wednesday, June 9</td>
</tr>
<tr>
<td>Schedule adjustment end for summer semester eight week (8A) classes</td>
<td>Wednesday, June 9</td>
</tr>
<tr>
<td>Last day for 80 percent refund for summer semester eight week (8A) classes</td>
<td>Thursday, June 10</td>
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<tr>
<td>Last day to choose S/U option for summer semester first five-week classes</td>
<td>Friday, June 11</td>
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<tr>
<td>Last day to choose audit option for summer semester (8A) classes</td>
<td>Friday, June 11</td>
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<tr>
<td>Last day for 100 percent refund for summer semester seven-week classes</td>
<td>Monday, June 14</td>
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<tr>
<td>Last day for 40 percent refund for summer semester full-term (8A) classes</td>
<td>Monday, June 14</td>
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<tr>
<td>Summer semester seven-week classes begin</td>
<td>Monday, June 14</td>
</tr>
<tr>
<td>Senior adult learner registration summer semester seven-week classes</td>
<td>Wednesday, June 16</td>
</tr>
<tr>
<td>Last day for schedule adjustments for summer semester seven-week classes</td>
<td>Wednesday, June 16</td>
</tr>
<tr>
<td>Last day for 80 percent refund for summer semester seven-week classes</td>
<td>Thursday, June 17</td>
</tr>
<tr>
<td>Last day to choose audit option for summer semester seven-week classes</td>
<td>Friday, June 18</td>
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<tr>
<td>Event</td>
<td>Date</td>
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<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Last day to complete withdrawal from classes and receive a W for summer</td>
<td>Friday</td>
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<tr>
<td>semester first five-week classes</td>
<td>June 18</td>
</tr>
<tr>
<td>Last day for 40 percent refund for summer semester seven-week classes</td>
<td>Sunday</td>
</tr>
<tr>
<td>Last day to choose S/U option for summer semester 10-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Summer semester first five-week classes end</td>
<td>Sunday</td>
</tr>
<tr>
<td>Last day for 100 percent refund for summer semester second five-week classes</td>
<td>Sunday</td>
</tr>
<tr>
<td>Classes begin – summer semester second five-week classes begin</td>
<td>Monday</td>
</tr>
<tr>
<td>Last day for schedule adjustments for summer semester second five-week classes</td>
<td>Tuesday</td>
</tr>
<tr>
<td>Financial aid release aid</td>
<td>Thursday</td>
</tr>
<tr>
<td>Senior adult learner registration summer semester second five-week classes</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Last day for 80 percent refund for summer semester second five-week classes</td>
<td>Wednesday</td>
</tr>
<tr>
<td>Last day to choose audit option for summer semester second five-week classes</td>
<td>Thursday</td>
</tr>
<tr>
<td>Last day to choose S/U option for summer semester full-term (8A) and 12-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Last day for 40 percent refund for summer semester second five-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Campus closed</td>
<td>Monday</td>
</tr>
<tr>
<td>Campus re-opens – classes resume</td>
<td>Tuesday</td>
</tr>
<tr>
<td>Last day to choose S/U option for summer semester seven-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Last day to apply for summer semester graduation</td>
<td>Friday</td>
</tr>
<tr>
<td>Last day to complete withdrawal from classes and receive a W for summer semester eight-week and 10-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Last day to choose S/U option for summer semester second five-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Last day to complete withdrawal from classes and receive a W for summer semester 12-week, seven-week and second five-week classes</td>
<td>Friday</td>
</tr>
<tr>
<td>Summer semester eight-week, 10-week, seven-week and second five-week classes end</td>
<td>Sunday</td>
</tr>
<tr>
<td>Summer semester 12-week classes end</td>
<td>Sunday</td>
</tr>
<tr>
<td><strong>Notes:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Instructional fees are waived for qualified older adults when they register for credit classes on an audit (no credit received) basis. Students must be at least 60 years old and have lived in Ohio for at least one year. Tuition fee waivers on credit courses for qualifying older adults are processed on a space-available, first come, first served basis.</td>
<td></td>
</tr>
<tr>
<td>2. Schedule adjustment and add/drop for a given course must be completed prior to the second meeting of that course but before the end of the schedule adjustment period.</td>
<td></td>
</tr>
<tr>
<td>3. Audit means to take a course without receiving college credit or a grade. Courses taken on this basis are not included in the computation of cumulative grade point average and are not applicable to graduation requirements. An audit cannot be reversed once the semester is in session. Courses taken for audit are not covered by Financial Aid or used for calculating course load.</td>
<td></td>
</tr>
<tr>
<td>4. A student may elect the S/U grading option in no more than three courses for the associate degree and not more than one course a semester. The S/U option cannot be reversed to a letter grade once the semester is in session. The S/U option for credit may be used only for electives within a degree or certificate program. S means satisfactory and indicates credit was earned. U means unsatisfactory and indicates no credit was earned.</td>
<td></td>
</tr>
<tr>
<td>5. Failure to withdraw from a course or courses will result in an F grade(s).</td>
<td></td>
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</tbody>
</table>
ACADEMIC INFORMATION

Bachelor of Applied Science (https://www.lorainccc.edu/engineering/bas-mems/)

Lorain County Community College (LCCC) is the first community college in Ohio to deliver a bachelor of applied science degree. The bachelor of applied science degree received approval from the Ohio Department of Higher Education and the Higher Learning Commission.

The bachelor degree is granted upon completion of a course of study normally requiring four academic years of college work. College work encompasses both upper- and lower-division institutional requirements.

• Microelectronic Manufacturing (p. 70)

Associate of Arts (p. 27) and Associate of Science (p. 28) Degrees

Associate of arts and associate of science degree programs are transfer degrees designed for students who intend to continue their education after LCCC. Associate of arts and associate of science degrees do not have specific majors, but can be tailored to apply toward a number of different majors at the bachelor’s degree level at the LCCC University Partnership and other universities.

Associate of Arts - Ohio Guaranteed Transfer Pathways (p. 31)

The Ohio Department of Higher Education established statewide guaranteed transfer pathways from two-year to four-year degree programs in an equivalent field. This effort is directly related to Ohio’s initiatives in college affordability and degree completion.

Associate of Applied Business

Applied associate degree programs allow students to earn a degree in a specific major. Typically, students who earn applied associate degrees plan to enter the workforce after earning their LCCC degrees.

Associate of Applied Science

Applied associate degree programs allow students to earn a degree in a specific major. Typically, students who earn applied associate degrees plan to enter the workforce after earning their LCCC degrees.

Associate of Individualized Studies (p. 46)

The associate of individualized studies is a degree designed to provide viable options for non-traditional students. College credit will be awarded for coursework completed at other post-secondary institutions or for other documentable learning experiences in educational enterprises judged at college level.

Associate of Technical Studies (p. 46)

The associate of technical studies is a degree designed to provide flexible options for non-traditional students with technical career goals.

Accelerated Pathways (p. 46)

Accelerated pathways allow students to earn a degree in as little as 15 months. Choosing an accelerated pathway can shorten your time to degree, and provide a fast start to your career.

One-Year Technical Certificate/One-Year General Certificate

Certificates are awarded to students who complete an approved certificate program of not less than 30 semester credit hours, exclusive of college preparatory courses, with a 2.0 GPA or higher in all graded coursework.

Short-Term Technical Certificate/Short-Term General Certificate

Certificates are awarded to students who complete a course or series of courses established to certify a job skill or competence with a 2.0 GPA or higher and a 2.0 GPA or higher in all other graded coursework.

Transfer Module and Requirements

Ohio Transfer Module Requirements

An Ohio transfer module completed at one Ohio public college or university will automatically meet the requirements of the Ohio transfer module at the receiving public college or university once the student is accepted. Students seeking the associate of arts or associate of science degree must complete the appropriate general education/Ohio transfer module requirements as specified under the Conditions for Transfer Admission section. The Ohio transfer module may be completed independently of degree requirements as follows: ENGL 161 three semester hours, six semester hours representing two disciplines of social sciences, six semester hours representing two disciplines of arts and humanities, six semester hours of science including at least one lab course, and three semester hours of mathematics or logic, plus additional courses from the list below to complete a block of at least 36 semester hours. Upon completion of the above, the student’s transcript will designate OHIO TRANSFER MODULE COMPLETED.

Ohio Transfer Module Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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<tr>
<td>ENGL 163</td>
<td>COLLEGE COMPOSITION II/SPECIAL TOPICS</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION (Optional)</td>
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SOCIAL AND BEHAVIORAL SCIENCES

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<th>Code</th>
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<tr>
<td>ARCH 155G</td>
<td>INTRODUCTION TO ARCHAEOLOGY</td>
<td>3</td>
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<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
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<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
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<tr>
<td>GPHY 151G</td>
<td>HUMAN GEOGRAPHY</td>
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<tr>
<td>GPHY 152</td>
<td>GEOGRAPHY OF UNITED STATES/CANADA</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
<td>3</td>
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<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
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<td>-------------</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
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<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
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<tr>
<td>HSTR 260G</td>
<td>HISTORY OF AMERICAN TECHNOLOGY</td>
<td>3</td>
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<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
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<tr>
<td>PLSC 151G</td>
<td>COMPARATIVE POLITICS</td>
<td>3</td>
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<tr>
<td>PLSC 155</td>
<td>STATE AND LOCAL GOVERNMENT</td>
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<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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<tr>
<td>PLSC 157G</td>
<td>CONTEMPORARY WORLD PROBLEMS</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>PSYH 251</td>
<td>HUMAN GROWTH AND DEVELOPMENT</td>
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<td>PSYH 253</td>
<td>CHILD DEVELOPMENT</td>
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<td>PSYH 254</td>
<td>ADOLESCENT DEVELOPMENT</td>
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<td>PSYH 256</td>
<td>ADULTHOOD AND AGING</td>
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<td>PSYH 257</td>
<td>ABNORMAL PSYCHOLOGY</td>
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<td>PSYH 261</td>
<td>SOCIAL PSYCHOLOGY</td>
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<td>PSYH 263</td>
<td>PERSONALITY THEORIES</td>
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<td>PSYH 273</td>
<td>INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY</td>
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<td>PSYH 275</td>
<td>PSYCHOLOGY OF GENDER</td>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<tr>
<td>SOCY 155G</td>
<td>INTRODUCTION TO ARCHAEOLOGY</td>
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<tr>
<td>SOCY 161G</td>
<td>INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
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<tr>
<td>SOCY 255G</td>
<td>THE FAMILY</td>
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<td>SOCY 256</td>
<td>SOCIAL PROBLEMS</td>
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<td>SOCY 265G</td>
<td>DEATH AND DYING</td>
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<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
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<td>SOCY 278</td>
<td>SOCIOLOGY OF SEX &amp; GENDER</td>
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<td>URBS 151G</td>
<td>INTRODUCTION TO URBAN STUDIES</td>
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<td>URBS 155G</td>
<td>INTRODUCTION TO ARCHAEOLOGY</td>
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<td>URBS 210</td>
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<td>ART HISTORY I</td>
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<td>ARTS 244G</td>
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<td>ARTS 245G</td>
<td>WORLD ART</td>
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<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
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<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
<td>3</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
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<td>ENGL 262G</td>
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<td>ENGL 264</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<td>ENGL 267G</td>
<td>CHILDREN'S LITERATURE</td>
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<td>INTRODUCTION TO SHAKESPEARE</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>HUMS 263</td>
<td>INTRODUCTION TO FOLKLORE</td>
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<td>INTRODUCTION TO ASIAN CULTURES AND LITERATURES</td>
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<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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<td>HUMS 281</td>
<td>INTRODUCTION TO AMERICAN CINEMA</td>
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<td>MUSC 261G</td>
<td>MUSIC APPRECIATION</td>
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<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>INTRODUCTION TO PHILOSOPHY</td>
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<td>PHLY 161</td>
<td>INTRODUCTION TO ETHICS</td>
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<td>PHLY 165</td>
<td>BIOETHICS</td>
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<td>PHLY 174</td>
<td>CRITICAL THINKING</td>
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<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 182G</td>
<td>INTRODUCTION TO THE STUDY OF RELIGION</td>
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<td>RELG 251G</td>
<td>EXPLORING THE BIBLE</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 270G</td>
<td>RELIGION AND SCIENCE</td>
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<td>RELG 281G</td>
<td>PHILOSOPHY OF RELIGION</td>
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<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
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<td>THTR 185G</td>
<td>THEATER HISTORY</td>
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<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
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<td>ASTY 152</td>
<td>SOLAR SYSTEM ASTRONOMY</td>
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<td>ANATOMY AND PHYSIOLOGY I</td>
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<td>ANATOMY AND PHYSIOLOGY II</td>
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<td>BIOL 150</td>
<td>INFECTIOUS DISEASE A TO Z</td>
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<td>BIOL 151</td>
<td>GENERAL BIOLOGY</td>
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<td>BIOL 152</td>
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<td>BIOL 159</td>
<td>AQUATIC LIFE</td>
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<td>BIOL 161</td>
<td>PRINCIPLES OF BIOLOGY I</td>
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<td>PRINCIPLES OF BIOLOGY II</td>
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<td>BIOL 163</td>
<td>THE MICROBIAL WORLD</td>
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<td>BIOL 164</td>
<td>EXPLORATIONS IN FIELD SCIENCE</td>
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<td>BIOL 251</td>
<td>GENERAL MICROBIOLOGY</td>
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<td>MICROBIOLOGY</td>
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<td>BIOL 261</td>
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<tr>
<td>BIOL 268</td>
<td>CLINICAL NUTRITION</td>
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</table>
Ohio Transfer Initiatives

The State of Ohio through the leadership of the Ohio Department of Higher Education has established a coherent statewide policy intended to facilitate a student’s ability to complete their highest level of educational goal achievement seamlessly within Ohio’s postsecondary educational system. To that end, the Ohio Articulation and Transfer policy (available online at: http://regents.ohio.gov/transfer/policy/index.php) was developed to facilitate the transfer of students and credits from any state-assisted college or university to another. It encourages faculty recognition of comparable and compatible learning experiences and expectations across institutions. It also encourages students to complete units of educational experience as they progress [e.g. transfer assurance guides, Ohio transfer modules, associate and baccalaureate degrees].

Ohio Guaranteed Transfer Pathways (p. 31)

Section 3333.16(C) of the Ohio Revised Code was signed into law in June of 2015. This law requires the Chancellor of the Ohio Department of Higher Education to develop a process to establish statewide guaranteed transfer pathways from two-year to four-year degree programs in an equivalent field. This effort is directly related to Ohio’s initiatives in college affordability and degree completion. The Ohio Guaranteed Transfer Pathways Statewide Steering Committee was created and has begun work on implementing the legislation.

Ohio Transfer Module (p. 23)

The Ohio transfer module completed at one Ohio public college or university will automatically meet the requirements of the Ohio transfer module at the receiving public college or university, once the student is accepted. Students seeking the associate of arts or associate of science degree must complete the appropriate general education/Ohio transfer module requirements as specified under the Conditions for Transfer Admission section.

Transfer Assurance Guides

Statewide Transfer Assurance Guides (TAGs) are composed of general education courses (Ohio transfer module courses) and specified courses required for the academic major. A TAG as an advising tool can assist Ohio university and community and technical college students planning specific majors to make course selections that will ensure comparable, compatible and equivalent learning experiences across the state’s higher-education system. A number of area-specific TAG pathways in the arts, humanities, business, communication, education, health, mathematics, science, engineering, engineering technologies and the social sciences have been developed by faculty teams. Additional information on specific Transfer Assurance Guides can be found on the Ohio Department of Education website at http://regents.ohio.gov/transfer/tags/index.php (https://www.ohiohighered.org/transfer/tag/).

TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisory at the institution to which a student wishes to transfer should also be consulted during the transfer process. Because of specific major requirements, early identification of the intended major is encouraged.
For more information about TAGs and a list of LCCC’s TAG-approved courses, visit https://www.ohiohighered.org/transfer/tag (https://www.ohiohighered.org/transfer/tag/).

**Career Transfer Assurance Guides**

Statewide CTAGs (Career Transfer Assurance Guides) are similar to TAGs, but are composed of career-technical courses instead of general education courses. CTAGs can assist Ohio university and community and technical college students in making decisions on course selection that will ensure comparable, compatible and equivalent learning experiences between and among all public higher education institutions in Ohio, and embody commonly accepted pathways to applied degree programs – both at the associate and baccalaureate levels – across the state.

Additional information on the Career Transfer Assurance Guides process may be found at https://www.ohiohighered.org/transfer/tag/.

**Transferology**

Transferology (https://www.transferology.com/) is designed to provide students with accurate information about how courses transfer between colleges and universities, and how they will apply toward the completion of a college degree. LCCC students are encouraged to access this site to check transferability of courses, and to work with their Academic Advisor to incorporate the use of this system into their degree planning.

Transferology is a web-based program that allows students to keep track of and check on how their LCCC courses will transfer to other Ohio colleges and universities. With Transferology, students are able to:

1. Establish a Transferology account (free of charge).
2. Store information on completed courses.
3. Obtain information on how Lorain County Community College courses transfer to other Ohio colleges and universities.
4. Request transfer guides that will provide information about:
   - How courses transfer.
   - How courses apply to intended major after transferring.
   - What courses are still needed to complete a degree after transferring.
5. Obtain information about how courses from other Ohio colleges and universities transfer to Lorain County Community College.

To access Transferology, go to www.transferology.com (http://www.transferology.com/) or www.lorainccc.edu/transfer (http://www.lorainccc.edu/transfer/).

As with TAGs, advisors at the institution to which a student wishes to transfer should be consulted during the course selection/transfer preparation process.

**Military Transfer Assurance Guides (MTAG)**

Statewide Military Transfer Assurance Guides (MTAG) are being developed in an effort to ensure that institutions and military students alike have access to this MTAG information. The Ohio Department of Higher Education will be posting MTAG information on www.ohiohighered.org (https://www.ohiohighered.org/) and transfercredit.ohio.gov (https://transfercredit.ohio.gov/pq_17:::/). The Ohio Department of Higher Education is encouraging institutions to take advantage of using Transferology™ to post all course equivalencies, including the statewide course equivalencies for military training, experience, and coursework, as this service is free to all Ohio institutions.

**Ohio Articulation Number (OAN)**

Pre-major courses that represent the commonly accepted pathway to majors within the bachelor’s degree (TAGs) have been reviewed by statewide faculty committees. Courses or course sequences meeting established learning outcome standards are assigned a discipline specific OANs. When consensus is established and a course is noted with both the colleges or universities departmental designation and the assigned Ohio Articulation Number (OAN), students are assured not only of the equivalency of the courses, but of their application to the degree objective. A complete listing of Lorain County Community College’s OAN approved courses can be found at http://regents.ohio.gov/transfer/tags/index.php (https://www.ohiohighered.org/transfer/tag/).

**One-Year Option (https://www.ohiohighered.org/one-year-option/)**

The One-Year Option establishes an articulation system whereby adults who complete a career-technical education program of study consisting of a minimum of 900 clock-hours and achieve an industry-recognized credential approved by the Chancellor shall receive thirty (30) semester hours of technical course credit toward a standardized Associate of Technical Study Degree (ATS) upon matriculation at a public institution of higher education in Ohio that confers such a degree. The 30 semester hours will be awarded as a block of credit (rather than credit for specific courses) and will satisfy the technical course requirements for the ATS degree. Proportional credit is to be awarded toward the ATS degree for adults who complete a program of study between 600 and 899 clock hours.

The One-Year Option builds upon Ohio’s articulation and transfer system to help more adults accelerate their preparation for work by earning a technical associate degree. Consistent with the philosophy of the Career-Technical Assurance Guides (CTAGs), the One-Year Option guarantees that college credit will be awarded for college-level learning that occurs at career-technical institutions. The credit earned through the One-Year Option will be applied to ATS degrees bearing the following standardized degree titles:

1. Associate of Technical Study in Building and Industrial Technology
2. Associate of Technical Study in Business Technology
3. Associate of Technical Study in Health and Allied Health Technology
4. Associate of Technical Study in Information Technology
5. Associate of Technical Study in Services Technology

Inter-institutional credit affirmation teams provide oversight for the One-Year Option through peer reviews of career-technical education program of study and certifications to affirm that students who complete each program and approved certification(s) demonstrate competencies equivalent to 30 (or proportional) technical course credits [16 (https://www.ohiohighered.org/transfer/policy/#ftn16)].

Advising resources are available to guide students who are considering enrolling in either a One-Year Option program of study or a Career-Technical Assurance Guide (CTAG) program of study. Effective advising is essential to inform the decision about which pathway is most appropriate to advance each student’s immediate and future career and academic goals.
Section 363.120 of House Bill 59 of the 130th General Assembly provided the impetus for the One-Year Option.

**Associate of Arts**

The associate of arts degree program provides students with a broad academic education to prepare them for the workplace and for upper-level university study. The degree requirements for the associate of arts may be met through LCCC’s university transfer courses or by taking university transfer courses at other recognized colleges and/or universities. Since requirements at transfer institutions vary widely, students should consult the catalog of the transfer institution and plan their program with an advisor.

Select from the general education/transfer module:

- **English composition** – Six credit hours.
- **Social and behavioral sciences** – Nine credit hours, representing two different disciplines.
- **Arts and humanities** – Nine credit hours, representing two different disciplines.
- **Mathematics/statistics/logic and natural sciences** – Three credit hours in mathematics or logic and six credit hours in science, of which one course must include a lab (lab courses identified with footnote).

Completion of the required number of credit hours represents 33 of the 36-40 credit hours in the general education/transfer module. To complete this requirement, a student must take another six to seven credit hours from the general education/transfer module courses. Students must complete a minimum of 60 credit hours to complete the associate of arts degree. Therefore, a student may earn the associate of arts degree by completing the general education/transfer module requirements of 36-40 credit hours, SDEV 101, for one credit hour and additional elective credit hours selected from the general education/transfer module courses or any other courses to complete a minimum of 60 credit hours. Choices within these ranges will require careful academic planning and advice. Students should seek assistance from an advisor before proceeding.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II (OR)</td>
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<tr>
<td>ENGL 163</td>
<td>COLLEGE COMPOSITION II/SPECIAL TOPICS (OR)</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
<td></td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION (Optional)</td>
<td></td>
</tr>
<tr>
<td>ARCH 155G</td>
<td>INTRODUCTION TO ARCHAEOLOGY</td>
<td></td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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</tr>
<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
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</tr>
<tr>
<td>GPHY 151G</td>
<td>HUMAN GEOGRAPHY</td>
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</tr>
<tr>
<td>GPHY 152</td>
<td>GEOGRAPHY OF UNITED STATES/Canada</td>
<td></td>
</tr>
</tbody>
</table>

**UNIVERSAL GRADUATION REQUIREMENT**

**ENGLISH COMPOSITION / ORAL COMMUNICATION**

**SOCIAL AND BEHAVIORAL SCIENCES**

Select nine semester hours, representing two different disciplines from the following:

- ARTS 243G ART HISTORY I
- ARTS 244G ART HISTORY II
- ARTS 245G WORLD ART
- ARTS 246 HISTORY OF PHOTOGRAPHY
- ARTS 254 HISTORY OF AMERICAN ARCHITECTURE
- ENGL 251 AMERICAN LITERATURE I
- ENGL 252 AMERICAN LITERATURE II
- ENGL 253G INTRODUCTION TO WORLD LITERATURE
- ENGL 254G INTRODUCTION TO HISPANIC LITERATURE
- ENGL 255G INTRODUCTION TO FICTION
- ENGL 257G INTRODUCTION TO POETRY
- ENGL 259G INTRODUCTION TO DRAMA
- ENGL 261G MASTERPIECES OF BRITISH LITERATURE I
The associate of science degree program provides students with a broad academic education to prepare them for the workplace and for upper-level university study. The degree requirements for the associate of science may be met through LCCC's university transfer courses or by

**Associate of Science**

The associate of science degree program provides students with a broad academic education to prepare them for the workplace and for upper-level university study. The degree requirements for the associate of science may be met through LCCC's university transfer courses or by
taking university transfer courses at other recognized colleges and/or universities. Since requirements at transfer institutions vary widely, students should consult the catalog of the transfer institution and plan their program with an advisor.

Other programs can be pursued, as advisors can help students customize their associate of science programs to meet the transfer college/university’s requirements for math and/or science-related majors. Select from the general education/transfer module.

- **English composition** Six credit hours.
- **Social and behavioral sciences** Six credit hours, representing two different disciplines.
- **Arts and humanities** Six credit hours, representing two different disciplines.
- **Mathematics/statistics/logic and natural sciences** Three credit hours in mathematics or logic and six credit hours in science, of which one course must be a lab science (lab courses identified with footnote 1); and, two year-long sequences (do not have to be in the same discipline) selected from those listed below. These sequences may be part of the science and mathematics requirements or may be taken as additional coursework.

Completion of the below requirements (excluding SDEV 101) may exceed the 40 credit hours required to complete the associate of science degree requirements; otherwise, the student must select from the above list (excluding SDEV 101) additional courses to complete a total of 36-40 credit hours. LCCC students must complete a minimum of 60 credit hours to complete the associate of science degree. Therefore, a student may earn the associate of science degree by completing the above requirements, SDEV 101 for one credit hour, and additional elective hours from these or any other courses. Completion of these requirements includes the Ohio transfer module. Choices within these ranges will require careful academic planning and advice. Students should seek assistance from an advisor before proceeding.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II (OR)</td>
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<tr>
<td>ENGL 163</td>
<td>COLLEGE COMPOSITION II/SPECIAL TOPICS (OR)</td>
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</tr>
<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
<td></td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION (Optional)</td>
<td></td>
</tr>
</tbody>
</table>

**ARTS AND HUMANITIES**

Select six semester hours, representing two different disciplines from the following:

- ARTS 243G ART HISTORY I
- ARTS 244G ART HISTORY II
- ARTS 245G WORLD ART
- ARTS 246 HISTORY OF PHOTOGRAPHY
- ARTS 254 HISTORY OF AMERICAN ARCHITECTURE
- ENGL 251 AMERICAN LITERATURE I
- ENGL 252 AMERICAN LITERATURE II
- ENGL 253G INTRODUCTION TO WORLD LITERATURE
- ENGL 254G INTRODUCTION TO HISPANIC LITERATURE
- ENGL 255G INTRODUCTION TO FICTION
- ENGL 257G INTRODUCTION TO POETRY
- ENGL 259G INTRODUCTION TO DRAMA
- ENGL 261G MASTERPIECES OF BRITISH LITERATURE I
- ENGL 262G MASTERPIECES OF BRITISH LITERATURE II
- ENGL 264 WOMEN’S LITERATURE

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1. Footnote for lab courses.
ENGL 266G AFRICAN AMERICAN LITERATURE
ENGL 267G CHILDREN'S LITERATURE
ENGL 269G INTRODUCTION TO SHAKESPEARE
HUMS 151G INTRODUCTION TO HUMANITIES
HUMS 261G INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE
HUMS 262G INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY
HUMS 263 INTRODUCTION TO FOLKLORE
HUMS 264G INTRODUCTION TO ASIAN CULTURES AND LITERATURES
HUMS 271G INTRODUCTION TO MYTHOLOGY
HUMS 274 FILM APPRECIATION
HUMS 281 INTRODUCTION TO AMERICAN CINEMA
MUSC 261G MUSIC APPRECIATION
MUSC 262G MUSIC AS A WORLD PHENOMENON
PHLY 151G INTRODUCTION TO PHILOSOPHY
PHLY 161 INTRODUCTION TO ETHICS
PHLY 165 BIOETHICS
PHLY 174 CRITICAL THINKING
PHLY 262G INTRODUCTION TO EASTERN PHILOSOPHY
PHLY 270G RELIGION AND SCIENCE
PHLY 271G SOCIAL AND POLITICAL PHILOSOPHY
PHLY 281G PHILOSOPHY OF RELIGION
RELG 181G INTRODUCTION TO WORLD RELIGIONS
RELG 182G INTRODUCTION TO THE STUDY OF RELIGION
RELG 251G EXPLORING THE BIBLE
RELG 261 RELIGION IN AMERICA
RELG 262G INTRODUCTION TO EASTERN PHILOSOPHY
RELG 270G RELIGION AND SCIENCE
RELG 281G PHILOSOPHY OF RELIGION
THTR 151G INTRODUCTION TO THEATER
THTR 185G THEATER HISTORY

MATHEMATICS/STATISTICS/LOGIC AND NATURAL SCIENCES

Select three semester hours in mathematics or logic and six semester hours in science (of which one course must include a lab science) from the following:

ASTY 151 STARS, GALAXIES AND COSMOLOGY
ASTY 152 SOLAR SYSTEM ASTRONOMY
BIOG 121 ANATOMY AND PHYSIOLOGY I
BIOG 122 ANATOMY AND PHYSIOLOGY II
BIOG 150 INFECTIOUS DISEASE A TO Z
BIOG 151 GENERAL BIOLOGY
BIOG 152 HUMAN BIOLOGY
BIOG 159 AQUATIC LIFE
BIOG 161 PRINCIPLES OF BIOLOGY I
BIOG 162 PRINCIPLES OF BIOLOGY II
BIOG 163 THE MICROBIAL WORLD
BIOG 164 EXPLorATIONS IN FIELD SCIENCE
BIOG 165 INTRODUCTION TO ECOLOGY

BIOG 251 GENERAL MICROBIOLOGY
BIOG 252 MICROBIOLOGY
BIOG 261 BOTANY
BIOG 268 CLINICAL NUTRITION
BIOG 275 GENETICS
CHMY 155G CHEMISTRY AND SOCIETY
CHMY 161 GENERAL, ORGANIC AND BIOCHEMISTRY I
CHMY 162 GENERAL, ORGANIC AND BIOCHEMISTRY II
CHMY 171 GENERAL CHEMISTRY I
CHMY 172 GENERAL CHEMISTRY II
CHMY 271 ORGANIC CHEMISTRY I
CHMY 272 ORGANIC CHEMISTRY II
MTHM 150 THE ART OF MATHEMATICAL THINKING
MTHM 151 COLLEGE MATHEMATICS
MTHM 158 QUANTITATIVE REASONING
MTHM 162 MATHEMATICS FOR ELEMENTARY TEACHERS II
MTHM 168 STATISTICS
MTHM 171 COLLEGE ALGEBRA
MTHM 172 PRECALCULUS
MTHM 175 COLLEGE ALGEBRA AND PRECALCULUS
MTHM 178 BUSINESS CALCULUS
MTHM 181 CALCULUS I
MTHM 182 CALCULUS II
MTHM 270 DISCRETE MATHEMATICS
MTHM 280 LINEAR ALGEBRA
MTHM 281 MULTIVARIABLE CALCULUS
MTHM 283 DIFFERENTIAL EQUATIONS
PHLY 171 INTRODUCTION TO LOGIC
PHYC 150 GENERAL PHYSICS I
PHYC 152 GENERAL PHYSICS II
PHYC 251 COLLEGE PHYSICS I
PHYC 252 COLLEGE PHYSICS II
PSSC 153 PHYSICAL SCIENCE
PSSC 156 PHYSICAL GEOLOGY
PSSC 157 HISTORICAL GEOLOGY
PSSC 158G METEOROLOGY
PSSC 160G INTRODUCTION TO CLIMATE STUDIES
PSSC 161G EARTH SCIENCE

Select two year-long sequences (do not have to be in the same discipline) from the following. These sequences may be part of the mathematics and science requirements or may be taken as additional coursework.

BIOG 151 & BIOG 152 GENERAL BIOLOGY & HUMAN BIOLOGY
BIOG 161 & BIOG 162 PRINCIPLES OF BIOLOGY & PRINCIPLES OF BIOLOGY II
BIOG 165 & BIOG 164 INTRODUCTION TO ECOLOGY & EXPLORATIONS IN FIELD SCIENCE
CHMY 161 & CHMY 162 GENERAL, ORGANIC AND BIOCHEMISTRY I and GENERAL, ORGANIC AND BIOCHEMISTRY II

CHMY 171 & CHMY 172 GENERAL CHEMISTRY I and GENERAL CHEMISTRY II

CHMY 271 & CHMY 272 ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY II

MTHM 181 & MTHM 182 CALCULUS I and CALCULUS II

MTHM 280 & MTHM 281 LINEAR ALGEBRA and MULTIVARIABLE CALCULUS

MTHM 283 & MTHM 285 DIFFERENTIAL EQUATIONS

PHYC 150 & PHYC 152 GENERAL PHYSICS I and GENERAL PHYSICS II

PHYC 251 & PHYC 252 COLLEGE PHYSICS I and COLLEGE PHYSICS II

OR a customized sequence approved by the Science and Mathematics division.

Total Hours 28

1 Lab Science course.

Ohio Guaranteed Transfer Pathways

Section 3333.16(C) of the Ohio Revised Code was signed into law in June of 2015. This law requires the Chancellor of the Ohio Department of Higher Education to develop a process to establish statewide guaranteed transfer pathways from two-year to four-year degree programs in an equivalent field. This effort is directly related to Ohio’s initiatives in college affordability and degree completion. The Ohio Guaranteed Transfer Pathways Statewide Steering Committee was created and has begun work on implementing the legislation. Students are encouraged to communicate transfer plans early and consult with their advisor to declare an Ohio Guaranteed Transfer Pathway.

Associate of Arts Transfer Pathways

- Anthropology (p. 31)
- Art History (p. 32)
- Business (p. 32)
- Economics (p. 34)
- English (p. 35)
- Geography (p. 37)
- History (p. 37)
- Music (p. 39)
- Philosophy (p. 40)
- Political Science (p. 41)
- Psychology (p. 42)
- Social Work/Social Services/Human Services (p. 43)
- Sociology (p. 44)
- Studio Fine Arts (p. 45)
- Theatre (p. 45)

Associate of Science Transfer Pathways

- Biology (p. 32)
- Chemistry (p. 34)
- Geology (p. 37)

- Mathematics to Bachelor of Arts (p. 39)
- Mathematics to Bachelor of Science (p. 39)
- Physics (p. 41)
- Psychology (p. 43)

Anthropology, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 161G</td>
<td>INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- ARCH 155G INTRODUCTION TO ARCHAEOLOGY
- SOCY 155G INTRODUCTION TO ARCHAEOLOGY
- URB 155G INTRODUCTION TO ARCHAEOLOGY

| Hours | 16 |

Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMCC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 255G</td>
<td>THE FAMILY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 278</td>
<td>SOCIETY OF SEX &amp; GENDER</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G or PHLY 174</td>
<td>INTRODUCTION TO WORLD RELIGIONS or CRITICAL THINKING</td>
<td>3</td>
</tr>
</tbody>
</table>

| Hours | 15 |

Semester III

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>ASTY 152</td>
<td>SOLAR SYSTEM ASTRONOMY</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
<td>3</td>
</tr>
</tbody>
</table>

Foreign Language Course I

| Hours | 4 |

| Hours | 16 |

Semester IV

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHY 151G</td>
<td>HUMAN GEOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 152</td>
<td>HUMAN BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>SOCY 256</td>
<td>SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

Foreign Language Course II

| Hours | 4 |

| Physical/Biological Anthropology (Course Sharing) | 3 |

| Hours | 17 |

| Total Hours | 64 |

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
### Art History, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 161 or ARTS 165</td>
<td>DRAWING I or TWO-DIMENSIONAL DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151 or SOCY 151G</td>
<td>INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td><strong>Semester II</strong></td>
<td></td>
<td></td>
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<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
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<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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</tr>
<tr>
<td>SOCY 161G</td>
<td>INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<td>3-4</td>
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<tr>
<td>BIOG 151</td>
<td>GENERAL BIOLOGY</td>
<td></td>
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<tr>
<td>BIOG 152</td>
<td>HUMAN BIOLOGY</td>
<td></td>
</tr>
<tr>
<td>BIOG 163</td>
<td>THE MICROBIAL WORLD</td>
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</tr>
<tr>
<td>PSSC 158G</td>
<td>METEOROLOGY</td>
<td></td>
</tr>
<tr>
<td><strong>Semester III</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 159 or BIOG 165</td>
<td>AQUATIC LIFE or INTRODUCTION TO ECOLOGY</td>
<td>3</td>
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<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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<tr>
<td>Foreign Language I</td>
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<tr>
<td>Select one of the following:</td>
<td></td>
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</tr>
<tr>
<td>ARTS 151</td>
<td>PHOTOGRAPHY I</td>
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</tr>
<tr>
<td>ARTS 158</td>
<td>PRINTMAKING</td>
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<tr>
<td>ARTS 181</td>
<td>CERAMICS I</td>
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<tr>
<td><strong>Semester IV</strong></td>
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<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
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<td>ARTS 246 or ARTS 254</td>
<td>HISTORY OF PHOTOGRAPHY or HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
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<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<td>Foreign Language II</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td>60-61</td>
</tr>
</tbody>
</table>

1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Biology, Associate of Science - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
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<tr>
<td>BIOG 161</td>
<td>PRINCIPLES OF BIOLOGY I</td>
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<td>CHMY 171</td>
<td>GENERAL CHEMISTRY I</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td>BIOG 162</td>
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<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>MTHM 181</td>
<td>CALCULUS I</td>
<td>5</td>
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<td><strong>Semester IV</strong></td>
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<tr>
<td>BIOG 165</td>
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<tr>
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<td>MICROBIOLOGY</td>
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<td>PHYC 150</td>
<td>GENERAL PHYSICS I</td>
<td></td>
</tr>
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<td>PHYC 251</td>
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<td><strong>Total Hours</strong></td>
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</table>

1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Business, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td><strong>Semester I</strong></td>
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<td>ACTG 151</td>
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<td>PRINCIPLES OF MACROECONOMICS</td>
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<td>COLLEGE COMPOSITION I</td>
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<td>MTHM 171</td>
<td>COLLEGE ALGEBRA ¹</td>
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<tr>
<td>MTHM 172</td>
<td>PRECALCULUS ¹</td>
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<td></td>
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<td>BADM 251</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
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<td>BIOG 165</td>
<td>INTRODUCTION TO ECOLOGY ³, ⁶</td>
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<td>MTHM 178</td>
<td>BUSINESS CALCULUS ¹</td>
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<td>MTHM 181</td>
<td>CALCULUS ¹</td>
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<td>PSYH 151G</td>
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<td>PHL 161</td>
<td>INTRODUCTION TO ETHICS ⁴</td>
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<td>PHL 174</td>
<td>CRITICAL THINKING ⁴</td>
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<td>BIOG 151</td>
<td>GENERAL BIOLOGY ⁷</td>
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<tr>
<td>BIOG 152</td>
<td>HUMAN BIOLOGY ⁷</td>
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<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
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<tr>
<td>MKRG 251</td>
<td>PRINCIPLES OF MARKETING ¹</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY ⁵</td>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY ⁵</td>
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Students transferring to Miami University must take MTHM 181 CALCULUS I.

---

1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3. This course offers an opportunity for experiential learning.
4. Student may substitute any Ohio Transfer Module approved Arts and Humanities course.
5. Student may substitute any Ohio Transfer Module approved Social and Behavioral Science course with the exception of Economics (ECNM).
6. Student may substitute any Ohio Transfer Module approved Natural Science course.
7. Student may substitute any Ohio Transfer Module approved Natural Science course with lab.

Program Contact(s):

Gerald McFadden

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440-366-7473
gmcfadden@lorainccc.edu

### Accelerated Pathway

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<thead>
<tr>
<th>Course Code</th>
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<tr>
<td><strong>8A Session</strong></td>
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<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS ⁴</td>
<td>3</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I ⁴</td>
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</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ², ⁴</td>
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<tr>
<td><strong>8B Session</strong></td>
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<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS ⁴</td>
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<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II ¹, ⁴</td>
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<td>MTHM 171</td>
<td>COLLEGE ALGEBRA ⁴</td>
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<td></td>
<td>Hours</td>
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<td></td>
<td><strong>Spring Semester</strong></td>
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<td><strong>8A Session</strong></td>
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<td>MTHM 178</td>
<td>BUSINESS CALCULUS ¹</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY ⁴</td>
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<tr>
<td>or SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<td><strong>8B Session</strong></td>
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<tr>
<td>BIOG 151</td>
<td>ORAL COMMUNICATION</td>
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<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>PHL 161</td>
<td>INTRODUCTION TO ETHICS</td>
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<td>PHL 174</td>
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<td>MKRG 251</td>
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<td>BADM 251</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>BIOG 151</td>
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Chemistry, Associate of Science - Ohio Guaranteed Transfer Pathway

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<tbody>
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<td>CHMY 171</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<td>MTHM 181</td>
<td>CALCULUS I</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ²</td>
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Semester II

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<tr>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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Semester III

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Semester IV

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<tr>
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<td>HUMS 151G</td>
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<td>PHLY 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
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<tr>
<td>or PHLY 161</td>
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1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 This course offers an opportunity for experiential learning.
4 Indicates that this course is offered online.

Economics, Associate of Arts - Ohio Guaranteed Transfer Pathway

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Semester I

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<td>COLLEGE ALGEBRA</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>or SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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Semester II

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<td>ART HISTORY II ¹</td>
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Semester III

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<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
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<tr>
<td>or MKRG 251</td>
<td>PRINCIPLES OF MARKETING</td>
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<td>MTHM 168</td>
<td>STATISTICS</td>
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<td>Foreign Language II</td>
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<td>SOLAR SYSTEM ASTRONOMY</td>
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<td>BIOL 159</td>
<td>AQUATIC LIFE</td>
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<td>BIOL 164</td>
<td>EXPLORATIONS IN FIELD SCIENCE</td>
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<td>BIOL 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hours</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>65</td>
</tr>
</tbody>
</table>

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# English, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>Semester I</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>ENGL 161</td>
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<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
<td></td>
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<tr>
<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
<td></td>
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<tr>
<td>HUMS 281</td>
<td>INTRODUCTION TO AMERICAN CINEMA</td>
<td></td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>16</td>
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<tr>
<td>Semester II</td>
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<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II/ SPECIAL TOPICS</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
<td></td>
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<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 261G</td>
<td>MUSIC APPRECIATION</td>
<td></td>
</tr>
<tr>
<td>THTR 185G</td>
<td>THEATER HISTORY</td>
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<tr>
<td>Select one of the following:</td>
<td></td>
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<tr>
<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
<td>4</td>
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<tr>
<td>BIOT 151</td>
<td>GENERAL BIOLOGY</td>
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<tr>
<td>BIOT 152</td>
<td>HUMAN BIOLOGY</td>
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<tr>
<td>BIOT 163</td>
<td>THE MICROBIAL WORLD</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
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<tr>
<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
<td>3</td>
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<tr>
<td>SOCY 278</td>
<td>SOCIOLOGY OF SEX &amp; GENDER</td>
<td>3</td>
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<tr>
<td>WMST 210</td>
<td>INTRODUCTION TO WOMEN'S STUDIES</td>
<td>3</td>
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<tr>
<td>Hours</td>
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<td>Semester III</td>
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<tr>
<td>ENGL Elective 2</td>
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<td>Select one of the following:</td>
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<td>ASTY 152</td>
<td>SOLAR SYSTEM ASTRONOMY</td>
<td>3</td>
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<tr>
<td>BIOT 159</td>
<td>AQUATIC LIFE</td>
<td></td>
</tr>
<tr>
<td>BIOT 164</td>
<td>EXPLORATIONS IN FIELD SCIENCE</td>
<td></td>
</tr>
<tr>
<td>BIOT 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
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<td></td>
</tr>
<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course is not offered online.
ENGL 262G  MASTERPIECES OF BRITISH LITERATURE II  
Select one of the following:  
HSTR 151G  CIVILIZATION I  
HSTR 161  UNITED STATES I  
Hours  16  

Semester IV  
PHLY 151G  INTRODUCTION TO PHILOSOPHY  3  
Foreign Language II  4  
Select one of the following:  
ENGL 253G  INTRODUCTION TO WORLD LITERATURE  
ENGL 254G  INTRODUCTION TO HISPANIC LITERATURE  
ENGL 255G  INTRODUCTION TO FICTION  
ENGL 257G  INTRODUCTION TO POETRY  
Select one of the following:  
HSTR 152G  CIVILIZATION II  
HSTR 162  UNITED STATES II  
Hours  13  
Total Hours  61  

1 Indicates that this course requires a prerequisite.  
2 Select English elective from the Ohio Transfer Module.  
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Accelerated Pathway

The Accelerated Pathway for the English, Associate of Arts - Ohio Guaranteed Transfer Pathway is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree and transfer within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your transfer goals.

Course Title Hours  
First Year  
Fall Semester  
ENGL 161  COLLEGE COMPOSITION I  3  
MTHM 158  QUANTITATIVE REASONING  3  
SDEV 101  COLLEGE 101  
SOCY 151G  INTRODUCTION TO SOCIOLOGY  3  
SPNH 151G  ELEMENTARY SPANISH I  4  
Select one of the following:  
HUMS 151G  INTRODUCTION TO HUMANITIES  
HUMS 263  INTRODUCTION TO FOLKLORE  
HUMS 271G  INTRODUCTION TO MYTHOLOGY  
HUMS 274  FILM APPRECIATION  
HUMS 281  INTRODUCTION TO AMERICAN CINEMA  
Hours  17  
Spring Semester  
CMMC 151  ORAL COMMUNICATION  3  
ENGL 162  COLLEGE COMPOSITION II  3  
ENGL 251  AMERICAN LITERATURE I  3  
ENGL 252  or AMERICAN LITERATURE II  
Select one of the following:  
ARTS 245G  WORLD ART  
ARTS 254  HISTORY OF AMERICAN ARCHITECTURE  
MUSC 261G  MUSIC APPRECIATION  
THTR 185G  THEATER HISTORY  
Select one of the following:  
ASTY 151  STARS, GALAXIES AND COSMOLOGY  
BIOG 151  GENERAL BIOLOGY  
BIOG 152  HUMAN BIOLOGY  
BIOG 163  THE MICROBIAL WORLD  
Hours  16  

Summer Semester  
ENGL 255G  INTRODUCTION TO FICTION  3  
HSTR 161  UNITED STATES I  3  
ENGL Elective  3  
Select one of the following:  
HSTR 252G  WOMEN IN WORLD HISTORY  
HSTR 267G  AFRICAN AMERICAN HERITAGE  
SOCY 278  SOCIETY OF SEX & GENDER  
WMST 210  INTRODUCTION TO WOMEN'S STUDIES  
Hours  12  

Second Year  
Fall Semester  
ENGL 261G  or ENGL 262G  MASTERPIECES OF BRITISH LITERATURE I  3  
or MASTERPIECES OF BRITISH LITERATURE II  
HSTR 152G  or HSTR 162  CIVILIZATION II  
or UNITED STATES II  
PHLY 151G  INTRODUCTION TO PHILOSOPHY  3  
SPNH 152G  ELEMENTARY SPANISH II  4  
Select one of the following:  
ASTY 152  SOLAR SYSTEM ASTRONOMY  
BIOG 159  AQUATIC LIFE  
BIOG 164  EXPLORATIONS IN FIELD SCIENCE  
BIOG 165  INTRODUCTION TO ECOLOGY  
Hours  16  

1 Indicates that this course requires a prerequisite.  
2 Select English elective from the Ohio Transfer Module.  
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options.
## Geography, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>GPHY 151G</td>
<td>HUMAN GEOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td></td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td></td>
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<tr>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>Semester II</strong></td>
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<td></td>
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<tr>
<td>BIOC 151</td>
<td>GENERAL BIOLOGY</td>
<td>4</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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</tr>
<tr>
<td></td>
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<td>2</td>
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<tr>
<td>Physical Geography (Course Sharing)</td>
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<tr>
<td>World Regional Geography (Course Sharing)</td>
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<td><strong>Hours</strong></td>
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<td><strong>Semester III</strong></td>
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<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
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<tr>
<td>Foreign Language I</td>
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<tr>
<td>Map Communication and Analysis (Course Sharing)</td>
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<tr>
<td>Select one of the following courses:</td>
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<tr>
<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
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<tr>
<td>ASTY 152</td>
<td>SOLAR SYSTEM ASTRONOMY</td>
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<tr>
<td>PSSC 156</td>
<td>PHYSICAL GEOLOGY</td>
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<tr>
<td>PSSC 157</td>
<td>HISTORICAL GEOLOGY</td>
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<td>PSSC 158G</td>
<td>METEOROLOGY</td>
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<tr>
<td>PSSC 160G</td>
<td>INTRODUCTION TO CLIMATE STUDIES</td>
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<tr>
<td>PSSC 161G</td>
<td>EARTH SCIENCE</td>
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<td><strong>Semester IV</strong></td>
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<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
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<tr>
<td>PLSC 157G</td>
<td>CONTEMPORARY WORLD PROBLEMS</td>
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<tr>
<td>Foreign Language II</td>
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<td>4</td>
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<tr>
<td>Introduction to Geographic Information Systems (Course Sharing)</td>
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<td>3</td>
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<tr>
<td><strong>Hours</strong></td>
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<td>16</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<td>64-65</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite.
2 This course is not offered at Lorain County Community College. Course needs to be transferred in from another institution.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

## Geology, Associate of Science - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td><strong>Semester I</strong></td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>MTHM 181</td>
<td>CALCULUS I</td>
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<tr>
<td>PSSC 156</td>
<td>PHYSICAL GEOLOGY</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>2</td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>Semester II</strong></td>
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</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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<tr>
<td>or PHLY 161</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
<td></td>
</tr>
<tr>
<td>or PHLY 162</td>
<td>INTRODUCTION TO ETHICS</td>
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</tr>
<tr>
<td>or PHYC 150</td>
<td>GENERAL PHYSICS I</td>
<td>4-5</td>
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<tr>
<td>or PHYC 251</td>
<td>or COLLEGE PHYSICS I</td>
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<tr>
<td>or SPNH 151G</td>
<td>ELEMENTARY SPANISH I</td>
<td>4</td>
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<td>CHMY 171</td>
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<td>PHLY 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
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<td>or PHYC 252</td>
<td>or COLLEGE PHYSICS II</td>
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<tr>
<td>or SPNH 152G</td>
<td>ELEMENTARY SPANISH II</td>
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</tr>
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<td><strong>Hours</strong></td>
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<td><strong>Total Hours</strong></td>
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<td>64-65</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

## History, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
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</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td><strong>Hours</strong></td>
<td></td>
<td>16</td>
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<tr>
<td><strong>Semester II</strong></td>
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<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>1</td>
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<tr>
<td><strong>Hours</strong></td>
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</table>
ENGL 162 or ENGL 163 **COLLEGE COMPOSITION II** 3  
HSTR 162 **UNITED STATES II** 3  
HUMS 151G **INTRODUCTION TO HUMANITIES** 3  
SOCI 151G **INTRODUCTION TO SOCIOLOGY** 3  

**Semester III**

HSTR 151G **CIVILIZATION I** 3  
HSTR 252G or HSTR 267G **WOMEN IN WORLD HISTORY** 3  
PLSC 151G **COMPARATIVE POLITICS** 3  
Foreign Language I 4  
Select one of the following: 4  
- ASTY 151 **STARS, GALAXIES AND COSMOLOGY**  
- BIOG 151 **GENERAL BIOLOGY**  
- BIOG 152 **HUMAN BIOLOGY**  
- BIOG 163 **THE MICROBIAL WORLD**  

Hours 15

**Semester IV**

ARTS 244G **ART HISTORY II** 3  
HSTR 152G **CIVILIZATION II** 3  
Foreign Language II 1 4  
Select one of the following: 3  
- ASTY 152 **SOLAR SYSTEM ASTRONOMY**  
- BIOG 159 **AQUATIC LIFE**  
- BIOG 164 **EXPLORATIONS IN FIELD SCIENCE**  
- BIOG 165 **INTRODUCTION TO ECOLOGY**  
Select one of the following: 3  
- PLSC 155 **STATE AND LOCAL GOVERNMENT**  
- PLSC 156 **AMERICAN NATIONAL GOVERNMENT**  
- PLSC 157G **CONTEMPORARY WORLD PROBLEMS**  

Total Hours 16

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Accelerated Pathway

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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
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</tr>
<tr>
<td>HSTR 161</td>
<td><strong>UNITED STATES I</strong> 3</td>
<td>3</td>
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</tbody>
</table>

3 Indicates that this course is offered online.

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Course Title Hours

**Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTR 161</td>
<td><strong>UNITED STATES I</strong> 3</td>
<td>3</td>
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</tbody>
</table>

### Spring Semester

**Full Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTR 161</td>
<td><strong>UNITED STATES II</strong> 3</td>
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</table>

### Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>HSTR 161</td>
<td><strong>UNITED STATES II</strong> 3</td>
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### Second Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td><strong>ART HISTORY I (Full Semester or 10 Week Session)</strong> 1,3</td>
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<td>ARTS 244G</td>
<td><strong>ART HISTORY II (Full Semester)</strong> 1,3</td>
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<tr>
<td>BIOG 165</td>
<td><strong>INTRODUCTION TO ECOLOGY (8B Session)</strong> 3</td>
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<tr>
<td>HSTR 152G</td>
<td><strong>CIVILIZATION II (10 Week Session)</strong> 3</td>
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<tr>
<td>SPNH 152G</td>
<td><strong>ELEMENTARY SPANISH II (8B Session)</strong> 1,3</td>
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Select one of the following: 3  
- PLSC 155 **STATE AND LOCAL GOVERNMENT** (8A Session or 8B Session) 3  
- PLSC 156 **AMERICAN NATIONAL GOVERNMENT** (Full Semester or 8B Session) 3  
- PLSC 157G **CONTEMPORARY WORLD PROBLEMS** (Full Semester) 3  

Total Hours 19

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course is offered online.
### Mathematics, Associate of Science to Bachelor of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<td><strong>Semester I</strong></td>
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<tr>
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<td>MTHM 181</td>
<td>CALCULUS I</td>
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<td>INTRODUCTION TO PSYCHOLOGY</td>
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<td>MTHM 182</td>
<td>CALCULUS II 1</td>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<td>ASTY 152</td>
<td>SOLAR SYSTEM ASTRONOMY</td>
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<td>BIOG 159</td>
<td>AQUATIC LIFE</td>
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</tr>
<tr>
<td>BIOG 164</td>
<td>EXPLORATIONS IN FIELD SCIENCE</td>
<td></td>
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<tr>
<td>BIOG 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
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<td>LINEAR ALGEBRA 1</td>
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<td>MULTIVARIABLE CALCULUS 1</td>
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<tr>
<td>SPNH 151G</td>
<td>ELEMENTARY SPANISH I</td>
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<tr>
<td>Select one of the following:</td>
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<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
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<td>GENERAL BIOLOGY</td>
<td></td>
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<tr>
<td>BIOG 152</td>
<td>HUMAN BIOLOGY</td>
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<tr>
<td>BIOG 163</td>
<td>THE MICROBIAL WORLD</td>
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<td><strong>Hours</strong></td>
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<td><strong>Semester IV</strong></td>
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<td>INTRODUCTION TO HUMANITIES</td>
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<td>MTHM 270</td>
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<td>MTHM 283</td>
<td>DIFFERENTIAL EQUATIONS 1</td>
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<td>PHLY 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
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<tr>
<td>SPNH 152G</td>
<td>ELEMENTARY SPANISH II 1</td>
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1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
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<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
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<tr>
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<tr>
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<tr>
<td>MUSA 161</td>
<td>APPLIED MUSIC: BRASS</td>
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</tr>
<tr>
<td>MUSA 162</td>
<td>APPLIED MUSIC: GUITAR</td>
<td></td>
</tr>
<tr>
<td>MUSA 164</td>
<td>APPLIED MUSIC: PERCUSSION</td>
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<tr>
<td>MUSA 165</td>
<td>APPLIED MUSIC: STRINGS</td>
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<tr>
<td>MUSA 166</td>
<td>APPLIED MUSIC - VOICE</td>
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<tr>
<td>MUSA 167</td>
<td>APPLIED MUSIC: WOODWINDS</td>
<td></td>
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</tbody>
</table>

| Select one of the following: |                                           | 1     |
| MUSC 101 | CIVIC CHORALE                             |       |
| MUSC 102 | CIVIC CONCERT BAND                        |       |
| MUSC 103 | CIVIC ORCHESTRA                           |       |
| MUSC 111 | COLLEGIATE CHORALE                        |       |
| MUSC 165 | VOCAL ENSEMBLE                            |       |

<table>
<thead>
<tr>
<th>Semester II</th>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
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<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II 1</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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</tr>
<tr>
<td>MUSC 172</td>
<td>MUSIC THEORY II 1</td>
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<tr>
<td>MUSC 182</td>
<td>SIGHT SINGING AND EAR TRAINING II 1</td>
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</tr>
<tr>
<td>MUSC 156</td>
<td>ELEMENTARY CLASS PIANO II 1</td>
<td>1-2</td>
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</table>

| or MUSA 163 | or APPLIED MUSIC: KEYBOARD                           |       |

| Select one of the following: |                                           | 1     |
| MUSA 161 | APPLIED MUSIC: BRASS                             |       |
| MUSA 162 | APPLIED MUSIC: GUITAR                           |       |
| MUSA 164 | APPLIED MUSIC: PERCUSSION                        |       |
| MUSA 165 | APPLIED MUSIC: STRINGS                           |       |
| MUSA 166 | APPLIED MUSIC - VOICE                            |       |
| MUSA 167 | APPLIED MUSIC: WOODWINDS                         |       |

| Select one of the following: |                                           | 1     |
| MUSC 101 | CIVIC CHORALE                                   |       |
| MUSC 102 | CIVIC CONCERT BAND                              |       |
| MUSC 103 | CIVIC ORCHESTRA                                 |       |
| MUSC 111 | COLLEGIATE CHORALE                              |       |
| MUSC 165 | VOCAL ENSEMBLE                                  |       |

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<tr>
<th>Semester III</th>
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<td>MUSIC APPRECIATION</td>
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<tr>
<td>MUSC 271</td>
<td>MUSIC THEORY III 1</td>
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<tr>
<td>MUSC 281</td>
<td>SIGHT SINGING AND EAR TRAINING III 1</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
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</tbody>
</table>

| Select one of the following: |                                           | 4     |
| ASTY 151      | STARS, GALAXIES AND COSMOLOGY                        |       |
| BIOG 151      | GENERAL BIOLOGY                                       |       |
| BIOG 152      | HUMAN BIOLOGY                                         |       |
| BIOG 163      | THE MICROBIAL WORLD                                   |       |

| Select one of the following: |                                           | 1     |
| MUSA 261 | APPLIED MUSIC: BRASS                             |       |
| MUSA 262 | APPLIED MUSIC: GUITAR                           |       |
| MUSA 263 | APPLIED MUSIC: KEYBOARD                        |       |
| MUSA 264 | APPLIED MUSIC: PERCUSSION                       |       |

| MUSA 265 | APPLIED MUSIC: STRINGS                           |       |
| MUSA 266 | APPLIED MUSIC: VOICE                            |       |
| MUSA 267 | APPLIED MUSIC: WOODWINDS                        |       |

| Select one of the following: |                                           | 1     |
| MUSC 101 | CIVIC CHORALE                                   |       |
| MUSC 102 | CIVIC CONCERT BAND                              |       |
| MUSC 103 | CIVIC ORCHESTRA                                 |       |
| MUSC 111 | COLLEGIATE CHORALE                              |       |
| MUSC 165 | VOCAL ENSEMBLE                                  |       |

<table>
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<tr>
<th>Semester IV</th>
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<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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</tr>
<tr>
<td>or HSTR 152G</td>
<td>or CIVILIZATION II</td>
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</tr>
<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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</tr>
<tr>
<td>MUSC 272</td>
<td>MUSIC THEORY IV 1</td>
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<tr>
<td>MUSC 282</td>
<td>SIGHT SINGING AND EAR TRAINING IV 1</td>
<td>1</td>
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</table>

| Select one of the following: |                                           | 3     |
| ASTY 152      | SOLAR SYSTEM ASTRONOMY                          |       |
| BIOG 159     | AQUATIC LIFE                                     |       |
| BIOG 164     | EXPLORATIONS IN FIELD SCIENCE                    |       |
| BIOG 165     | INTRODUCTION TO ECOLOGY                          |       |

| Select one of the following: |                                           | 1     |
| MUSA 261 | APPLIED MUSIC: BRASS                             |       |
| MUSA 262 | APPLIED MUSIC: GUITAR                           |       |
| MUSA 263 | APPLIED MUSIC: KEYBOARD                        |       |
| MUSA 264 | APPLIED MUSIC: PERCUSSION                       |       |
| MUSA 265 | APPLIED MUSIC: STRINGS                           |       |
| MUSA 266 | APPLIED MUSIC: VOICE                            |       |
| MUSA 267 | APPLIED MUSIC: WOODWINDS                         |       |

| Select one of the following: |                                           | 1     |
| MUSC 101 | CIVIC CHORALE                                   |       |
| MUSC 102 | CIVIC CONCERT BAND                              |       |
| MUSC 103 | CIVIC ORCHESTRA                                 |       |
| MUSC 111 | COLLEGIATE CHORALE                              |       |
| MUSC 165 | VOCAL ENSEMBLE                                  |       |

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<tr>
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<table>
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1 Indicates that this course requires a prerequisite.
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### Lorain County Community College

#### Political Science, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Semester I</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<td>MTHM 168</td>
<td>STATISTICS</td>
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<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<td>SDEV 101</td>
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<td>MTHM 182</td>
<td>CALCULUS I</td>
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<td>SDEV 101</td>
<td>COLLEGE 101 ²</td>
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<tr>
<td>Hours</td>
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<table>
<thead>
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<th>Semester II</th>
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<tbody>
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<td>ENGL 162</td>
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<td>CALCULUS II ¹</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>Hours</td>
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<thead>
<tr>
<th>Semester III</th>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>MTHM 280</td>
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<td>MULTIVARIABLE CALCULUS ¹</td>
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<td>PHYC 251</td>
<td>COLLEGE PHYSICS I ¹</td>
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<th>Semester IV</th>
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<td>MTHM 283</td>
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<td>INTRODUCTION TO PHILOSOPHY</td>
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<tr>
<td>or PHLY 161</td>
<td>INTRODUCTION TO ETHICS</td>
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<td>PHYC 252</td>
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<td>SOCY 151G</td>
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<tr>
<td>Hours</td>
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</table>

**Total Hours**: 63

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

---

### Physics, Associate of Science - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Semester I</td>
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<td>CHMY 171</td>
<td>GENERAL CHEMISTRY I</td>
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<td>CMPR 166</td>
<td>INTRODUCTION TO COMPUTER SCIENCE</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 182</td>
<td>CALCULUS I</td>
<td>5</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ²</td>
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<tr>
<td>Hours</td>
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<tr>
<th>Semester II</th>
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<tbody>
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<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II ¹</td>
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<td>PLSC 155</td>
<td>STATE AND LOCAL GOVERNMENT</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ASTY 152</td>
<td>SOLAR SYSTEM ASTRONOMY</td>
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<tr>
<td>BIOG 159</td>
<td>AQUATIC LIFE</td>
<td></td>
</tr>
<tr>
<td>BIOG 164</td>
<td>EXPLORATIONS IN FIELD SCIENCE</td>
<td></td>
</tr>
<tr>
<td>BIOG 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
<td></td>
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<td>Hours</td>
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<td>15</td>
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</table>

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## Semester III

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<tbody>
<tr>
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<td>PRINCIPLES OF MACROECONOMICS</td>
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<tr>
<td>PLSC 151G</td>
<td>COMPARATIVE POLITICS</td>
<td>3</td>
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Foreign Language I 4

Select one of the following:

- ARTS 243G ART HISTORY I
- ARTS 244G ART HISTORY II
- ARTS 245G WORLD ART

Select one of the following:

- ASTY 151 STARS, GALAXIES AND COSMOLOGY
- BIOG 151 GENERAL BIOLOGY
- BIOG 152 HUMAN BIOLOGY
- BIOG 161 PRINCIPLES OF BIOLOGY I
- BIOG 163 THE MICROBIAL WORLD

<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Accelerated Pathway

The Accelerated Pathway for the Political Science, Associate of Arts - Ohio Guaranteed Transfer Pathway is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree and transfer within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your transfer goals.

### Psychology, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
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<td>COLLEGE COMPOSITION I</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</tr>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>16</th>
</tr>
</thead>
</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 This course is offered online.
4 This course may be taken in an alternate sub-term.
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>SOCIAL PSYCHOLOGY</td>
<td>3</td>
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<tr>
<td>PSYH 263</td>
<td>PERSONALITY THEORIES</td>
<td>3</td>
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<td>Foreign Language I</td>
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<td>4</td>
</tr>
<tr>
<td>Semester IV</td>
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<tr>
<td>BIOG 151</td>
<td>GENERAL BIOLOGY</td>
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<tr>
<td>PSYH 256</td>
<td>ADULTHOOD AND AGING</td>
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<td>PSYH 257</td>
<td>ABNORMAL PSYCHOLOGY</td>
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<tr>
<td>Foreign Language II</td>
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<tr>
<td>Hours</td>
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<td>16</td>
</tr>
</tbody>
</table>

1 Indicates this course requires a prerequisite.
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Psychology, Associate of Science - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester I</td>
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<tr>
<td>BIOG 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
<td>4</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Semester II

| BIOG 164   | EXPLORATIONS IN FIELD SCIENCE              | 3     |
| CMMC 151   | ORAL COMMUNICATION                         | 3     |
| ENGL 162   | COLLEGE COMPOSITION II                     | 3     |
| PSYH 251   | HUMAN GROWTH AND DEVELOPMENT                | 3     |
| SOWK 151G  | INTRODUCTION TO SOCIAL WORK AND SOCIAL WELFARE | 3   |
| Hours      |                                            | 16    |

Semester III

| BIOG 161   | PRINCIPLES OF BIOLOGY I                    | 4     |
| MTHM 168   | STATISTICS                                 | 3     |
| PSYH 257   | ABNORMAL PSYCHOLOGY                        | 3     |
| PSYH 263   | PERSONALITY THEORIES                       | 3     |
| Foreign Language I |                                        | 4     |
| Hours      |                                            | 15    |

Semester IV

| ARS 245G   | WORLD ART                                  | 3     |
| BIOG 162   | PRINCIPLES OF BIOLOGY II                   | 4     |
| PSYH 261   | SOCIAL PSYCHOLOGY                          | 3     |
| Foreign Language II |                                          | 4     |
| Hours      |                                            | 14    |
| Total Hours|                                            | 63    |

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Social Work/Social Services/Human Services, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 151</td>
<td>INTRO TO SOCIAL WORK AND SOCIAL WELFARE</td>
<td>3</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>16</td>
</tr>
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</table>

Semester II

| ENGL 162   | COLLEGE COMPOSITION II                     | 3     |
| ARTS 245G  | WORLD ART                                  | 3     |
| PSYH 151   | INTRODUCTION TO PSYCHOLOGY                 | 3     |
| BIOG 165   | INTRODUCTION TO ECOLOGY                    | 3     |
| Select one of the following: |                                      | 3    |
| HSTR 267G  | AFRICAN AMERICAN HERITAGE                  |       |
| SOCY 256   | SOCIAL PROBLEMS                            | 3     |
| SOCY 276G  | RACE AND ETHNICITY                         | 3     |
| Hours      |                                            | 15    |

Semester III

| BIOG 152   | HUMAN BIOLOGY                              | 4     |
| PLSC 156   | AMERICAN NATIONAL GOVERNMENT               | 3     |
| SOWK 251G  | SOCIAL WELFARE AND POVERTY                 | 3     |
| Select two of the following: |                                      | 6    |
| ECNM 152   | PRINCIPLES OF MICROECONOMICS               |       |
| HSTR 252G  | WOMEN IN WORLD HISTORY                     |       |
| PHLY 174   | CRITICAL THINKING                          |       |
| WMST 210   | INTRODUCTION TO WOMEN'S STUDIES            |       |
| Hours      |                                            | 16    |

Semester IV

| PHLY 165   | BIOETHICS                                  | 3     |
| PSYH 257   | ABNORMAL PSYCHOLOGY                        | 3     |
| RELG 181G  | INTRODUCTION TO WORLD RELIGIONS            | 3     |
| SOCY 161G  | INTRODUCTION TO CULTURAL ANTHROPOLOGY       | 3     |
| SOCY 255G  | THE FAMILY                                 | 3     |
| Hours      |                                            | 15    |
| Total Hours|                                            | 62    |
1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Sociology, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>WMST 210</td>
<td>INTRODUCTION TO WOMEN’S STUDIES</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sociology, Associate of Arts - Ohio Guaranteed Transfer Pathway**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G or RELG 262G</td>
<td>INTRODUCTION TO WORLD RELIGIONS or INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 161G</td>
<td>INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

**Accelerated Pathway**

The Accelerated Pathway for the Sociology, Associate of Arts - Ohio Guaranteed Transfer Pathway is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree and transfer within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your transfer goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>WMST 210</td>
<td>INTRODUCTION TO WOMEN’S STUDIES</td>
<td>3</td>
</tr>
</tbody>
</table>

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1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
### Studio Fine Arts, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 161</td>
<td>DRAWING I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 165</td>
<td>TWO-DIMENSIONAL DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Semester II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 167</td>
<td>THREE-DIMENSIONAL DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>or PSSC 158G</td>
<td>METEOROLOGY</td>
<td></td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II or SPECIAL TOPICS</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td></td>
</tr>
<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
<td></td>
</tr>
<tr>
<td>PHLY 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Semester III</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 159</td>
<td>AQUATIC LIFE</td>
<td>3</td>
</tr>
<tr>
<td>or BIOG 165</td>
<td>or INTRODUCTION TO ECOLOGY</td>
<td></td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art Elective &lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art Elective &lt;sup&gt;2&lt;/sup&gt;</td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
<td>15</td>
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<tr>
<td><strong>Semester IV</strong></td>
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<td></td>
</tr>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
<td>3</td>
</tr>
<tr>
<td>or HSTR 152G</td>
<td>or CIVILIZATION II</td>
<td></td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Indicates that this course requires a prerequisite.
2. Studio Art Elective to be selected from the following list: ARTS 151, ARTS 158, ARTS 171, ARTS 181, ARTS 185, and ARTS 260.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

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### Theatre, Associate of Arts - Ohio Guaranteed Transfer Pathway

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Semester II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II or AMERICAN LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 252</td>
<td>or AMERICAN LITERATURE II</td>
<td></td>
</tr>
<tr>
<td>THTR 162</td>
<td>INTRODUCTION TO TECHNICAL PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>THTR 185G</td>
<td>THEATER HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>Select from the following list:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
<td></td>
</tr>
<tr>
<td>BIOG 151</td>
<td>GENERAL BIOLOGY</td>
<td></td>
</tr>
<tr>
<td>BIOG 152</td>
<td>HUMAN BIOLOGY</td>
<td></td>
</tr>
<tr>
<td>BIOG 163</td>
<td>THE MICROBIAL WORLD</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Semester III</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I or MASTERPIECES OF BRITISH LITERATURE II</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 262G</td>
<td>or MASTERPIECES OF BRITISH LITERATURE II</td>
<td></td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>THTR 181</td>
<td>TECHNIQUES OF ACTING</td>
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<tr>
<td>Foreign Language I</td>
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<tr>
<td>Select one from the following list:</td>
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</tr>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART I</td>
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</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>Semester IV</strong></td>
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<td></td>
</tr>
<tr>
<td>SOCY 161G</td>
<td>INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>
Accelerated Pathways

Accelerated pathways allow students to earn a degree in as little as 15 months. Choosing an accelerated pathway can shorten your time to degree, and provide a fast start to your career.

Associate of Arts Online (p. 49)

Associate of Arts - Ohio Guaranteed Transfer Pathway
- Business (p. 33)
- Economics (p. 34)
- English (p. 36)
- History (p. 38)
- Political Science (p. 42)
- Sociology (p. 44)

Associate of Applied Business
- Accounting (p. 73)
- Business Administration - Entrepreneurship (p. 75)
- Business Administration - Management (p. 77)

Associate of Applied Science
- Computer Engineering Technology - Business Forensics Investigations Major (p. 94)
- Computer Engineering Technology - Computer and Digital Forensics Major (p. 96)
- Computer Engineering Technology - Computer Applications Integration Specialist Major (p. 98)
- Early Childhood Education (p. 194)
- Electronic Engineering Technology - Computer Maintenance and Networking (p. 108)
- Public Administration (p. 199)
- Sports and Fitness Management (p. 178)

Associate of Individualized Studies
The associate of individualized studies is a degree designed to provide viable options for students with career or educational goals that do not require a specific major. College credit will be awarded for coursework completed at other post-secondary institutions or for other documentable learning experiences in educational enterprises judged at college level. The degree is awarded for the satisfactory completion of a minimum of 60 semester credit hours, exclusive of college preparatory courses, including an English sequence, math (for students beginning fall 2016 and after), and student development course, in an individually planned educational program.

The program must contain:

1. Twenty-four semester credit hours distributed with eight credit hours limited to any three of the following academic areas: business, engineering technologies, arts and humanities, science and mathematics, social sciences and human services, allied health and nursing, physical education, or student development.
2. Thirty semester credit hours of block credit awarded for documentable educational experience or courses completed at other post-secondary institutions or other educational enterprises judged by LCCC criteria to be of college level; OR
3. A coherent combination of technical and/or general courses totaling a minimum of 20 semester credit hours planned in consultation with an academic advisor to form an individualized area of concentration.
4. Electives will include any courses (inclusive of credit awarded for prior learning assessment) in the 2020-21 Catalog.

The individualized degree plan, once designed, requires approval of the provost/vice president of academic affairs and University Partnership.

Associate of Technical Studies
The associate of technical studies is a degree designed to provide flexible options for non-traditional students with technical career goals such as IBEW/NECA Electrical Trades Apprenticeship, Pipefitter Apprenticeship Pathway, Plumber Apprenticeship Pathway, Building and Industrial Technology, Health and Allied Health Technology, Business Technology, Information Technology, and Services Technology.

College credit will be awarded for work completed and other post-secondary institutions, selected apprenticeships and for educational experiences judged to be college level. The degree is awarded for the satisfactory completion of a minimum of 60 semester credit hours, exclusive of college preparatory courses, in an individually planned educational program, which contains:

1. A coherent combination of technical courses totaling a minimum of 30 semester credit hours from two or more technical programs meeting the career goals of the student; OR
2. A maximum of 30 semester credit hours of block credit awarded for documentable educational experience or courses completed at other post-secondary institutions or other educational enterprises judged to be of college-level. Every program must include a minimum of 30 non-technical courses (which includes both general education and applied general education courses). General education must contain at least 15 semester credit hours and include English composition or oral communications; SDEV 101, a mathematics, statistics and/or logic course; and a minimum of six semester hours from the following three categories, with at least two of the three categories represented: arts and humanities, social and behavioral sciences and natural sciences.
Associate of Arts Degree with Specialization in International Studies

The associate of arts degree with specialization in international studies is primarily the lower-division coursework for a business administration degree in international studies. This multidisciplinary program prepares students for the global environment, developing sensitivity for other cultures and appreciation of global interdependencies. It is also an excellent foundation for careers in the international arena in fields such as government service, international banking and finance, travel and tourism, and careers with international organizations and corporations. Baccalaureate programs in international studies commonly require students to select a specialization either in a global region (such as Southeast Asia studies) or a discipline focus (such as political science).

In the process of completing degree requirements, students seeking the associate of arts with specialization in international studies are required to complete at least 24 credit hours covering all three of the following areas:

- INTL 151G and INTL 152G, Principles of International Studies I and II.
- Foreign language study through the intermediate II level (252) in a language that is linked to the student’s area of interest. Students who have completed four years of foreign language in high school are encouraged to select a second foreign language.
- Courses that end with a G are designated as internationalized. Students are encouraged to select these courses based on their intended specialization within international studies.

Students are advised to consult the program guides at the universities to which they intend to transfer, as well as the college website, published schedules, a division representative, counseling or the Enrollment, Financial and Career Services division prior to enrolling.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED COURSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Education for the Associate of Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>8-12</td>
<td></td>
</tr>
<tr>
<td>INTL 151G PRINCIPLES/INTERNATIONAL STUDIES I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>INTL 152G PRINCIPLES/INTERNATIONAL STUDIES II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>SUGGESTED COURSES (CONSULT WITH TRANSFER INSTITUTION)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 253G INTRODUCTION TO WORLD LITERATURE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GPHY 151G HUMAN GEOGRAPHY</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSTR 151G CIVILIZATION I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HSTR 152G CIVILIZATION II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOCY 161G INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MUSC 262G MUSIC AS A WORLD PHENOMENON</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RELG 181G INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSSC 161G EARTH SCIENCE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PLSC 157G CONTEMPORARY WORLD PROBLEMS</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>41-45</td>
<td></td>
</tr>
</tbody>
</table>

1 Indicates this course has a prerequisite.

International Studies Focus

Lorain County Community College’s international studies focus supports and encourages students through thematic international units across the curriculum including the international aspects of business, education, gender, health and languages.

Students who intend to graduate with an international studies focus must complete all of the degree requirements for their particular program and the international studies focus requirements. Students satisfy the international studies focus by completing a minimum of 24 credit hours in courses that are designated as international or global.

A course that is determined to have at least 30% of its content from material or resources found outside the United States is considered an international or global course. The courses that meet this definition are listed below. Those special offerings, along with the automatically international courses are identified in the class schedule with a G following the course number (e.g. CMCC 177G). Any combination of these two types of international courses adding up to a minimum of 24 credit hours satisfies the international studies focus requirement.

Students may be able to satisfy the international studies focus without additional credit hours by selecting Ohio transfer module and/or program requirements that have been designated as having international content. Students are advised to consult the College website, published schedules, a division representative, counseling or the Enrollment, Financial and Career Services division, prior to enrolling.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>SOCIAL AND BEHAVIORAL SCIENCES (OHIO TRANSFER MODULE)</strong></td>
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<tr>
<td>GPHY 151G HUMAN GEOGRAPHY</td>
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<tr>
<td>HSTR 151G CIVILIZATION I</td>
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<td>HSTR 152G CIVILIZATION II</td>
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<tr>
<td>HSTR 171G THE WORLD SINCE 1900</td>
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<tr>
<td>HSTR 267G AFRICAN AMERICAN HERITAGE</td>
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<tr>
<td>PLSC 151G COMPARATIVE POLITICS</td>
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<tr>
<td>PLSC 157G CONTEMPORARY WORLD PROBLEMS</td>
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<tr>
<td>SOCY 151G INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
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<tr>
<td>SOCY 161G INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
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<tr>
<td>SOCY 255G THE FAMILY</td>
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<tr>
<td>SOCY 276G RACE AND ETHNICITY</td>
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<tr>
<td><strong>ARTS AND HUMANITIES (OHIO TRANSFER MODULE)</strong></td>
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<tr>
<td>ARTS 243G ART HISTORY I</td>
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<tr>
<td>ARTS 244G ART HISTORY II</td>
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<td></td>
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<tr>
<td>ARTS 245G WORLD ART</td>
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<tr>
<td>ENGL 253G INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G INTRODUCTION TO HISPANIC LITERATURE</td>
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<td>ENGL 255G INTRODUCTION TO FICTION</td>
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<td>ENGL 257G INTRODUCTION TO POETRY</td>
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<tr>
<td>ENGL 259G INTRODUCTION TO DRAMA</td>
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<tr>
<td>ENGL 261G MASTERPIECES OF BRITISH LITERATURE I</td>
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<tr>
<td>ENGL 262G MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G AFRICAN AMERICAN LITERATURE</td>
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<tr>
<td>ENGL 267G CHILDREN’S LITERATURE</td>
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<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
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<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
<td>3</td>
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<tr>
<td>MUSC 261G</td>
<td>MUSIC APPRECIATION</td>
<td>3</td>
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<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
<td>3</td>
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<tr>
<td>PHL Y 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
<td>3</td>
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<tr>
<td>PHL Y 271G</td>
<td>SOCIAL AND POLITICAL PHILOSOPHY</td>
<td>3</td>
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<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<tr>
<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
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<tr>
<td>THTR 185G</td>
<td>THEATER HISTORY</td>
<td>3</td>
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<tr>
<td>MUSC 262G</td>
<td>INTRODUCTION TO MUSIC APPRECIATION</td>
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<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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</tbody>
</table>

**UNIVERSAL GRADUATION REQUIREMENT**

Select one semester hour from the following:

- SDEV 101 COLLEGE 101 (W/B)

**ENGLISH COMPOSITION**

- ENGL 161 COLLEGE COMPOSITION I (W/B)
- ENGL 162 COLLEGE COMPOSITION II (W/B)
- ENGL 164 COLLEGE COMPOSITION II WITH TECHNICAL TOPICS (B)

**SOCIAL AND BEHAVIORAL SCIENCES**

Select nine semester hours, representing two different disciplines from the following:

- ARCH 155G INTRODUCTION TO ARCHAEOLOGY
- ECNM 151 PRINCIPLES OF MACROECONOMICS (W)
- ECNM 152 PRINCIPLES OF MICROECONOMICS (W)
- GPHY 151G HUMAN GEOGRAPHY
- GPHY 152 GEOGRAPHY OF UNITED STATES/CANADA (W)
- HSTR 151G CIVILIZATION I
- HSTR 152G CIVILIZATION II
- HSTR 161 UNITED STATES I (W)
- HSTR 162 UNITED STATES II (W)
- HSTR 267G AFRICAN AMERICAN HERITAGE
- PLSC 151G COMPARATIVE POLITICS
- PLSC 155 STATE AND LOCAL GOVERNMENT (W)
- PLSC 156 AMERICAN NATIONAL GOVERNMENT (W/B)
- PLSC 157G CONTEMPORARY WORLD PROBLEMS
- PSYH 151 INTRODUCTION TO PSYCHOLOGY (W)
- PSYH 251 HUMAN GROWTH AND DEVELOPMENT (W/B)
- PSYH 253 CHILD DEVELOPMENT (W)
- PSYH 254 ADOLESCENT DEVELOPMENT (W)
- PSYH 257 ABNORMAL PSYCHOLOGY (W)
- PSYH 261 SOCIAL PSYCHOLOGY (W)
- SOCY 151G INTRODUCTION TO SOCIOLOGY
- SOCY 161G INTRODUCTION TO CULTURAL ANTHROPOLOGY
- SOCY 255G THE FAMILY
- SOCY 256 SOCIAL PROBLEMS (W)
- SOCY 276G RACE AND ETHNICITY
- URBS 151G INTRODUCTION TO URBAN STUDIES
- URBS 155G INTRODUCTION TO ARCHAEOLOGY
- URBS 210 INTRODUCTION TO WOMEN'S STUDIES (W)
- WMST 210 INTRODUCTION TO WOMEN'S STUDIES (W)

**ARTS AND HUMANITIES**

Select nine semester hours, representing two different disciplines from the following:

- ARTS 243G ART HISTORY I
- ARTS 244G ART HISTORY II
- ARTS 245G WORLD ART
- ARTS 246 HISTORY OF PHOTOGRAPHY (W)
- ARTS 254 HISTORY OF AMERICAN ARCHITECTURE
- ENGL 251 AMERICAN LITERATURE I (W/B)
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>ENGL 253G</strong> INTRODUCTION TO WORLD LITERATURE</td>
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<tr>
<td><strong>ENGL 254G</strong> INTRODUCTION TO HISPANIC LITERATURE</td>
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<td><strong>ENGL 255G</strong> INTRODUCTION TO FICTION</td>
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<td><strong>ENGL 257G</strong> INTRODUCTION TO POETRY</td>
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<td><strong>ENGL 266G</strong> AFRICAN AMERICAN LITERATURE</td>
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<td><strong>HUMS 151G</strong> INTRODUCTION TO HUMANITIES</td>
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<tr>
<td><strong>HUMS 262G</strong> INTRODUCTION TO GREAT BOOKS: EARLY MODERN</td>
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<td><strong>HUMS 264G</strong> INTRODUCTION TO ASIAN CULTURES AND LITERATURES</td>
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<td><strong>HUMS 271G</strong> INTRODUCTION TO MYTHOLOGY</td>
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<tr>
<td><strong>HUMS 274</strong> FILM APPRECIATION (W)</td>
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<tr>
<td><strong>HUMS 281</strong> INTRODUCTION TO AMERICAN CINEMA (W)</td>
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<td><strong>MUSC 261G</strong> MUSIC APPRECIATION</td>
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<td><strong>MUSC 262G</strong> MUSIC AS A WORLD PHENOMENON</td>
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<td><strong>PHL Y 151G</strong> INTRODUCTION TO PHILOSOPHY</td>
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<tr>
<td><strong>PHL Y 161</strong> INTRODUCTION TO ETHICS (W/B)</td>
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<td><strong>PHL Y 165</strong> BIOETHICS (W)</td>
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<tr>
<td><strong>PHL Y 174</strong> CRITICAL THINKING (W)</td>
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<tr>
<td><strong>PHL Y 262G</strong> INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<tr>
<td><strong>PHL Y 270G</strong> RELIGION AND SCIENCE</td>
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<td><strong>RELG 181G</strong> INTRODUCTION TO WORLD RELIGIONS</td>
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<tr>
<td><strong>RELG 251G</strong> EXPLORING THE BIBLE</td>
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<tr>
<td><strong>RELG 262G</strong> INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<tr>
<td><strong>RELG 270G</strong> RELIGION AND SCIENCE</td>
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<tr>
<td><strong>THTR 185G</strong> THEATER HISTORY</td>
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### MATHEMATICS/STATISTICS/LOGIC AND NATURAL SCIENCES

Select three semester hours in mathematics or logic and six semester hours in science (of which one course must include a lab science) from the following:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>ASTY 152</strong> SOLAR SYSTEM ASTRONOMY (W)</td>
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<tr>
<td><strong>BIOG 121</strong> ANATOMY AND PHYSIOLOGY I (B)</td>
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<tr>
<td><strong>BIOG 122</strong> ANATOMY AND PHYSIOLOGY II (B)</td>
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<tr>
<td><strong>BIOG 152</strong> HUMAN BIOLOGY (W)</td>
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<tr>
<td><strong>BIOG 159</strong> AQUATIC LIFE (W)</td>
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<td><strong>BIOG 163</strong> THE MICROBIAL WORLD (W)</td>
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<tr>
<td><strong>BIOG 165</strong> INTRODUCTION TO ECOLOGY (W)</td>
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<tr>
<td><strong>CHMY 155G</strong> CHEMISTRY AND SOCIETY</td>
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<tr>
<td><strong>CHMY 161</strong> GENERAL, ORGANIC AND BIOCHEMISTRY I (B)</td>
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<tr>
<td><strong>MTHM 151</strong> COLLEGE MATHEMATICS (W/B)</td>
<td></td>
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<tr>
<td><strong>MTHM 158</strong> QUANTITATIVE REASONING</td>
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<tr>
<td><strong>MTHM 168</strong> STATISTICS (W)</td>
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<tr>
<td><strong>PHL Y 171</strong> INTRODUCTION TO LOGIC (W)</td>
<td></td>
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<tr>
<td><strong>PSSC 158G</strong> METEOROLOGY</td>
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</tbody>
</table>

### ELECTIVES

Electives may be selected from any of the courses listed in the courses offered via distance learning section except developmental education courses.

<table>
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<tr>
<th>Hours</th>
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<td>31</td>
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</table>

1 Lab Science course.

Completion of the required number of credit hours (excluding SDEV 101) represents 33 of the 36-40 credit hours in the associate of arts degree requirements. To complete the requirements, a student must take another six to seven credit hours from the above-specified courses. LCCC students must complete a minimum of 60 credit hours to complete the associate of arts degree. Therefore, a student may earn the associate of arts degree by completing the degree requirements of 36-40 credit hours, SDEV 101 for one credit hour, and additional elective hours selected from the listed courses or any other courses to complete a minimum of 60 semester hours. Completion of these requirements includes the Ohio transfer module. Choices within these ranges will require careful academic planning and advice. Students should seek assistance from an advisor before proceeding.

Some courses not appearing on the above list are internationalized in specific offerings. Those offerings are designated with a G in the course number (e.g. CMMC 151G D1601). Students are advised to consult the college website; published schedules; the Enrollment, Financial and Career Services division; or division representative prior to enrolling.

### Accelerated Pathway

The Accelerated Pathway for an Online Associate of Arts Degree is a helpful guide for students who desire the convenience of online courses and who seek to complete their degree and transfer within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your transfer goals.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
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<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td><strong>BIOG 151</strong> or <strong>BIOG 152</strong> GENERAL BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td><strong>ENGL 161</strong> COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td><strong>HSTR 151G</strong> or <strong>HSTR 161</strong> CIVILIZATION I</td>
<td>3</td>
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<tr>
<td><strong>MTHM 158</strong> QUANTITATIVE REASONING</td>
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<tr>
<td><strong>SDEV 101</strong> COLLEGE 101</td>
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<td><strong>MUSC 261G</strong> MUSIC APPRECIATION</td>
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<tr>
<td><strong>PHL Y 174</strong> CRITICAL THINKING</td>
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<tr>
<td><strong>RELG 181G</strong> INTRODUCTION TO WORLD RELIGIONS</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td><strong>CMMC 151</strong> ORAL COMMUNICATION</td>
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<tr>
<td><strong>ENGL 162</strong> COLLEGE COMPOSITION II</td>
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<tr>
<td><strong>HSTR 152G</strong> CIVILIZATION II</td>
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<tr>
<td><strong>PSYH 151</strong> INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td><strong>SOCY 151G</strong> INTRODUCTION TO SOCIOLOGY</td>
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<td>Select one of the following:</td>
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<tr>
<td><strong>ARTS 243G</strong> ART HISTORY I</td>
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</table>
Allied Health and Nursing Admission Requirements

For a complete listing of the Allied Health and Nursing programs and individual requirements see the Curriculum Guides (p. 161).

In all associate of applied science and certificate programs, students are REQUIRED to attend lectures, college laboratories and clinical sections. Students applying to an Allied Health and Nursing program must successfully complete all deficiencies shown during the placement assessment process with a grade of C or better prior to the submission of a program application. Transportation to and from the agencies hosting clinical sections is the responsibility of students. Transportation is not provided. Clinical sections may be held during the day, in the evening and on weekends. Clinical section assignments are subject to change depending upon enrollment, student needs and agency requirements. Standardized examinations prepared by state and/or national organizations may be given. The cost of these examinations is the responsibility of the student. Students are EXPECTED to have their own health insurance and may be REQUIRED to show evidence of insurance for specific clinical agency placement.

Note: To assure compliance with specific state licensure or certification agency examination eligibility, students who have been previously convicted of a felony must schedule an appointment with the appropriate program coordinator (program director) and division dean prior to enrollment (entry or re-entry) into any Allied Health and Nursing program. Certain programs require students to be fingerprinted and/or drug tested prior to program entry.

Allied Health Program Checklist

Students interested in applying for admission to an Allied Health and Nursing program should meet with an academic advisor to review an allied health checklist for their desired allied health program. Each checklist provides students with information regarding the application requirements and admissions procedures for a particular allied health program.

Student Transfer Evaluation

To ensure that the processing of non-LCCC transcripts is completed well in advance of specific Allied Health and Nursing program application deadlines, the Records office should receive all transcripts at least 12 weeks prior to the time in which the student intends to complete a program application.

Please note: Selection for some program entry is competitive and based on a combination of factors including grade point average, interview, completion of observation hours, a self-narrative and completion of program supporting non-technical courses. Only selected candidates (initially based on support of observation hours, a self-narrative and completion of program supporting non-technical courses. Only selected candidates (initially based on support coursework completed and GPA) will be asked to interview and submit a narrative form, along with observation hour documentation.

Malpractice Insurance

All students in Allied Health and Nursing programs are REQUIRED to have malpractice insurance. This insurance is provided by a blanket policy. Students are assessed when paying tuition. Students are not to obtain their own malpractice insurance.

Grading Policies

1. A grade of C or better is required in all clinical laboratory courses of all allied health and nursing programs.
2. A grade of C or better is required in all courses in the associate degree and practical nursing programs.
3. A grade of C or better is required in all courses in the EMT and paramedic programs.

Allied Health and Nursing Course Repetition Policy

1. Students in clinical laboratory science technology, diagnostic medical sonography, physical therapist assisting or surgical technology may fail and repeat one clinical course in their major in the first year of the program and may fail and repeat one clinical course in their major in
the second year of the program. A second clinical course failure, in either year of the program, will result in dismissal from the program.

2. Students in associate degree nursing and radiologic technology may fail and repeat one NURS or RDTC course in the curriculum. A second failure will result in dismissal from the program. A withdrawal from any NURS or RDTC course after 50% of the course is completed with an unsatisfactory status is regarded as a failure of that course. Passing a course means a minimum of a C and satisfactory performance in clinical and college laboratory settings.

3. Students in emergency medical services, medical assisting or phlebotomy may fail and repeat one clinical course in the program. A second course failure causes the student to be dismissed from the program.

4. Students in nurse aide training program may fail and repeat the course one time.

5. Students in practical nursing may fail and repeat only one practical nursing course in the program. A second course failure causes the student to be dismissed from the program.

6. A student who receives a grade of D or F in a dental hygiene course or withdraws unsatisfactorily from a dental hygiene course because of a failing lecture or clinic grade must reapply and have their name placed into the applicant pool. Students are only permitted to reapply one time. Students are required to make an appointment with the program director prior to reapplying to the program. Reapplying does not automatically guarantee re-admission.

Course Withdrawals
Students who initiate withdrawal from an Allied Health and Nursing core program course (i.e. NURS, PRNS, CLSC, etc.) will be REQUIRED to submit a withdrawal status report form from the course instructor to the Records office. This form reports if students are failing or passing the course at the time of withdrawal. If the student is failing the course at the time of withdrawal, the failure counts as if they received a failing grade in the course and the course repetition policy will be in effect. However, if the student re-enters the respective program, a completed clinical progression request form must be completed and can be obtained by an academic advisor.

Associate degree nursing (ADN) or practical nursing (PN) students who withdraw from a NURS or PRNS course who wish to re-enter their respective program must meet with the nursing program director/coordinator and complete a clinical progression request form. If withdrawal occurs within the first semester, the completion of a new program application will be required (depending upon the course that is needed, a student may also need to complete a clinical progression request form).

Consequences of Program Dismissal Due to Academic Dishonesty or Unprofessional Behavior
- Any student case involving dismissal for academic dishonesty and/or unprofessional behavior from an Allied Health and Nursing program shall automatically be referred to the College’s Code of Conduct process.

Program Pre-Admission Checklists and Program Application Forms
Available from the Enrollment, Financial and Career Services division. Please see academic advisor for guidance.

Health Requirements
A health examination by a physician is REQUIRED prior to entrance into an Allied Health and Nursing program. The form will be made available at the time of acceptance to the first clinical course. This examination must be completed no earlier than three months prior to acceptance into the program.

The following reports must accompany the health form:
1. Proof of varicella immunity.
2. Two-step Mantoux results (Tine tests not acceptable).
   • If student is a positive reactor to the Mantoux test, then a chest x-ray is REQUIRED.
   • Upon review of a health examination, a statement from a physician may be requested for purpose of clarity.
3. Diphtheria and tetanus immunization documented within the past 10 years.
4. An MMR vaccine or proof of mumps, rubella and rubeola screening indicating immunity.
5. Hepatitis B vaccine.
6. All students are required to have the influenza vaccine each year.
7. Some clinical sites require drug testing and this may have a cost associated that the student must pay. All nursing students are required to have a drug screen each semester.
8. Students will be required to have a background check and meet clinical facility requirements.

Students entering the EMSB 101, EMS-Basic course are REQUIRED to provide the following documentation two weeks prior to the beginning clinical practice:
1. Diphtheria and tetanus immunization documented within the past 10 years.
2. Two-step Mantoux results (Tine tests not acceptable).
   • If student is a positive reactor to the Mantoux test, then a chest x-ray is REQUIRED.
   • Upon review of a health examination, a statement from a physician may be requested for purpose of clarity.
3. Hepatitis B vaccine (if a student chooses not to receive this vaccine, he/she must sign their refusal on the health form).

American Heart Association Healthcare Provider Requirement
Students must complete the healthcare provider course through an American Heart Association training center. The Allied Health and Nursing programs accept the American Heart Association’s healthcare provider course only. LCCC offers several healthcare provider course
offered. For additional information, contact the Health and Wellness Sciences division at (440) 366-7701.

Students are responsible to keep current as an American Heart Association healthcare provider throughout the program. Students whose currency has expired will be withdrawn from clinical practice and any absences will be considered unexcused.

Note: Students entering the nurse aide-training program are NOT REQUIRED to complete an American Heart Association healthcare provider course, but it is highly recommended.

General Education Outcomes

Values and Philosophy

Lorain County Community College believes that all individuals should learn to read with comprehension, to write with clarity, to speak with precision, to listen with discrimination and to think critically and analytically with the capacity to apply knowledge. The education of the whole person and strengthening of literacy should occur throughout educational experiences.

Students seeking the associate of arts or associate of science degree must complete the appropriate general education/transfer module requirements as specified in the Ohio Transfer Module (p. 23).

General Education Outcomes

LCCC believes that the role of education is the development of the whole person. General education outcomes at the College enable students to develop the knowledge, skills, values and beliefs important for all college graduates. LCCC’s general education outcomes are embedded across the curriculum in the B.A.S., A.A., A.A.B., A.A.S., A.S., A.I.S., A.T.S. degrees and one year and short-term certificates. General education outcomes are designed to ensure that all graduates meet general education requirements and are guided by specific learning outcomes:

LCCC’s five core course outcomes will be addressed in a select few core courses.

C1: English: Demonstrate logical organization, coherent thinking, and precision in writing.

C2: Mathematics: Utilize college mathematics to solve problems.

C3: Natural Science: Apply scientific concepts and methods of inquiry.

C4: Social Science: Apply concepts, principles and methods of inquiry in the social sciences.

C5: Humanities: Examine the nature of human expression and/or artistic creativity.

The remaining five are infused outcomes that are built into courses across the curriculum.

In1: Critical Thinking: Employ critical thinking skills in addressing issues and problems.

In2: Communication: Demonstrate competence in verbal and nonverbal communication.

In3: Diversity: Analyze the role of diversity in the development of the individual, the community and the global society.

In4: Ethics: Apply personal, professional, social and civic values.

In5: Health: Identify behaviors that promote health of the individual.

General Education Purpose Statement

Through its general education program, Lorain County Community College provides the student with the knowledge, understanding and skills that our society expects from any college-educated individual. General education introduces the student to academic disciplines and fosters critical thinking, rigorous investigation and effective communication. The experience of general education is valuable because it helps the student:

- Prepare for further academic studies, professional accomplishments and lifelong learning.
- Become an engaged member of the community.
- Adapt to a changing world.
- Understand and appreciate diverse aspects of human civilization and the natural world.

eLearning@LCCC

Bass Library, Room 234
(440) 366-7582
eLearning@lorainccc.edu (distance@lorainccc.edu)

The mission of the eLearning@LCCC Team (ELT) at Lorain County Community College is to promote the delivery of quality instruction through technology at any time, any place. We provide students, faculty, and staff with the expertise and support needed for the creation and delivery of quality education at a distance through the utilization of institutional materials, programs, services, and resources.

LCCC Distance Learning courses offer a mode of instructional delivery where students and the instructor are separated, but they engage in regular, substantive interactions with each other synchronously or asynchronously using one or more of the following technologies: the Internet, streaming video, video conferencing and/or Interactive Video Distance Learning (IVDL).

Ohio Learning Network

LCCC is part of the Ohio Learning Network (OLN), a consortium of Ohio colleges and universities that provides coordinated distance learning opportunities. OLN allows students to access, in one place, all of the distance learning courses and degrees offered by its members throughout the State of Ohio. OLN also allows students to combine distance learning classes from its members to earn the degree of choice. Participating OLN institutions commit to higher education opportunities for the learning community by reducing inter-instructional barriers and by encouraging more Ohioans to pursue higher education. For more information on the Ohio Learning Network and its programs and services, visit www.olt.org (http://www.olt.org/).
Service Learning

Service learning is a teaching and learning strategy that integrates community service with academic instruction while focusing on critical thinking, reflection and civic responsibility. Service learning provides students with opportunities to make a difference in their community through a service project that enhances classroom learning. Students who participate in service learning during their time at Lorain County Community College are honored by a certificate of completion and a recognition medallion to wear during commencement.

A course that is determined to have a substantial community service component that directly connects to learning objectives and includes structured reflection is considered a service learning course. Service learning courses are defined through three designations. A service learning class is the designation received when every student in the course is required to participate in the service learning experience. A service learning component class is the designation received when a student may choose to opt into the service learning experience. A service learning course is the designation received when every instructor teaching the course uses service learning as a teaching and learning strategy. Students interested in enrolling in a service learning course would seek out the particular service learning section/instructor or opt into a course with a service learning requirement.

Please contact the Career Services office at (440) 366-4076 for additional information or for a list of service learning courses or visit the service learning website at https://www.lorainccc.edu/career-services/service-learning/
Program and Career Pathways

Business and Entrepreneurship (p. 54)
Programs and majors in this pathway lead to careers in accounting, management, sales, marketing, human resources, entrepreneurship (owning your own business), customer service, computer information systems, and business transfer programs.

Explore this pathway (https://www.lorainccc.edu/business-programs/)

Computer and Information Technologies (p. 55)
Programs and majors in this pathway lead to careers in network systems, mobile device application and development, software development, web design and development, computer gaming, hardware maintenance, computer security, computer forensics, IT for healthcare, and computer and information technologies transfer programs.

Explore this pathway (https://www.lorainccc.edu/it/)

Culinary and Hospitality (p. 56)
Programs and majors in this pathway lead to careers in culinary arts, tourism, and transfer programs in this field.

Explore this pathway (https://www.lorainccc.edu/culinary/)

Education (p. 56)
Programs and majors in this pathway lead to careers in teaching at the pre-school, elementary and secondary school levels along with an education transfer program.

Explore this pathway (https://www.lorainccc.edu/education/)

Engineering and Manufacturing (p. 56)
Programs and majors in this pathway lead to careers in electrical and mechanical engineering; mechatronics or MEMS, welding, alternative energy, computer engineering, and engineering and manufacturing transfer programs.

Explore this pathway (https://www.lorainccc.edu/engineering/)

Health and Wellness (p. 57)
Programs and majors in this pathway lead to careers in nursing, health related occupations that work in a hospital or health care setting, exercise and fitness, and health and wellness transfer programs.

Explore this pathway (https://www.lorainccc.edu/health/)

Human/Social Services and Public Safety (p. 58)
Programs and majors in this pathway lead to careers in social work, psychology, journalism, counseling, public administration, and safety forces along with associated transfer programs.

Explore this pathway (https://www.lorainccc.edu/human-social-services/)

Liberal and Creative Arts (p. 58)
Programs and majors in this pathway lead to careers in humanities, literature, music, photography, theatre, religion, philosophy, foreign language, digital arts and associated transfer programs.

Explore this pathway (https://www.lorainccc.edu/liberal-and-creative-arts/)

Science and Math (p. 59)
Programs and majors in this pathway lead to careers in mathematics, biology, chemistry, physics, sustainable agriculture, environmental, and associated transfer programs.

Explore this pathway (https://www.lorainccc.edu/sciences/)

Personal and Professional Development/Non-Credit Education (p. 17)
Continuing education courses are non-credit. Both credit and non-credit programs both provide valuable job skills for a great career.

Undecided Students (p. 345)
Identifying and finding the right career or major can be a challenge for college students. LCCC provides career decision tools to help every student make a well-informed career decision.

Business and Entrepreneurship

Associate of Arts
- Associate of Arts #8720 (p. 27)
- Associate of Arts - Business Ohio Guaranteed Transfer Pathway (p. 32)

Accounting
- Bookkeeper I - Short-term technical certificate #0007 (p. 140)
- Bookkeeper II - Short-term technical certificate #0008 (p. 141)
- Payroll clerk – Short-term technical certificate #0005 (p. 141)
- Accounting – Associate degree #0011 (p. 72)

Customer Service
- Customer Service – Short-term technical certificate #0001 (p. 149)

Data Analytics
- Data Analytics - Tools & Techniques - Associate degree #6650 (p. 83)

Human Resources
- Human Resource Management – One-year technical certificate #0129 (p. 131)
- Human Resource Management – Associate degree #0229 (p. 75)

Interactive and Digital Media
- Computer Animation – One-year general certificate #4106 (p. 62)
Management and Entrepreneurship
- General Business Administration – Short-term technical certificate #0027 (p. 151)
- Business Management – One-year technical certificate #0127 (p. 123)
- Entrepreneurship – One-year technical certificate #0225 (p. 129)
- Management – Associate degree #0227 (p. 76)
- Entrepreneurship – Associate degree #0224 (p. 74)

Marketing
- Marketing – Associate degree #0226 (p. 78)

Professional Sales
- Professional Sales – One-year technical certificate #0126 (p. 139)

Real Estate
- Real Estate - Associate degree #0233 (p. 79)
- Real Estate - Short-term technical certificate #0231 (p. 157)

Tourism
- Hospitality Operations – One-year technical certificate #0106 (p. 130)
- Tourism – Hospitality Major – Associate degree #0101 (p. 84)
- Tourism – Travel Industry Major – Associate degree #0102 (p. 85)

Computer and Information Technologies

Associate of Arts
- Associate of Arts #8720 (p. 27)

Associate of Science
- Associate of Science #8750 (p. 28)

Computer Science, Engineering and Technology
- Blockchain Engineering Technology - Associate degree #6236 (p. 92)
- Blockchain Engineering Technology - One-year technical certificate #6234 (p. 122)
- Bootcamp I - Blockchain System Architect - Short-term technical certificate #6230 (p. 143)
- Blockchain Bootcamp II - Blockchain Developer - Short-term technical certificate #6231 (p. 143)
- Computer Application Integration Specialist – Associate degree #6222 (p. 97)
- Computer Engineering Technology: Computer Application Integration Specialist – One-year technical certificate #6123 (p. 124)
- Electronic Engineering Technology - Applied Electronics – Associate degree #6310 (p. 105)
- Electronic Engineering Technologies - Applied Electronics One-year technical certificate #6309 (p. 128)

Computer Security
- Computer Information Systems - Information Security for Business - Short-term technical certificate #6623 (p. 145)
- Computer Information Systems - Network Security Foundations - Short-term technical certificate #6609 (p. 147)
- Computer and Digital Forensics - One-year technical certificate #6121 (p. 125)
- Computer Engineering Technology - Business Forensics Investigations - One-year technical certificate #6218 (p. 123)
- Computer Engineering Technology - Business Forensics Investigations Major - Associate degree #6220 (p. 93)
- Cyber and Information Security - Associate degree #6470 (p. 101)
- CyberSecurity Bootcamp I - Cybersecurity Specialist - Short-term technical certificate #6475
- Digital Forensics for Law Enforcement - One-year technical certificate #6119 (p. 127)

Data Analytics
- Data Analytics - Tools & Techniques - Associate degree #6650 (p. 83)

Hardware Maintenance and Information Systems Support
- Computer Maintenance and Networking - Short-term technical certificate #6003 (p. 150)
- Computer Maintenance and Networking - One-year technical certificate #6450 (p. 128)
- Electronic Engineering Technology - Computer Maintenance and Networking - Associate degree #6312 (p. 107)
- Information Systems Support - One-year technical certificate #6603 (p. 132)

Interactive and Digital Media
- Computer Animation – One-year general certificate #4106 (p. 62)
- Computer Games and Simulation Design – Associate degree #8300 (p. 204)

Network Systems
- Computer Information Systems - Network Communications Technology - Associate degree #6649 (p. 81)
- Computer Information Systems - Network Administration - Short-term technical certificate #6604 (p. 146)
- Computer Information Systems - Network Infrastructure Technologies/CCNA - Short-term technical certificate #6606 (p. 146)

Programming and Software Development
- Business IT Fundamentals - Short-term technical certificate #6602 (p. 144)
- Computer Information Systems - Software Development Fundamentals - Short-term technical certificate #6620 (p. 147)
- Computer Information Systems - Mobile Device Application Development – Associate degree #6639 (p. 80)
• Computer Information Systems - Mobile Device Application Development - Short-term technical certificate #6619 (p. 145)
• Computer Information Systems - Mobile Device Application Development - One-year technical certificate #6629 (p. 126)
• Computer Information Systems - Software Development – Associate degree #6618 (p. 82)
• Computer Games and Simulation Design – Associate degree #8300 (p. 204)
• IT Fast Track - Short-term technical certificate #6005 (p. 153)

Web Development
• Computer Information Systems - Web Design Fundamentals - Short-term technical certificate #6621 (p. 148)
• Computer Information Systems - Web Programming Fundamentals - Short-term technical certificate #6622 (p. 148)
• Web Development – Associate degree #6601 (p. 82)

Culinary and Hospitality
Culinary Arts
• Culinary Arts – Associate degree #0104 (p. 60)
• Kitchen Essentials – One-year technical certificate #4034 (p. 62)

Tourism
• Hospitality and Tourism – Hospitality Major – Associate degree #0101 (p. 84)
• Hospitality and Tourism – Travel Industry Major – Associate degree #0102 (p. 85)
• Hospitality Operations – One-year technical certificate #0106 (p. 130)

Education
Associate of Arts
• Associate of Arts #8720 (p. 27)

Associate of Science
• Associate of Science #8750 (p. 28)

Early Childhood Education
• Early Childhood Education – Associate degree #5159 (p. 193)
• Early Childhood Education – Short-term technical certificate #5003 (p. 202)
• Early Childhood Education – Infant and Toddler – Short-term technical certificate #5158 (p. 203)

Teacher Education
• Teacher Education – Transfer Program – Associate degree #5261 (p. 192)

Engineering and Manufacturing
Associate of Science
• Associate of Science #8750 (p. 28)

Alternative energy
• Alternative Energy Technology – Solar Technology – One-year technical certificate #6356 (p. 121)
• Alternative Energy Technology – Solar Technology – Associate degree #6355 (p. 87)
• Alternative Energy Technology – Wind Turbine – Short-term technical certificate #6352 (p. 142)
• Alternative Energy Technology – Wind Turbine – One-year general certificate #6351 (p. 121)
• Alternative Energy Technology – Wind Turbine – Associate degree #6350 (p. 142)

Automation Engineering
• Automation Engineering Technology - Maintenance Technician – Short-term technical certificate #6181 (p. 142)
• Automation Engineering Technologies – Systems Specialist Major – Associate degree #6211 (p. 90)
• Automation Engineering Technology – Maintenance/Repair – Associate degree #6210 (p. 89)
• Microelectronic Manufacturing -Bachelor of applied science #9601 (p. 70)

Construction
• Construction Technology – Construction and Renovation Tradesman – Short-term technical certificate #6175 (p. 149)
• Construction Technology – Residential Building and Renovation – One-year technical certificate #6176 (p. 126)
• Construction Technology – Construction Engineering – Associate degree #6170 (p. 99)
• Construction Technology – Construction Management – Associate degree #6171 (p. 100)

Digital Fabrication
• Digital Fabrication Technology - Digital Fabrication Major - Associate degree #6167 (p. 102)

Electric Power Utility
• Electric Power Utility Technology – Overhead Line Technology – Associate degree #6320 (p. 103)
• Electric Power Utility Technology – Substation Technology Major – Associate degree #6321 (p. 104)

Electronic Engineering
• Electronic Engineering Technology – Applied Electronics – One-year technical certificate #6309 (p. 128)
• Electronic Engineering Technology – Applied Electronics – Associate degree #6310 (p. 105)
• Microelectronic Manufacturing -Bachelor of applied science #9601 (p. 70)

Engineering Technology
• Engineering Technology – General Technician – Short-term technical certificate #6050 (p. 151)
Industrial Safety
- Industrial Safety Technology/Technician - Associate degree #6720 (p. 109)
- Industrial Safety Technology/Technician – Professional Safety – One year technical certificate #6710 (p. 131)
- Industrial Safety Technology/Technician – General Safety – Short-term technical certificate #6700 (p. 152)

Manufacturing Engineering
- Manufacturing Engineering Technology – Computer Aided Machining Manufacturing Process – Short-term technical certificate #6012 (p. 154)
- Manufacturing Engineering Technology – Computer-Aided Machining Operator – One-year technical certificate #6112 (p. 133)
- Manufacturing Engineering Technology – Computer Aided Machining – Associate degree #6213 (p. 110)
- Manufacturing Engineering Technology – Industrial Electrical Technician – Short-term technical certificate #6015 (p. 154)
- Manufacturing Engineering Technology – Industrial Electrical Technician – One-year technical certificate #6115 (p. 134)
- Manufacturing Engineering Technology – Industrial Electrical Technician – Associate degree #6215 (p. 111)
- Manufacturing Engineering Technology - Industrial Internet of Things - Short-term technical certificate #6241 (p. 155)
- Manufacturing Engineering Technology - Industrial Internet of Things - One-year technical certificate, #6243 (p. 135)
- Manufacturing Engineering Technology - Industrial Internet of Things (IIOT) - Associate degree #6245 (p. 112)
- Manufacturing Engineering Technology – Industrial Mechanical Technician – Short-term technical certificate #6016 (p. 155)
- Manufacturing Engineering Technology - Industrial Mechanical Technician – One-year technical certificate #6116 (p. 136)
- Manufacturing Engineering Technology - Industrial Mechanical Technician – Associate degree #6216 (p. 113)
- Manufacturing Engineering Technology – Computer Aided Design – Short-term technical certificate #6002 (p. 153)
- Manufacturing Engineering Technology – Computer Aided Design Operator – One-year technical certificate #6111 (p. 132)
- Manufacturing Engineering Technology – Mechanical Design – Associate degree #6212 (p. 115)
- Manufacturing Engineering Technology – Quality Technician – One-year technical certificate #6007 (p. 136)
- Manufacturing Engineering Technology - Right Skills Now - Short-term technical certificate #6031 (p. 156)
- Microelectronic Manufacturing -Bachelor of applied science #9601 (p. 70)

Mechatronics
- Mechatronics Technology: Micro Electromechanical Systems (MEMS) – Short-term technical certificate #6500 (p. 157)
- Mechatronics Technology: Micro Electromechanical Systems (MEMS) – One-year technical certificate #6510 (p. 137)
- Mechatronics Technology: Micro Electromechanical Systems (MEMS) – Associate degree #6520 (p. 117)
- Microelectronic Manufacturing -Bachelor of applied science #9601 (p. 70)

Welding
- Welding Technology – Advanced Welding – Short-term technical certificate #6011 (p. 158)
- Welding Technology – Basic Welding – Short-term technical certificate #6006 (p. 159)
- Welding Technology – Short-term technical certificate #6009 (p. 159)
- Welding Technology – Welding Visual Inspection – Short-term technical certificate #6013 (p. 160)
- Welding Operator – One-year technical certificate #6008 (p. 139)
- Welding Technology – Associate degree #6410 (p. 119)

Health and Wellness Sciences

Associate of Arts
- Associate of Arts #8720 (p. 27)

Associate of Science
- Associate of Science #8750 (p. 28)

Clinical Lab Science
- Clinical Laboratory Science Technology – Associate degree #2406 (p. 163)

Dental Hygiene
- Dental Hygiene – Associate degree #2409 (p. 164)

Diagnostic Medical Sonography
- Diagnostic Medical Sonography – Associate degree #2402 (p. 167)

EMS/Paramedic
- Emergency Medical Services – Short-term technical certificate #2114 (p. 185)
- Emergency Medical Services – Paramedic – One year technical certificate #2116 (p. 181)

Exercise and Fitness
- Group Exercise Instructor – Short-term technical certificate #3004 (p. 185)
- Personal Trainer – One-year technical certificate #3003 (p. 182)
- Sports and Fitness Management - Associate degree #3002 (p. 177)
- Wellness – Short-term technical certificate #3005 (p. 188)

Health and Wellness Coaching/Promotion
- Health & Wellness Coaching & Promotion- Short-term technical certificate #3030 (p. 186)

Medical Assisting
- Medical Assisting – One-year technical certificate #2006 (p. 182)
- Medical Assisting – Clinical Focus – Associate degree #2142 (p. 172)
Human/Social Services and Public Safety

• Medical Assisting – Administrative Focus – Associate degree #2143 (p. 171)

Nursing
• Associate Degree Nursing (RN) – Associate degree #2400 (p. 162)
• Practical Nursing (LPN) – One-year technical certificate #2091 (p. 183)
• State Tested Nurse Assisting – Short-term technical certificate #C201 (p. 188)

Occupational Therapy
• Occupational Therapy Assistant – Associate degree #2420 (p. 173)

Phlebotomy
• Phlebotomy – Short-term technical certificate #2241 (p. 186)

Public Safety
• Digital Forensics for Law Enforcement - One-year technical certificate #6119 (p. 127)
• Emergency Medical Services – Short-term technical certificate #2114 (p. 185)
• Emergency Medical Services – Paramedic - One-year technical certificate #2116 (p. 181)
• Fire Science – Associate degree #2072 (p. 170)
• Justice Systems – Police Science Basic Police Academy – One-year technical certificate #5076 (p. 200)
• Justice Systems – Corrections Major – Associate degree #5073 (p. 196)
• Justice Systems – Police Science Major – Associate degree #5071 (p. 197)
• Police Science - One-year technical certificate #5094 (p. 200)

Physical Therapy
• Physical Therapist Assisting – Associate degree #2411 (p. 175)

Radiologic Technology
• Radiologic Technology – Associate degree #2045 (p. 176)

Surgical Technology
• Surgical Technology – Associate degree #2407 (p. 179)

Human/Social Services and Public Safety

Associate of Arts
• Associate of Arts #8720 (p. 27)

Counseling
• Addiction Counselor – Short-term technical certificate #5063 (p. 202)
• Student Success Coaching and Mentoring - Short-term general certificate #8100 (p. 161)

Human Services
• Human Services – Associate degree #5701 (p. 195)
• Women, Gender and Sexuality Studies - One-year general certificate #5120 (p. 201)

Public Administration
• Journalism – Public Relations and Advertising – One-year technical certificate #4150 (p. 65)
• Public Administration – One-year general certificate #5080 (p. 201)
• Public Administration – Associate degree #5180 (p. 198)

Public Safety
• Digital Forensics for Law Enforcement - One-year technical certificate #6119 (p. 127)
• Emergency Medical Services – Short-term technical certificate #2114 (p. 185)
• Emergency Medical Services – Paramedic - One-year technical certificate #2116 (p. 181)
• Fire Science – Associate degree #2072 (p. 170)
• Justice Systems – Police Science Basic Police Academy – One-year technical certificate #5076 (p. 200)
• Justice Systems – Corrections Major – Associate degree #5073 (p. 196)
• Justice Systems – Police Science Major – Associate degree #5071 (p. 197)
• Police Science - One-year technical certificate #5094 (p. 200)

Liberal and Creative Arts

Associate of Arts
• Associate of Arts #8720 (p. 27)

Creative Arts
• Arts Foundations – One-year general certificate #4110 (p. 63)
• Photography – One-year general certificate #4111 (p. 66)

Digital Arts
• Computer Animation – One-year general certificate #4106 (p. 62)
• Computer Games and Simulation Design – Associate degree #8300 (p. 204)
• Graphic Design – One-year general certificate #4104 (p. 64)

Foreign Language
• Spanish – One-year general certificate #4112 (p. 67)

Humanities
• Humanities Studies – One-year general certificate #4102 (p. 65)

Journalism and Communication
• Communication Studies – One-year general certificate #4105 (p. 61)
• Journalism – Public Relations and Advertising – One-year technical certificate #4150 (p. 65)
Literature
• English Literature - Short-term general certificate #4103 (p. 63)

Philosophy
• Philosophical Studies – One-year general certificate #4100 (p. 66)

Religion
• Religious Studies – One-year general certificate #4101 (p. 67)

Science and Math

Associate of Science
• Associate of Science #8750 (p. 28)

Computer Engineering Technology
• Computer Application Integration Specialist – One-year technical certificate #6122 (p. 124)
• Computer Application Integration Specialist – Associate degree #6222 (p. 97)
• Computer and Digital Forensics - One-Year technical certificate #6121 (p. 125)
• Computer Engineering Technology - Business Forensics Investigations Major - Associate degree #6220 (p. 93)
• Computer Engineering Technology - Business Forensics Investigations - One-year technical certificate #6218 (p. 123)
• Digital Forensics for Law Enforcement - One-year technical certificate #6119 (p. 127)
• Computer Engineering Technology- Computer and Digital Forensics Major - Associate degree #6120 (p. 95)
• Computer Games and Simulation Design – Associate degree #8300 (p. 204)

Environmental Technology
• Environmental Technology – Short-term technical certificate #7153 (p. 191)

Sustainable Agriculture
• Specialty Crop Growers – Short-term technical certificate #7191 (p. 191)
• Sustainable Agriculture – One-year technical certificate #7195 (p. 190)
• Sustainable Agriculture – Associate degree #7200 (p. 189)
Academic Programs

Curriculum Guides

Lorain County Community College students must complete a minimum of 60 credit hours, exclusive of developmental education courses, in order to graduate. Students planning to transfer are advised to consult with the intended transfer institution regarding any limitation on the number of transfer hours. Choices will require careful academic planning and advice. Students should consult regularly with an academic advisor while attending LCCC. The semester indicated for the specific program courses are suggestions only. LCCC curriculum guides and transfer information for specific colleges are available in Enrollment, Financial, and Career Services division.

Curriculum guides outline all of the coursework required for a particular degree or certificate program. Curriculum guides are primarily used for two purposes:

- To provide students with a checklist that may be followed throughout their curriculum. By outlining all necessary coursework, a student may "check-off" or "cross-off" courses that have been completed and then easily see which requirements remain to be completed.
- Curriculum guides are helpful to prospective students and students considering changing programs. They provide a resource to see all of the courses and times involved with particular programs.

Program and Career Pathways (p. 54)

Program and Career Pathway exploratory majors are designed for regularly admitted, degree-seeking students who have an associate degree focus in mind but haven't narrowed it down to a specific major. This affords these students the opportunity to explore in defined areas of study such as business and entrepreneurship; education; health and wellness; science and math; etc. While in the exploratory major, students are required to meet with their career and academic advisement professional every semester to ensure proper course selection. Additionally, students are encouraged to engage in career exploration activities either through their academic advisor or with a career development specialist in the career services area. Students may remain in the program and career pathway for up to 24 college-level credit hours. Upon achieving 24 college-level credit hours, the student will then be required to select a specific major.

Learn more about Program and Career Pathways and exploratory majors (https://www.lorainccc.edu/program-pathways/)

Divisions that offer Academic Programs

- Division of Arts and Humanities (p. 60)
- Division of Engineering, Business and Information Technologies (p. 68)
- Division of Enrollment, Financial and Career Services (p. 161)
- Division of Health and Wellness Sciences (p. 161)
- Division of Science and Mathematics (p. 189)
- Division of Social Sciences and Human Services (p. 191)
- Multidisciplinary Programs (p. 204)
- Certificates of Completion (p. 205)

Division of Arts and Humanities

Division Offices: SC 239

Division Telephone: 440-366-4013

Associate of Arts (p. 27)
Associate of Applied Business

- Hospitality and Tourism Management – Culinary Arts Major #0104 (p. 60)

One-Year Technical and General Certificates

- Communication Studies #4105 (p. 61)
- Culinary Arts - Kitchen Essentials #4034 (p. 62)
- Digital Arts - Computer Animation #4106 (p. 62)
- English Literature #4103 (p. 63)
- Fine Arts - Arts Foundation #4110 (p. 63)
- Graphic Design #4104 (p. 64)
- Humanities Studies #4102 (p. 65)
- Journalism - Public Relations #4150 (p. 66)
- Philosophical Studies #4100 (p. 66)
- Photography #4111 (p. 66)
- Religious Studies #4101 (p. 67)
- Spanish #4112 (p. 67)

Hospitality and Tourism Management - Culinary Arts Major, Associate of Applied Business

Curriculum Code #0104

Effective May 2020

Division of Arts and Humanities (p. 60)

A major in culinary arts provides an opportunity to really understand food. From the preparation of simple dishes to the creation of international cuisine, students will learn a variety of cooking skills and techniques through intense hands-on instruction. Emphasis is also placed on safety, sanitation, nutrition and health. Whether the goal is to begin a new career or to gain additional skills for a current one, this program is the place to start.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 153 BASIC HUMAN NUTRITION</td>
<td>3</td>
</tr>
<tr>
<td>CULN 157 FUNDAMENTALS OF FOOD SERVICE PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>CULN 175 PURCHASING AND PRODUCT IDENTIFICATION</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 112 INTRODUCTION TO THE HOSPITALITY INDUSTRY</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 118 FOOD SAFETY AND SANITATION</td>
<td>2</td>
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<td>SDEV 101 COLLEGE 101</td>
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<tr>
<td><strong>Hours</strong></td>
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</table>

Spring Semester

| CULN 152 ESSENTIALS OF DINING ROOM SERVICE        | 3     |
| CULN 154 INTRODUCTION TO BAKING AND PASTRY         | 3     |
**Communication Studies, One-Year General Certificate**

Curriculum Code #4105  
Effective May 2020

Division of Arts and Humanities (p. 60)

The study of communication improves a student’s critical thinking, oral communication and written communication skills. This course of study is valuable for professionals wishing to enhance their communication skills and for those intending to pursue the further academic study of communication. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
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<tr>
<td>CMMC 165</td>
<td>INTERPERSONAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>PHL Y 174</td>
<td>CRITICAL THINKING</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>Communication Elective</td>
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<td>2-3</td>
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<td>Transfer Module Elective</td>
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<td><strong>Total Hours</strong></td>
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### Second Semester

Select one of the following:

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 163</td>
<td>COLLEGE COMPOSITION II/SPECIAL TOPICS</td>
<td>3</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
<td>3</td>
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<tr>
<td>Communication Elective</td>
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<tr>
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<tr>
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<tr>
<td>Transfer Module Elective</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td>15</td>
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</tbody>
</table>

1. Solve problems related to food service and food preparation  
2. Demonstrate proper conduct and professionalism  
3. Communicate effectively with co-workers and customers  
4. Handle front of house operations including meal service, guest check handling and dining room arrangement  
5. Prepare bakery products from scratch  
6. Demonstrate proficiency in basic culinary techniques such as broiling, grilling, roasting, braising and stir-frying  
7. Produce cheese, cured and brined meats/fish, and use a cryovac machine  
8. Design a professional menu including costs/pricing  
9. Fabricate various types of pork, lamb, veal and beef  
10. Produce simple and compound salads as well as salad dressings  
11. Perform proper storage techniques and maintain proper food storage temperatures  
12. Work as part of a team during preparation, cooking, and clean up

### Program Learning Outcomes

1. Solve problems related to food service and food preparation  
2. Demonstrate proper conduct and professionalism  
3. Communicate effectively with co-workers and customers  
4. Handle front of house operations including meal service, guest check handling and dining room arrangement  
5. Prepare bakery products from scratch  
6. Demonstrate proficiency in basic culinary techniques such as broiling, grilling, roasting, braising and stir-frying  
7. Produce cheese, cured and brined meats/fish, and use a cryovac machine  
8. Design a professional menu including costs/pricing  
9. Fabricate various types of pork, lamb, veal and beef  
10. Produce simple and compound salads as well as salad dressings  
11. Perform proper storage techniques and maintain proper food storage temperatures  
12. Work as part of a team during preparation, cooking, and clean up

Program Contact(s):  
Adam Schmith  
440-366-7740  
aschmith@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/culinary/culinary-arts-2/associate-of-applied-business-in-hospitality-tourism-management-culinary-arts-major/)
1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Communication elective selected from the following list: CMMC 152, CMMC 169, CMMC 175, CMMC 177G, or JRNM 151.

3 Indicates that this course requires a prerequisite.

4 Select from transfer module courses (p. 23).

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

Tammy Bosley
440-366-7098
tbosley@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website (https://www.lorainccc.edu/culinary/culinary-arts-2/kitchen-essentials/).

### Culinary Arts - Kitchen Essentials, One-Year Technical Certificate

Curriculum Code #4034

Effective May 2020

Division of Arts and Humanities (p. 60)

The one-year technical certificate in culinary arts prepares the certificate holder with the basic foundational skills required to pursue additional education in culinary arts or for entry-level employment in various types of restaurants and food businesses. Students will learn a variety of basic cooking and baking techniques through hands-on instruction. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 153</td>
<td>BASIC HUMAN NUTRITION</td>
<td>3</td>
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<tr>
<td>CULN 157</td>
<td>FUNDAMENTALS OF FOOD SERVICE PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>CULN 175</td>
<td>PURCHASING AND PRODUCT IDENTIFICATION</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 150</td>
<td>THE ART OF MATHEMATICAL THINKING or QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>or MTHM 158</td>
<td></td>
<td></td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TRSM 118</td>
<td>FOOD SAFETY AND SANITATION</td>
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#### Spring Semester

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CULN 152</td>
<td>ESSENTIALS OF DINING ROOM SERVICE</td>
<td>3</td>
</tr>
<tr>
<td>CULN 154</td>
<td>INTRODUCTION TO BAKING AND PASTRY</td>
<td>3</td>
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</table>

CULN 160 FOODSERVICE OPERATIONS AND CAREER MANAGEMENT 3
CULN 165 ADVANCED FOOD SERVICE PRODUCTION 3
ENGL 161 COLLEGE COMPOSITION I 3

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
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</tbody>
</table>

Total Hours 30

1 ServSafe® Food Protection Manager Prep.
2 National Restaurant Association of the American Culinary Federation Certification Prep.
3 Indicates that this course has a prerequisite.

Program Contact(s):

Adam Schmith
440-366-7740
aschmith@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/culinary/culinary-arts-2/kitchen-essentials/)

### Digital Arts - Computer Animation, One-Year General Certificate

Curriculum Code #4106

Effective May 2020

Division of Arts and Humanities (p. 60)

The one-year certification in computer animation from the Visual Arts department represents the successful completion of select courses in art, design, digital art, and software development that prepares individuals to develop, storyboard, and create 2-D or 3-D animations and motion graphics. Successful completion of this certificate prepares the student to be an independent animator or motion designer for entry-level employment in an number of fields, including film, television, web, music videos, gaming and instructional materials; or for further study in art, design, animation and motion graphics. Certification is well suited for the individuals with professional experience seeking to add to their current skill set. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership. National Association of Schools of Art and Design plan approval 2016.

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 161</td>
<td>DRAWING I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 165</td>
<td>TWO-DIMENSIONAL DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 271</td>
<td>DIGITAL IMAGING</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
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#### Second Semester

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ARTS 273</td>
<td>2-D ANIMATION AND MOTION GRAPHICS 1</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>13</td>
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</table>
**ARTS 276** 3-D MODELING AND ANIMATIONS ¹ 3
**MUSC 261G** MUSIC APPRECIATION ¹ 3
or **HUMS 274** or FILM APPRECIATION
**THTR 151G** INTRODUCTION TO THEATER 3

**Third Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARTS 272</td>
<td>DIGITAL ILLUSTRATION ¹</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 278</td>
<td>3-D MODELING AND ANIMATION II ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours** 12

**English Literature, One-Year General Certificate**

Curriculum Code #4103

Effective May 2020

Division of Arts and Humanities (p. 60)

The study of English literature develops a student’s ability to think critically and communicate well. This certificate prepares the student for further academic work as an English major or for preparing to teach English in secondary education. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ¹</td>
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<td>Transfer Module Elective ²</td>
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</tr>
<tr>
<td>Transfer Module Elective ²</td>
<td>3</td>
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</tbody>
</table>

**Second Semester**

Select one of the following:

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II ³</td>
<td></td>
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<tr>
<td>ENGL 163</td>
<td>COLLEGE COMPOSITION II/SPECIAL TOPICS ³</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS ³</td>
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</table>

**Literature Elective 1 ⁴ | 3**

**Literature Elective 1 ⁴ | 3**

**Literature Elective 1 ⁴ | 3**

**Literature Elective 2 ⁵ | 3**

**Literature Elective 2 ⁵ | 3**

**Total Hours** 18

1 Indicates that this course requires a prerequisite.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

**Gregory Little**

440-366-7107
glittle@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/digital-arts/computer-animation-one-year-certificate/)

Fine Arts - Arts Foundation, One-Year General Certificate

Curriculum Code #4110

Effective May 2020

Division of Arts and Humanities (p. 60)

The arts foundation certificate prepares students for a transfer to four-year art departments and schools. This is an appropriate certificate for those who are preparing portfolios for such a transfer. This certificate contains the art foundation studio classes of two dimensional design, three dimensional design and Drawing I, which are courses that are in the fine arts transfer agreement. It is the foundation year of a four-year arts program. Art students will produce a portfolio of works suitable for their major. The academic courses such as College Composition I, Arts History I and II, math, and humanities electives are traditional academic courses for the first year art student in a four-year arts program. This certificate is also appropriate for College Credit Plus (CCP) students preparing for

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 251</td>
<td>ENGL 252, ENGL 261G, ENGL 262G, ENGL 266G.</td>
<td></td>
</tr>
<tr>
<td>ENGL 255G, ENGL 257G, ENGL 259G, ENGL 264, ENGL 267G, ENGL 269G.</td>
<td></td>
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</tr>
</tbody>
</table>

**Total Hours** 31

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Select from transfer module courses (p. 23).

3 Indicates that this course requires a prerequisite.

4 Select from ENGL 251, ENGL 252, ENGL 261G, ENGL 262G, ENGL 266G.

5 Select from ENGL 255G, ENGL 257G, ENGL 259G, ENGL 264, ENGL 267G, ENGL 269G.

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

**Karin Hooks**

440-366-7102

khooks@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/literature/)
entry into a four-year arts program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership. National Association of Schools of Art and Design plan approval 2016.

First Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 161</td>
<td>DRAWING I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 165</td>
<td>TWO-DIMENSIONAL DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td>Mathematics elective</td>
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Second Semester

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<tbody>
<tr>
<td>ARTS 167</td>
<td>THREE-DIMENSIONAL DESIGN</td>
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<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
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<tr>
<td>Studio Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td></td>
<td>3</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>15</strong></td>
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</tbody>
</table>

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

2 Elective selected from the following list: ARTS 151, ARTS 158, ARTS 162, ARTS 171, ARTS 181, ARTS 185, ARTS 260, ARTS 261 or ARTS 271.

3 Mathematics elective select from the following list: MTHM 150 or MTHM 158 recommended; PHLY 171, MTHM 168, or MTHM 171 accepted.

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

Josh Eiskamp
440-366-7114
ejiskamp@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/creative-arts/arts-foundations-one-year-certificate/)

Graphic Design, One-Year General Certificate

Curriculum Code #4104

Effective May 2020

Division of Arts and Humanities (p. 60)
Humanities Studies, One-Year General Certificate

Curriculum Code #4102

Effective May 2020

Division of Arts and Humanities (p. 60)

The study of humanities develops a student's critical thinking skills, reading skills, research skills and written communication skills and provides the student with a broad knowledge of some of the most important and enduring aspects of human culture. A knowledge of humanities is useful for the further academic study of human behavior, history, literature, art, music and all aspects of human culture. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Semester

Select one of the following:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>Transfer Module Elective 2</td>
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Second Semester

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<th>Course Title</th>
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<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II 3</td>
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<td>MUSC 261G</td>
<td>MUSIC APPRECIATION</td>
<td>3</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
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<tr>
<td>Humanities Elective 4</td>
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<tr>
<td>Humanities Elective 4</td>
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<tr>
<td></td>
<td><strong>Hours</strong></td>
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<td></td>
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</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2. Select from transfer module courses (p. 23).
3. Indicates that this course requires a prerequisite.
4. Humanities elective selected from core humanities general education courses.

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

Brenda Pongracz
440-366-7192
bpongracz@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/humanities/)

Journalism - Public Relations and Advertising, One-Year Technical Certificate

Curriculum Code #4150

Effective May 2020

Division of Arts and Humanities (p. 60)

The communications profession, especially journalism, has dramatically changed with the advent of social media. Many journalists have left the newsroom to start their own ventures in public relations, marketing, advertising and other related fields. Unfortunately, many of them face immense challenges because of their lack of knowledge in social media, marketing and advertising. Similarly, marketing and public relations graduates also experience the same challenges. A comprehensive certificate program covering all these four areas — journalism, public relations, marketing and advertising — will help these entrepreneurs launch their career goals. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>JRNM 151</td>
<td>JOURNALISM I</td>
<td>3</td>
</tr>
<tr>
<td>JRNM 153</td>
<td>PRINCIPLES OF PUBLIC RELATIONS</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
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<td></td>
<td><strong>Hours</strong></td>
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Spring Semester

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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>JRNM 152</td>
<td>JOURNALISM II</td>
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<td>JRNM 221</td>
<td>INTRODUCTION TO PHOTOJOURNALISM</td>
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<td>TCMN 278</td>
<td>FIELD PRODUCTION &amp; ONLINE DISTRIBUTION</td>
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<td>JRNM 222</td>
<td>NEWSPAPER EDITING AND DESIGN 2</td>
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<td>JRNM 223</td>
<td>SOCIAL MEDIA FOR THE NEWSROOM 2</td>
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<tr>
<td>MKRG 251</td>
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Summer Semester

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<th>Course Title</th>
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<tbody>
<tr>
<td>MKRG 245</td>
<td>SOCIAL MEDIA MARKETING 2</td>
<td>3</td>
</tr>
<tr>
<td>or MKRG 255</td>
<td>ADVERTISING &amp; PROMOTION MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

1
Philosophical Studies, One-Year General Certificate

Curriculum Code #4100

Effective May 2020

Division of Arts and Humanities (p. 60)

The study of philosophy develops a student’s critical thinking skills, reading skills, research skills, and written communication skills and provides the student with a broad knowledge of some of the most challenging and important issues facing human beings. A knowledge of philosophy is useful for the further academic study of nature, theology, human behavior, history, literature, art and politics. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 151G</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 174</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>1</td>
</tr>
<tr>
<td>Transfer Module Elective</td>
<td>3</td>
</tr>
<tr>
<td>Science and Mathematics Elective</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>17</strong></td>
</tr>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 162</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151G</td>
<td></td>
</tr>
<tr>
<td>Philosophy Elective</td>
<td>3</td>
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<tr>
<td>Philosophy Elective</td>
<td>3</td>
</tr>
<tr>
<td>Transfer Module Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Total Hours: 32

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course requires a prerequisite.

Program Contact(s):

Clifford Anthony
440-366-7729
canthony@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/journalism-and-communication/journalism-public-relations-and-advertising-one-year-certificate/)

Photography, One-Year General Certificate

Curriculum Code #4111

Effective May 2020

Division of Arts and Humanities (p. 60)

The one-year certification in photography from the visual arts department represents the successful completion of select courses in art, photography, design and digital art that prepares individuals to design, create and produce traditional and digital solutions for a variety of contexts including websites, print media and fine art. Successful completion of this certificate prepares the student for employment in the area of photographic production, or for further study in art, photography or design. Certification is well-suited for individuals with professional experience seeking to add to their skill set. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership. The course work also helps prepare the student in the development of a portfolio (for work or transfer). National Association of Schools of Art and Design plan approval 2016.

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 151</td>
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<tr>
<td>ARTS 161</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 165</td>
<td>3</td>
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<tr>
<td>ARTS 246</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course requires a prerequisite.

Program Contact(s):

Ben Cordry
440-366-4732
bcordry@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/philosophy/)
Second Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 152</td>
<td>PHOTOGRAPHY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 261</td>
<td>GRAPHIC DESIGN I</td>
<td>3</td>
</tr>
<tr>
<td>or ARTS 158</td>
<td>or PRINTMAKING</td>
<td></td>
</tr>
<tr>
<td>ARTS 271</td>
<td>DIGITAL IMAGING</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 275</td>
<td>DIGITAL PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS ADMINISTRATION</td>
<td></td>
</tr>
<tr>
<td>or ECNM 113</td>
<td>or PERSONAL FINANCE</td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 15 |

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.  
2. Indicates that this course requires a prerequisite.  

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

Dennis Ryan  
440-366-7100  
dryan@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website.  
(https://www.lorainccc.edu/liberal-and-creative-arts/creative-arts/photography-one-year-certificate/)

Religious Studies, One-Year General Certificate

Curriculum Code #4101  
Effective May 2020  
Division of Arts and Humanities (p. 60)

Religious Studies explore a wide variety of religious beliefs and practices. Religious studies discuss ultimate values and their relationship to our ways of life by examining myth, ritual, ethical behavior, emotional response, and symbolic expression. Students learn the meaning of religion in human experience and social life through various disciplines: history, sociology, psychology, anthropology, cross-cultural studies, and philosophy. Students are encouraged to think critically about values and meanings that have been expressed through various religions and to relate those values to the contemporary world. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Semester  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>Transfer Module Elective</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Science and Mathematics Elective</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

| Hours | 17 |

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.  
2. Select from transfer module courses (p. 23).  
3. Science and mathematics elective selected from the general education (p. 52)/transfer module (p. 23).  
4. Indicates that this course requires a prerequisite.  
5. Religion elective selected from: RELG 251G, RELG 261, RELG 262G, RELG 270G or RELG 281G.

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

Young Ko  
440-366-7110  
yko@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website.  
(https://www.lorainccc.edu/liberal-and-creative-arts/religion/)

Spanish, One-Year General Certificate

Curriculum Code #4112  
Effective May 2020  
Division of Arts and Humanities (p. 60)

The certificate in Spanish provides students, prospective employers and others with documented evidence of persistence and academic accomplishment in the language. This certificate also prepares students for further academic work as a Spanish major, for preparing to teach Spanish in secondary education, or for preparation in becoming an interpreter/translator. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.
agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMC 151 ORAL COMMUNICATION</td>
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<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>SPNH 251G INTERMEDIATE SPANISH I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101</td>
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<td>Transfer Module Elective</td>
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<tr>
<td>Total Hours</td>
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</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 162 COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 254G INTRODUCTION TO HISPANIC LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>SPNH 252G INTERMEDIATE SPANISH II</td>
<td>3</td>
</tr>
<tr>
<td>Transfer Module Elective</td>
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<tr>
<td>Total Hours</td>
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<tr>
<th>Third Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Spanish Elective</td>
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<td>Total Hours</td>
<td>6</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3 Select from transfer module courses (p. 23).

4 Spanish elective to be chosen from the following: SPNH 257G, SPNH 258G, SPNH 259G, SPNH 260G, SPNH 271G, SPNH 272G or SPNH 299G.

Consult an advisor or future transfer institution for advice in selecting electives that will apply to a specific major upon transfer.

Program Contact(s):

**Gregory Rivera**
440-366-7132
grivera@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/liberal-and-creative-arts/foreign-language/)

**Division of Engineering, Business and Information Technologies**

Engineering Technologies Offices: AT 116
Engineering Technologies: 440-366-4005

Business and Information Offices: BU 211
Business and Information Telephone: 440-366-4030

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**Bachelor of Applied Science**

- Microelectronic Manufacturing #9601 (p. 70)

**Associate of Applied Business Programs**

- Accounting #0011 (p. 72)
- Business Administration – Entrepreneurship #0224 (p. 74)
- Business Administration – Human Resource Management #0229 (p. 75)
- Business Administration – Management #0227 (p. 76)
- Business Administration – Marketing #0226 (p. 78)
- Business Administration - Real Estate #0233 (p. 79)
- Computer Information Systems – Mobile Device Application Development Major #6639 (p. 80)
- Computer Information Systems – Network Communication Technology #6649 (p. 81)
- Computer Information Systems – Software Development #6618 (p. 82)
- Computer Information Systems – Web Development #6601 (p. 82)
- Data Analytics - Tools & Techniques #6650 (p. 83)
- Hospitality and Tourism Management – Hospitality #0101 (p. 84)
- Hospitality and Tourism Management – Travel Industry #0102 (p. 85)

**Associate of Applied Science Programs**

- Alternative Energy Technology – Solar Technology Major #6355 Not Offered 2020-2021 (p. 87)
- Alternative Energy Technology – Wind Turbine Major #6350 Not Offered 2020-2021 (p. 88)
- Automation Engineering Technology – Maintenance/Repair #6210 (p. 89)
- Automation Engineering Technology – Systems Specialist #6211 (p. 90)
- Blockchain Engineering Technology - Blockchain Major #6236 (p. 92)
- Computer Engineering Technology – Business Forensics Investigations Major #6220 (p. 93)
- Computer Engineering Technology – Computer and Digital Forensics Major #6120 (p. 95)
- Computer Engineering Technology – Computer Applications Integration Specialist Major #6222 (p. 97)
- Construction Technology – Construction Engineering Major #6170 (p. 99)
- Construction Technology – Construction Management Major #6171 (p. 100)
- Cyber Information and Security #6470
- Digital Fabrication Technologies: Digital Fabrication Major #6167
- Electric Power Utility Technology – Overhead Line Technology #6320 (Not Offered 2020-2021) (p. 103)
- Electric Power Utility Technology – Substation Technology Major #6321 (Not Offered 2020-2021) (p. 104)
- Electronic Engineering Technology – Applied Electronics #6310 (p. 105)
- Electronic Engineering Technology – Computer Maintenance and Networking #6312 (p. 107)
- Industrial Safety Technology/Technician #6720
• Manufacturing Engineering Technology – Computer Aided Machining #6213 (p. 110)
• Manufacturing Engineering Technology – Industrial Electrical Technician #6215 (p. 111)
• Manufacturing Engineering Technology - Industrial Internet of Things (IIOT) #6245 (p. 112)
• Manufacturing Engineering Technology – Industrial Mechanical Technician #6216 (p. 113)
• Manufacturing Engineering Technology – Mechanical Design #6212 (p. 115)
• Manufacturing Engineering Technology – Quality Assurance #6224 (p. 116)
• Mechatronics Technology – Micro-Electromechanical Systems #6520 (p. 117)
• Welding Technology #6410 (p. 119)

One-Year Technical and General Certificates

• Alternative Energy Technology – Solar Technology #6356 Not Offered 2020-2021 (p. 121)
• Alternative Energy Technology – Wind Turbine #6351 Not Offered 2020-2021 (p. 121)
• Blockchain Engineering Technology #6234 (p. 122)
• Business Management #0127 (p. 123)
• Computer Engineering Technology – Business Forensics Investigations #6218 (p. 123)
• Computer Engineering Technology – Computer and Digital Forensics #6121 (p. 125)
• Computer Engineering Technology – Computer Applications Integration Specialist #6122 (p. 124)
• Computer Information Systems – Business IT Fundamentals #6602 (p. 144)
• Computer Information Systems – Information Security for Business #6609 (p. 147)
• Construction Technology – Construction and Renovation Tradesman #6175 (p. 149)
• Customer Service #0001 (p. 149)
• Employment #0002 (p. 150)
• General Business Administration #0027 (p. 151)
• Government/Not-for-Profit Accounting Specialist #0035 (p. 152)
• IT Fast Track #6005 (Not Offered 2020-2021) (p. 153)
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• Manufacturing Engineering Technology – Industrial Electrical Technician #6115 (p. 134)
• Manufacturing Engineering Technology - Industrial Internet of Things, #6243 (p. 135)
• Manufacturing Engineering Technology – Industrial Mechanical Technician #6116 (p. 136)
• Manufacturing Engineering Technology – Quality Technician #6007 (p. 136)
• Mechatronics Technology – Micro-Electromechanical Systems #6510 (p. 137)
• Professional Sales #0126 (p. 139)
• Welding Technology – Welding Operator #6008 (p. 139)

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• Accounting – Bookkeeper II #0008 (p. 141)
• Accounting – Payroll Clerk #0005 (p. 141)
• Alternative Energy Technology – Wind Turbine #6352 Not Offered 2020-2021 (p. 142)
• Automation Engineering Technology – Maintenance Technician #6181 (p. 142)
• Blockchain Bootcamp I - Blockchain System Architect #6230 (p. 143)
• Blockchain Bootcamp II - Blockchain Developer #6231 (p. 143)
• Computer Information Systems – Business IT Fundamentals #6602 (p. 144)
• Computer Information Systems – Network Administration #6604 (p. 146)
• Computer Information Systems – Network Infrastructure Technology/CCNA #6606 (p. 146)
• Computer Information Systems – Network Security Foundations #6609 (p. 147)
• Computer Information Systems – Software Development Fundamentals #6620 (p. 147)
• Computer Information Systems – Web Design Fundamentals #6621 (p. 148)
• Computer Information Systems – Web Programming Fundamentals #6622 (p. 148)
• Construction Technology – Construction and Renovation Tradesman #6175 (p. 149)
• Customer Service #0001 (p. 149)
• CyberSecurity Bootcamp I - Cybersecurity Specialist #6475 (p. 150)
• Electronic Engineering Technology – Computer Aided Design Operator #6111 (p. 132)
• Engineering Technology – General Technician #6050 (p. 151)
• General Business Administration #0027 (p. 151)
• Government/Not-for-Profit Accounting Specialist #0035 (p. 152)
• Industrial Safety Technology/Technician – General Safety #6700 (p. 152)
• IT Fast Track #6005 (Not Offered 2020-2021) (p. 153)
• Manufacturing Engineering Technology – Computer Aided Design #6002 (p. 153)
• Manufacturing Engineering Technology – Computer Aided Machining/Manufacturing Processes #6012 (p. 154)
Microelectronic Manufacturing,
Bachelor of Applied Science

Curriculum Code #9601

Effective May 2020

The Microelectronic Manufacturing program prepares individuals to apply basic engineering principles and technical skills to design, assembly, prototyping, and manufacturing of printed circuit boards (PCB) used in electronic assembly as well microelectronic packaging and MEMS sensors. Includes hands-on machine operation of equipment used in high volume electronic assembly and microelectronic packaging, use of software for designing PCB layout and bills of materials, instruction in manufacturing, quality control principles and lean lite, instruction in programming of programmable logic controllers (PLC), and engineering analysis of the physical design and electronic function of PCB.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT 111</td>
<td>3</td>
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<tr>
<td>ELCT 115</td>
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<tr>
<td>MTHM 121</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 122</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>1</td>
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<tr>
<td>TECN 111</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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</tbody>
</table>

Spring Semester

| CADD 111      | 2     |
| CADD 216      | 1     |
| DFB 111       | 1     |
| ELCT 121      | 4     |
| MEMS 132      | 3     |
| MTHM 168      | 3     |
| **Total**     | **14**|

Second Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CHMY 171</td>
<td>5</td>
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<tr>
<td>ELCT 233</td>
<td>4</td>
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<tr>
<td>ENGL 161</td>
<td>3</td>
</tr>
<tr>
<td>MEMS 211</td>
<td>3</td>
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<td>MEMS 287</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Spring Semester

| ENGL 164      | 3     |
| MEMS 221      | 3     |
| MEMS 288      | 1     |
| Arts and Humanities Elective | 3 |
| Social Sciences Elective | 3 |
| **Total**     | **13**|

Third Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AETC 111</td>
<td>3</td>
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<tr>
<td>ELCT 112</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 311</td>
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<tr>
<td>PHYC 150</td>
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<td>TECN 115</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
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</tbody>
</table>

Spring Semester

| AETC 121      | 3     |
| ELCT 221      | 4     |
| MEMS 321      | 3     |
| MEMS 387      | 1     |
| QLTY 122      | 3     |
| TECN 245      | 2     |
| **Total**     | **16**|

Fourth Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 213</td>
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<tr>
<td>ELCT 234</td>
<td>4</td>
</tr>
<tr>
<td>MEMS 411</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151 or SOCY 151G</td>
<td>3</td>
</tr>
<tr>
<td>QLTY 234</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Spring Semester

| MEMS 421      | 3     |
| MEMS 487      | 1     |
| QLTY 241      | 2     |
| **Total**     | **17**|

Microelectronic Manufacturing Technology – Industrial Electrical Technician #6015 (p. 154)
• Manufacturing Engineering Technology - Industrial Internet of Things #6241 Short Term Technical Certificate (p. 155)
• Manufacturing Engineering Technology – Industrial Mechanical Technician #6016 (p. 155)
• Manufacturing Engineering Technologies - Right Skills Now #6031
• Mechatronics Technology – Micro-Electromechanical Systems #6500 (p. 157)
• Real Estate #0231 (p. 157)
• Tax Specialist #0037 (p. 158)
• Welding Technology – Advanced Welding #6011 (p. 158)
• Welding Technology – Basic Welding #6006 (p. 159)
• Welding Technology – Welding #6009 (p. 159)
• Welding Technology - Welding and Visual Inspection #6013 (p. 160)
Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246G</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254G</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251G</td>
<td>AMERICAN LITERATURE I</td>
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</tr>
<tr>
<td>ENGL 252G</td>
<td>AMERICAN LITERATURE II</td>
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<tr>
<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
<td>3</td>
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<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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</tr>
<tr>
<td>HUMS 274G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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</tr>
<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<tr>
<td>PHLG 165</td>
<td>BIOETHICS</td>
<td>3</td>
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<tr>
<td>PHLG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
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<td>RELG 261G</td>
<td>RELIGION IN AMERICA</td>
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<tr>
<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<tr>
<td>THTR 151G</td>
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Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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</tr>
<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
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</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

Johnny Vanderford
440-366-4206
jvanderford@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Program Requirements

1. Eligible to apply/earn AAS MEMS
2. Cumulative GPA of 2.5 (for transfer students, it has to be combined cumulative GPA of 2.5)

More program information can be found on our website. (https://www.lorainccc.edu/engineering/mechatronics/associate-of-applied-science-in-mechatronics-technology-micro-electromechanical-systems-mems/)

MISSION STATEMENT: Lorain County Community College's (LCCC) degrees in MicroElectroMechanical Systems (MEMS) and microelectronics are industry tailored, hands-on college degrees and certificates focused on training students for engineering technician, PCB assembler, operator, and manufacturing engineering skills to get them jobs in the rapidly growing fields of PCB manufacturing, MEMS sensors, biomedical devices, quality management, drafting, and electronic circuits.

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline of Printed Circuit Board (PCB) manufacturing, microelectronic manufacturing, and MicroElectroMechanical Systems (MEMS)
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline of PCB manufacturing, microelectronic manufacturing, and MEMS.
3. An ability to apply written, oral, and graphical communication in broadly-
Accounting, Associate of Applied Business

Curriculum Code #0011

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The accounting associate degree program prepares graduates for employment as accountants in business, industry and government. The program integrates software and the use of technology with various accounting concepts. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>or MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td><strong>Total</strong></td>
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| Spring Semester | ACTG 152 | ACCOUNTING II - MANAGERIAL | 4 |
| ACTG 251 | INTERMEDIATE ACCOUNTING I | 4 |
| ACTG 267 | FEDERAL INCOME TAX PROCEDURES-INDIVIDUAL | 4 |
| BADM 165 | LEGAL ENVIRONMENT OF BUSINESS | 3 |
| FNCE 251 | BUSINESS FINANCE | 3 |
| **Total** |               | **16** |

| Second Year | Fall Semester | Hours |
| ACTG 251 | INTERMEDIATE ACCOUNTING II | 4 |
| ACTG 267 | COST ACCOUNTING | 3 |
| BADM 251 | PRINCIPLES OF MANAGEMENT | 3 |
| MKRG 251 | PRINCIPLES OF MARKETING | 3 |
| **Total** |               | **16** |

| Spring Semester | ACTG 252 | INTERMEDIATE ACCOUNTING II | 4 |
| ACTG 265 | COST ACCOUNTING | 3 |
| BADM 251 | PRINCIPLES OF MANAGEMENT | 3 |
| MKRG 251 | PRINCIPLES OF MARKETING | 3 |
| **Total** |               | **16** |

Program Educational Objectives

1. Manufacture, assemble, and test Printed Circuit Boards (PCB) by programming and operating equipment used in the field of high volume PCB manufacturing.
2. Recognize manufacturing optimization methods using industry certified processes and systematic quality tools.
3. Perform on technical team using developed skills in team leadership and engineering management.
4. Successfully complete a paid internship demonstrating professional and technical responsibilities to working as a part of an engineering team in a quality manufacturing environment.
Students transferring to the Hiram College Lorain County Community College’s University Partnership Accounting Program should take MTHM 168. Students transferring elsewhere should obtain transfer information from that institution.

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course has a prerequisite.

This course offers an opportunity for experiential learning.

Students transferring to the Hiram College Lorain County Community College’s University Partnership accounting program should take BADM 251.

Science elective with lab selected from the general education (p. 52)/transfer module (p. 23).

| Electives | 2-3 | Hours | 16-17 | Total Hours | 60-61 |

**Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 161</td>
<td>PAYROLL ACCOUNTING</td>
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</tr>
<tr>
<td>ACTG 226</td>
<td>FUND ACCOUNTING</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 253</td>
<td>FORENSIC ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>ACTG 268</td>
<td>FEDERAL INCOME TAX PROCEDURES- BUSINESS ENTITIES</td>
<td>4</td>
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<tr>
<td>ACTG 287</td>
<td>WORK-BASED LEARNING I - ACTG</td>
<td>1-3</td>
</tr>
<tr>
<td>BADM 211</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 212</td>
<td>SPREADSHEET APPLICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

Students intending to transfer to the Hiram College, Lorain County Community College’s University Partnership or elsewhere should consult with the intended transfer institution or consult with an LCCC counselor or advisor for transfer information.

**Program Contact(s):**

Gerald McFadden
440-366-7473
gmcfadden@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/accounting/associate-of-applied-business-in-accounting/)

**Program Learning Outcomes**

1. Apply accounting theories and principles to a wide array of business transactions to effectively develop financial records and models.

2. Demonstrate written and verbal communication skills.

3. Formulate professional opinions and guidance by analyzing accounting data using critical thinking and ethical guidelines.

**Accelerated Pathway**

The Accelerated Pathway for the Accounting, Associate of Applied Business is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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</tr>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</tr>
<tr>
<td>ACTG 152</td>
<td>ACCOUNTING II - MANAGERIAL</td>
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</tr>
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<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
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<td></td>
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**Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<td></td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td></td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td></td>
</tr>
<tr>
<td>ACTG 251</td>
<td>INTERMEDIATE ACCOUNTING I</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 252</td>
<td>INTERMEDIATE ACCOUNTING II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Hours</td>
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**Summer Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 251</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
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<tr>
<td>Science Elective with Lab</td>
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<td></td>
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**Second Year**

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<tr>
<td>ACTG 265</td>
<td>COST ACCOUNTING</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 251</td>
<td>BUSINESS FINANCE</td>
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</tr>
<tr>
<td></td>
<td>Hours</td>
<td>15-17</td>
</tr>
<tr>
<td>ACTG 267</td>
<td>FEDERAL INCOME TAX PROCEDURES- INDIVIDUAL</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>60-62</td>
</tr>
</tbody>
</table>
Students transferring to the Hiram College Lorain County Community College’s University Partnership Accounting Program should take MTHM 168. Students transferring elsewhere should obtain transfer information from that institution.

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course has a prerequisite.

This course offers an opportunity for experiential learning.

Science elective with lab selected from the general education (p. 52)/transfer module (p. 23).

Note: All courses in the accelerated pathway are offered online.

### Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 161</td>
<td>PAYROLL ACCOUNTING</td>
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</tr>
<tr>
<td>ACTG 226</td>
<td>FUND ACCOUNTING</td>
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<td>ACTG 253</td>
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<tr>
<td>ACTG 268</td>
<td>FEDERAL INCOME TAX PROCEDURES-BUSINESS ENTITIES</td>
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<tr>
<td>ACTG 287</td>
<td>WORK-BASED LEARNING I - ACTG</td>
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<td>BADM 211</td>
<td>BUSINESS COMMUNICATIONS</td>
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<tr>
<td>CISS 212</td>
<td>SPREADSHEET APPLICATIONS</td>
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</table>

Students intending to transfer to the Hiram College, Lorain County Community College’s University Partnership or elsewhere should consult with the intended transfer institution or consult with an LCCC counselor or advisor for transfer information.

## Business Administration - Entrepreneurship, Associate of Applied Business

Curriculum Code #0224

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This program is designed to prepare individuals for possible transfer or employment in a variety of management, business development and entrepreneur positions. The focus of the program is skill-building in the area of entrepreneurship. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<tr>
<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
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</tr>
<tr>
<td>CISS 212</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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</tbody>
</table>

#### Spring Semester

Select one of the following:

- MTHM 158 QUANTITATIVE REASONING
- MTHM 168 STATISTICS
- MTHM 171 COLLEGE ALGEBRA

### Elective

3-4 Hours

### Second Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 211</td>
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<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 201</td>
<td>ENTREPRENEURIAL FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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</tbody>
</table>

#### Spring Semester

Select one of the following:

- ENTR 202 ENTREPRENEURIAL MARKETING
- MKRG 251 PRINCIPLES OF MARKETING
- ENTR 203 ENTREPRENEURIAL MANAGEMENT
- ENTR 205 NEW VENTURE CREATION
- Technical Elective

### Total Hours

60-62 Hours

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course requires a prerequisite.

This course offers an opportunity for experiential learning.

MTHM 168 is required for students transferring to Miami University’s Bachelor of Science in Commerce-Major in Small Business Management Degree. MTHM 171 is required for other partner universities and most transfer institutions. Students intending to transfer elsewhere should consult with the intended transfer institution or consult with an LCCC advisor for transfer information.

Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).

Students may select from one of the following electives: ENTR 204 or ENTR 287.

Program Contact(s):

Lee Kolczun
440-366-4737
lkolczun@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team.
More program information can be found on our website.

1. Contrast and apply various management concepts and techniques to starting and managing a small business.
2. Distinguish between and analyze the multiple (economic, financial, legal, international, and social) environment of business.
3. Construct and utilize effective documents and presentations using technology.

**Accelerated Pathway**

The Accelerated Pathway for the Business Administration - Entrepreneurship, Associate of Applied Business is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td>8A Session</td>
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<td>16-17</td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
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<tr>
<td>8B Session</td>
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</tr>
<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
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<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>8A Session</td>
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<td>17</td>
</tr>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<td>MICROCOMPUTER APPLICATIONS I</td>
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<td>ENTR 200</td>
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<td>8B Session</td>
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<tr>
<td>ACTG 152</td>
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</tr>
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<td>ENTR 201</td>
<td>ENTREPRENEURIAL FINANCE</td>
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</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151</td>
<td>or INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
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<tr>
<td><strong>Second Year</strong></td>
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<td></td>
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<tr>
<td><strong>Fall Semester</strong></td>
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<td>ENTR 204</td>
<td>ENTREPRENEURIAL APPLICATIONS</td>
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<tr>
<td>or ENTR 287</td>
<td>PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>or WORK-BASED LEARNING I - ENTR</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENTR 205</td>
<td>NEW VENTURE CREATION</td>
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<tr>
<td>Science Elective</td>
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<tr>
<td><strong>8A Session</strong></td>
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<tr>
<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ENTR 202</td>
<td>ENTREPRENEURIAL MARKETING</td>
<td>3</td>
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<tr>
<td>MKRG 251</td>
<td>PRINCIPLES OF MARKETING</td>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>60-61</td>
</tr>
</tbody>
</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2. Indicates that this course requires a prerequisite.
3. This course offers an opportunity for experiential learning.
4. MTHM 168 is required for students transferring to Miami University’s Bachelor of Science in Commerce-Major in Small Business Management Degree. MTHM 171 is required for other partner universities and most transfer institutions. Students intending to transfer elsewhere should consult with the intended transfer institution or consult with an LCCC advisor for transfer information.
5. Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).

**Business Administration - Human Resource Management, Associate of Applied Business**

Curriculum Code #0229

Effective May 2020

Division of Engineering, Business and Information Technologies

This program is designed to prepare individuals for transfer or employment in a variety of management/administrative positions. The focus of the program is skill-building in the areas of recruitment, selection, training, development, compensation, labor-management relations and labor law. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
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<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
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<tr>
<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
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<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
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</tr>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
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<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS</td>
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<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td>ACTG 152</td>
<td>ACCOUNTING II - MANAGERIAL</td>
<td>4</td>
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<tr>
<td>BADM 153</td>
<td>RECRUITMENT SELECTION TRAINING AND DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td></td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
<td>3</td>
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<td>Hours</td>
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Second Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 251</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151</td>
<td>or INTRODUCTION TO SOCIOLOGY</td>
<td></td>
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<td></td>
<td>Science Elective</td>
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<tr>
<td></td>
<td>Hours</td>
<td>15-16</td>
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<td></td>
<td>Spring Semester Hours</td>
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</tr>
<tr>
<td>BADM 154</td>
<td>COMPENSATION AND BENEFITS</td>
<td>3</td>
</tr>
<tr>
<td>BADM 164</td>
<td>LABOR LAW</td>
<td>3</td>
</tr>
<tr>
<td>BADM 211</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
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<tr>
<td>BADM 255</td>
<td>HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>BADM 264</td>
<td>LABOR-MANAGEMENT RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
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</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>60-62</td>
</tr>
</tbody>
</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course requires a prerequisite.

3. MTHM 168 is required for students transferring to Miami University's Bachelor of Science in Commerce-Major in Small Business Management Degree. MTHM 171 is required for other partner universities and most transfer institutions. Students intending to transfer elsewhere should consult with the intended transfer institution or consult with an LCCC advisor for transfer information.

4. Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).

Program Contact(s):

Tony Cioffi
440-366-7409
acioffi@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
PSYH 151 or SOCY 151G
INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY 3
Science Elective 4 3-4

Hours 15-16

Spring Semester
BADM 211 BUSINESS COMMUNICATIONS 2 3
ENTR 201 ENTREPRENEURIAL FINANCE 2 or FNCE 251 BUSINESS FINANCE 3
MKRG 251 PRINCIPLES OF MARKETING 2 3
Technical Elective I 2,6 3
Technical Elective II 2,6 3

Total Hours 15

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2. Indicates that this course has a prerequisite.
3. MTHM 168 is required for students transferring to Miami University's Bachelor of Science in Commerce-Major in Small Business Management Degree. MTHM 171 is required for other partner universities and most transfer institutions. Students intending to transfer elsewhere should consult with the intended transfer institution or consult with an LCCC advisor for transfer information.
4. Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).
5. This course offers an opportunity for experiential learning.
6. Six credit hours are needed to meet the technical elective credit hour requirement. Students intending to transfer should consult with the intended transfer institution, the Business division or with an LCCC advisor for transfer information. See technical electives below.

### Technical Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 265</td>
<td>COST ACCOUNTING 2</td>
<td>3</td>
</tr>
<tr>
<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>BADM 220</td>
<td>PRINCIPLES OF SUPPLY CHAIN MANAGEMENT 2</td>
<td>3</td>
</tr>
<tr>
<td>BADM 255</td>
<td>HUMAN RESOURCES MANAGEMENT 2</td>
<td>3</td>
</tr>
<tr>
<td>BADM 264</td>
<td>LABOR-MANAGEMENT RELATIONS 2</td>
<td>3</td>
</tr>
<tr>
<td>BADM 281G</td>
<td>INTERNATIONAL BUSINESS 2</td>
<td>3</td>
</tr>
<tr>
<td>BADM 287</td>
<td>WORK-BASED LEARNING I - BADM (must be taken for three credits) 2</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 203</td>
<td>ENTREPRENEURIAL MANAGEMENT 2</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 255</td>
<td>ADVERTISING &amp; PROMOTION MANAGEMENT 2</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 261</td>
<td>SOCIAL PSYCHOLOGY 2</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 273</td>
<td>INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

Tony Cioffi
440-366-7409
acioffi@lorainccc.edu

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More program information can be found on our website. (https://www.lorainccc.edu/business-programs/management-and-entrepreneurship/associate-of-applied-business-in-management/)

1. Contrast and apply various management concepts and theories to address and resolve organizational challenges and problems.
2. Distinguish between and analyze the multiple (economic, financial, legal, international, and social) components of business.
3. Construct and utilize effective documents and presentations using technology.

### Accelerated Pathway

The Accelerated Pathway for the Business Administration - Management, Associate of Applied Business is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 151</td>
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<tr>
<td>ENGL 161</td>
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</tr>
<tr>
<td>SDEV 101</td>
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<td>Total Hours</td>
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</table>

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 152</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158 or MTHM 168</td>
<td>3</td>
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<tr>
<td>Total Hours</td>
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<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 151 ACCOUNTING I - FINANCIAL</td>
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<tr>
<td>BADM 165</td>
<td>3</td>
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<tr>
<td>CISS 121</td>
<td>3</td>
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<td>Total Hours</td>
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<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 152 ACCOUNTING II - MANAGERIAL</td>
<td>4</td>
</tr>
<tr>
<td>ENTR 200 ENTREPRENEURSHIP</td>
<td>3</td>
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<td>Total Hours</td>
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</table>
Second Year
Fall Semester
8A Session
CMMC 151 ORAL COMMUNICATION 3
MKRG 251 PRINCIPLES OF MARKETING 2 3
Technical Elective 5 6 3

8B Session
BADM 251 PRINCIPLES OF MANAGEMENT 3
Science Elective 4 3
Technical Elective 6 3

Hours 18
Total Hours 60

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2. Indicates that this course has a prerequisite.
3. MTHM 168 is required for students transferring to Miami University’s Bachelor of Science in Commerce-Major in Small Business Management Degree. MTHM 171 is required for other partner universities and most transfer institutions. Students intending to transfer elsewhere should consult with the intended transfer institution or consult with an LCCC advisor for transfer information.
4. Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).
5. This course offers an opportunity for experiential learning.
6. Six credit hours are needed to meet the technical elective credit hour requirement. Students intending to transfer should consult with the intended transfer institution, the Business division or with an LCCC advisor for transfer information. See technical electives below.

Note: All courses in the accelerated pathway are offered online.

Technical Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 265</td>
<td>COST ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>BADM 220</td>
<td>PRINCIPLES OF SUPPLY CHAIN MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>BADM 255</td>
<td>HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>BADM 264</td>
<td>LABOR-MANAGEMENT RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BADM 281G</td>
<td>INTERNATIONAL BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>BADM 287</td>
<td>WORK-BASED LEARNING I - BADM</td>
<td>3</td>
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<tr>
<td>ENTR 203</td>
<td>ENTREPRENEURIAL MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 255</td>
<td>ADVERTISING &amp; PROMOTION MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 261</td>
<td>SOCIAL PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 273</td>
<td>INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY</td>
<td>3</td>
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</tbody>
</table>

Business Administration - Marketing, Associate of Applied Business

Curriculum Code #0226

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 66)

This program is designed to prepare individuals for employment in a variety of marketing/administrative positions. The focus of the program is skill-building in the areas of communications, consumer behavior, sales management, advertising and promotion, and services marketing. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACTG 151 ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>BADM 165 LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
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<tr>
<td>ECNM 151 PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
<td>3</td>
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<td>SDEV 101 COLLEGE 101 1</td>
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Spring Semester

<table>
<thead>
<tr>
<th>ACTG 152 ACCOUNTING II - MANAGERIAL</th>
<th>2 4</th>
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<tbody>
<tr>
<td>ECNM 152 PRINCIPLES OF MICROECONOMICS</td>
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<tr>
<td>ENGL 162 COLLEGE COMPOSITION II 2</td>
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<td>MKRG 113 PRINCIPLES OF SELLING</td>
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<td>Select one of the following:</td>
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<tr>
<td>MTHM 158 QUANTITATIVE REASONING</td>
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<tr>
<td>MTHM 168 STATISTICS 3</td>
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<tr>
<td>MTHM 171 COLLEGE ALGEBRA 3</td>
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Hours 17

Second Year

Fall Semester

| BADM 211 BUSINESS COMMUNICATIONS 2 | 3 |
| BADM 251 PRINCIPLES OF MANAGEMENT | 3 |
| MKRG 251 PRINCIPLES OF MARKETING 2 | 3 |
| PSYH 151 INTRODUCTION TO PSYCHOLOGY | 3 |
| Science Elective 4                 | 3-4 |

Hours 15-16

Spring Semester

| MKRG 221 CONSUMER BEHAVIOR 2       | 3 |
| MKRG 247 SERVICES MARKETING 2      | 3 |
| MKRG 255 ADVERTISING & PROMOTION MANAGEMENT 2 | 3 |
| Select one of the following:        | 3 |
| MKRG 245 SOCIAL MEDIA MARKETING    |     |
| MKRG 256 RETAIL MANAGEMENT 2       |     |
| MKRG 258 ADVANCED SALES TECHNIQUES 2 |     |

Hours 12

Total Hours 60-62
A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course requires a prerequisite.

MTHM 16x is required for students transferring to Miami University's Bachelor of Science in Commerce-Major in Small Business Management degree. MTHM 17x is required for other partner universities and most transfer institutions. Students intending to transfer elsewhere should consult with the intended transfer institution or consult with an LCCC advisor for transfer information.

Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).

Program Contact(s):

Maria McConnell
440-366-7404
mcconnel@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/marketing/)

1. Contrast and apply various marketing concepts and theories to the promotion selling, and distribution of products and services.
2. Distinguish between and analyze the multiple (economic, financial, legal, international, and social) environment of business.
3. Construct and utilize effective documents and presentations using technology.

Business Administration - Real Estate, Associate of Applied Business

Curriculum Code #0233

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This program is designed to prepare individuals for employment in the field of real estate. The four real estate courses satisfy the pre-license education requirement for the State of Ohio Real Estate Salesperson’s License examination, and completion of this program may meet the education requirement for an Ohio Real Estate Broker’s license. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership. Any student interested in pursuing a bachelor degree needs to check with Lorain County Community College’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151 ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 111 REAL ESTATE PRINCIPLES &amp; PRACTICES</td>
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Second Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 161 BUSINESS LAW I or BADM 165 LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
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<tr>
<td>ECNM 152 PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 200 ENTREPRENEURSHIP</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 201 ENTREPRENEURIAL FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>Science Elective 4</td>
<td>3-4</td>
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</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BADM 211 BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BADM 255 HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 211 APPLIED MARKETING ESSENTIALS</td>
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</tr>
<tr>
<td>MKRG 211 APPLIED MARKETING ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective</td>
<td>2-3</td>
</tr>
</tbody>
</table>

| Total Hours | 60-63 |

1. This course is required for the Ohio Real Estate Broker’s license.
2. MTHM 17x is required for the partnership universities and most transfer institutions.
3. Indicates that this course requires a prerequisite.
4. Science elective from the general education/transfer module and must be with a lab if transferring to the University Partnership.
5. FNCE 251 may be used as a substitution for ENTR 201. Check catalog for FNCE 251 prerequisites.
6. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Technical Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BADM 153</td>
<td>RECRUITMENT SELECTION TRAINING AND DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>BADM 162</td>
<td>BUSINESS LAW II</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 113</td>
<td>PRINCIPLES OF SELLING</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 211</td>
<td>APPLIED MARKETING ESSENTIALS</td>
<td>3</td>
</tr>
</tbody>
</table>
The mobile device application development major prepares students to design and develop applications for the mobile device market. Students learn to write applications for modern mobile platforms including the iPhone/iPad and Android (phone and tablet) devices. Students also learn to write web-based applications specifically targeted at mobile devices. Additional topics including database design, computer networking, and systems design complement the focus on mobile computing to provide the student with a well-rounded information technology education. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

**Computer Information Systems - Mobile Device Application Development, Associate of Applied Business**

Curriculum Code #6639

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The mobile device application development major prepares students to design and develop applications for the mobile device market. Students learn to write applications for modern mobile platforms including the iPhone/iPad and Android (phone and tablet) devices. Students also learn to write web-based applications specifically targeted at mobile devices. Additional topics including database design, computer networking, and systems design complement the focus on mobile computing to provide the student with a well-rounded information technology education. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

**First Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>Select one from the following list:</td>
<td></td>
<td>3-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td></td>
</tr>
<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS</td>
<td></td>
</tr>
</tbody>
</table>

**Spring Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 245</td>
<td>SOCIAL MEDIA MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>Science Elective (from Transfer Module)</td>
<td></td>
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**Second Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>CISS 226</td>
<td>INTRODUCTION TO PROGRAMMING IN JAVA</td>
<td>3</td>
</tr>
<tr>
<td>CISS 264</td>
<td>INTRODUCTION TO ANDROID PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151G</td>
<td>or INTRODUCTION TO SOCIOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

**Spring Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 152</td>
<td>ACCOUNTING II - MANAGERIAL</td>
<td>4</td>
</tr>
<tr>
<td>CISS 247</td>
<td>SYSTEMS DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>CISS 260</td>
<td>INTRODUCTION TO IPHONE/IPAD PROGRAMMING</td>
<td>4</td>
</tr>
<tr>
<td>CISS 266</td>
<td>ADVANCED ANDROID PROGRAMMING</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours** 64-65

1 Indicates that this course requires a prerequisite or may be taken concurrently.
2 Indicates that this course requires a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Before taking any electives, science and/or MTHM classes refer to The University of Akron University Partnership CIS curriculum guide to ensure you take the correct classes towards the CIS Bachelor degree. The University of Akron requires MTHM 171 & MTHM 172 or MTHM 121 & MTHM 122 for the bachelor degree.

Program Contact(s):

**Mike Zellers**
440-366-4796
mzellers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
More program information can be found on our website: (https://www.lorainccc.edu/it/programming-and-software-development/associate-of-applied-business-in-computer-information-systems-mobile-device-application-development/)

Program Learning Outcomes

1. Design applications for smart-phone and tablet platforms
2. Learn basic principles in complimentary I.T. areas such as business computer applications, database, operating system, and networking fundamentals

Computer Information Systems - Network Communication Technology, Associate of Applied Business

Curriculum Code #6649

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This program prepares students to design, install, configure, test and support business networks. Primary focus will be on network servers, network operating systems, network services, client workstations in an integrated and converged services environment. Students will learn a strong set of technical skills coupled with business and communication skills so they can understand the needs of a business and apply their IT skills to give a business a competitive IT advantage. Attention is given to designing networks, whose components function seamlessly together and where the infrastructure is transparent, secure, and integrated into the organization so the network enables the sharing of information, ideas and resources between clusters of people. Additionally, students have the opportunity to take a wide range of IT courses providing more background in security, infrastructure, programming and web design.

Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES ¹</td>
<td>3</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
</tr>
<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
</tr>
<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ³</td>
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</tr>
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</table>

**Spring Semester**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS ADMINISTRATION</td>
<td>3</td>
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</table>

 or BADM 171

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>or BADM 171</td>
<td>INTRODUCTION TO E-COMMERCE</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C# ²</td>
<td>4</td>
</tr>
<tr>
<td>CISS 245</td>
<td>NETWORK INTEGRATION AND MANAGEMENT ²</td>
<td>4</td>
</tr>
<tr>
<td>CISS Elective ²,4</td>
<td></td>
<td>3</td>
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</table>

| Hours       | 15                                               |

**Spring Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 152   or MKRG 245</td>
<td>ACCOUNTING II - MANAGERIAL ²</td>
<td>3-4</td>
</tr>
<tr>
<td>or MKRG 245</td>
<td>SOCIAL MEDIA MARKETING</td>
<td></td>
</tr>
<tr>
<td>CISS 227</td>
<td>INTRANET/INTERNET NETWORKING ²</td>
<td>4</td>
</tr>
<tr>
<td>CISS 247</td>
<td>SYSTEMS DEVELOPMENT ²</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151 or SOCY 151G</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

| Hours       | 13-14                                           |

**Total Hours** 60-63

1 Indicates that this course requires a prerequisite or may be taken concurrently.

2 Indicates that this course has a prerequisite.

3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

4 Electives: CISS 165, CISS 166, CISS 167, CISS 236 or CISS 287, CISS 288, CISS 289 for the equivalent number of credit hours to meet the technical elective credit hour requirement. Students intending to transfer should consult with the intended transfer institution, the Engineering, Business and Information Technologies division, or an LCCC advisor for transfer information.

Before taking any electives, science MTHM and/or MRKG classes please refer to The University of Akron University Partnership CIS curriculum guide to ensure you take the correct classes towards the CIS bachelor degree. The University of Akron requires MTHM 171 & MTHM 172 or MTHM 121 & MTHM 122 for the bachelor degree.

Program Contact(s):

Doug Huber
440-366-4785
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Install, configure, maintain and troubleshoot a Windows networking server environment for businesses and organizations.
2. Explain the function and configuration of standard networking protocols and hardware components.
3. Learn basic principles in complimentary I.T. areas such as software applications, databases, and web development.

**Computer Information Systems - Software Development, Associate of Applied Business**

Curriculum Code #6618

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The software development major prepares students for programming on different computer platforms. Students will learn to design and develop software using the procedural and object-oriented languages most commonly used in business. Additional topics covered include database design and development and an introduction to networking. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### First Year

**Fall Semester**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>Select one from the following list:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td></td>
</tr>
<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS</td>
<td></td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td></td>
</tr>
<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td></td>
</tr>
<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS</td>
<td></td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td></td>
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<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
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<tbody>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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### Spring Semester

**Fall Semester**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>Science elective (from Transfer Module)</td>
<td></td>
<td>3-4</td>
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</table>

**Hours**  
<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>16-17</td>
</tr>
</tbody>
</table>

### Second Year

**Fall Semester**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
</tbody>
</table>

### Bernard H. Schumacher, Dean, Engineering, Business and Information Technologies Division

5 Indicates that this course requires a prerequisite or may be taken concurrently.

2 Indicates that this course requires a prerequisite.

3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

4 Students may substitute CISS 232, CISS 260, CISS 264 in place of Work Based Learning. Students intending to transfer should consult with the intended transfer institution, the Engineering, Business and Information Technologies division or an LCCC advisor for transfer information.

5 Before taking any electives, science and/or MTHM classes refer to The University of Akron University Partnership CIS curriculum guide to ensure you take the correct classes towards the CIS Bachelor degree. The University of Akron requires MTHM 171 & MTHM 172 or MTHM 121 & MTHM 122 for the bachelor degree.

Program Contact(s):  
Mark Harms  
440-366-7023  
jharms@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).


**Computer Information Systems - Web Development, Associate of Applied Business**

Curriculum Code #6601
The web development technology major prepares students for development, administration and support positions in the emerging digital economy. Students learn to design and develop Internet applications in a client/server environment. Additional topics covered include integrating Internet and enterprise-wide databases, middleware issues, building robust Internet applications and designing dynamic web portals. A variety of elective courses are available to augment the program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### First Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one from the following list:</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>MTHM 121 TECHNICAL MATHEMATICS I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTHM 151 COLLEGE MATHEMATICS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTHM 158 QUANTITATIVE REASONING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTHM 171 COLLEGE ALGEBRA</td>
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</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</table>

**Spring Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
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<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
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</tr>
<tr>
<td>MKRG 245</td>
<td>SOCIAL MEDIA MARKETING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science Elective (from Transfer Module)</td>
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</table>

**Total Hours** 16-17

### Second Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>or BADM 171</td>
<td>or INTRODUCTION TO E-COMMERCE</td>
<td></td>
</tr>
<tr>
<td>CISS 232</td>
<td>SCRIPTING IN THE CLIENT SERVER ENVIRONMENT</td>
<td>3</td>
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<tr>
<td>CISS 243</td>
<td>WEB DATABASE INTEGRATION</td>
<td>4</td>
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**Spring Semester**

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<thead>
<tr>
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</thead>
<tbody>
<tr>
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<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or SOCY 151G</td>
<td>or INTRODUCTION TO SOCIOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours** 14

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2 Indicates that this course has a prerequisite.
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4 Electives: CISS 215, CISS 268 or CISS 287, CISS 288, CISS 289 for the equivalent number of credit hours to meet the technical elective credit hour requirement. Students intending to transfer should consult with the intended transfer institution, the Engineering, Business and Information Technologies division, or with an LCCC advisor for transfer information.

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Program Contact(s):

Mike Zellers
440-366-4796
mzellers@lorainccc.edu

More program information can be found on our website. (https://www.lorainccc.edu/it/web-development/associate-of-applied-business-in-web-development/)

**Data Analytics - Tools and Techniques, Associate of Applied Business**

Curriculum Code #6650

Effective May 2020

This program prepares students to apply the tools and techniques used in data analytics and assist a data scientist. The courses are in partnership with the IBM Academy and leverage IBM and open source applications. Each student will have access to the IBM Cloud for hands-on lab activities. The process of data analysis is taught in the context of data from manufacturing (IoT), marketing, finance and other sources. Lorain County Community College has articulation agreements with
colleges and universities including programs offered by the Lorain County Community College’s University Partnership.

**First Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>DATA 130</td>
<td>ETHICAL AND LEGAL FRAMEWORK OF BIG DATA 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 2</td>
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<td><strong>Total Hours</strong></td>
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**Spring Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION 1</td>
<td>3</td>
</tr>
<tr>
<td>CISS 212</td>
<td>SPREADSHEET APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>PHL Y 171</td>
<td>INTRODUCTION TO LOGIC</td>
<td>3</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>DATA 220</td>
<td>LINUX ADMINISTRATION FOR BIG DATA 1</td>
<td>3</td>
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<tr>
<td><strong>Total Hours</strong></td>
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**Second Year**

**Fall Semester**

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CYBR 220</td>
<td>PYTHON SCRIPTING AND PROGRAM CONCEPTS</td>
<td>3</td>
</tr>
<tr>
<td>DATA 200</td>
<td>DATA MANAGEMENT IN BIG DATA 1</td>
<td>3</td>
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<tr>
<td>PHL Y 174</td>
<td>CRITICAL THINKING</td>
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<tr>
<td>Science Elective 3</td>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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**Spring Semester**

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<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>DATA 210</td>
<td>BIG DATA MANAGEMENT TECHNOLOGIES 1</td>
<td>3</td>
</tr>
<tr>
<td>DATA 230</td>
<td>PREDICTIVE AND VISUAL ANALYTICS 1</td>
<td>3</td>
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<tr>
<td>DATA 240</td>
<td>DATA ANALYTICS WITH WATSON STUDIO 1</td>
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<td>DATA 247</td>
<td>BIG DATA PROJECTS 1</td>
<td>3</td>
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</table>

Total Hours: 60

1. Indicates that this course requires a prerequisite or may be taken concurrently.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3. Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).

Students will need to obtain IBM Cloud accounts.

Program Contact(s):

**Douglas Huber**

440-366-4785
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Understand the benefits and privacy issues with using Big Data.
2. Utilize the industry common tools to mine large data sets for relationships and other insights.
3. Utilize visualization techniques to discover useful information within large data sets and communicate them to an appropriate audience.
4. Understand the purpose of machine learning and related artificial intelligence algorithms in analyzing large data sets.

**Hospitality and Tourism Management - Hospitality, Associate of Applied Business**

Curriculum Code #0101
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

According to the U.S. Travel Association, travel is the seventh largest industry in terms of employment. Job growth is predicted to continue with one in every nine new jobs created being found in this industry. In order to meet the need for trained professionals to work in this exciting and fast-paced field, LCCC offers a two-year associate of applied business degree in hospitality and tourism management. A concentration in hospitality, travel or culinary arts provides students the opportunity to select a program of study in their area of interest. Dynamic coursework coupled with a practicum or work based learning will provide the student with the skills necessary to enter a variety of sectors in this industry. Students must check with each individual institution for transferability of this program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

**First Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 1</td>
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<td>TRSM 112</td>
<td>INTRODUCTION TO THE HOSPITALITY INDUSTRY 2,3</td>
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<td>TRSM 118</td>
<td>FOOD SAFETY AND SANITATION</td>
<td>2</td>
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<td>TRSM 119</td>
<td>TECHNOLOGY IN THE HOSPITALITY INDUSTRY 3,4</td>
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<td>HOSPITALITY AND TOURISM MANAGEMENT CAREER EXPLORATION</td>
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**Spring Semester**

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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II 5</td>
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<td>MKRG 113</td>
<td>PRINCIPLES OF SELLING</td>
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<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS 5 or MTHM 158</td>
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<tr>
<td>TRSM 120</td>
<td>HOUSEKEEPING OPERATIONS 2,3,4</td>
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<tr>
<td>TRSM 121</td>
<td>FRONT OFFICE OPERATIONS 2,3,4</td>
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</table>
TRSM 124 CONFERENCES, MEETINGS AND EVENT PLANNING 3

Second Year

Fall Semester

ACTG 151 ACCOUNTING I - FINANCIAL 2,3 4
TRSM 143 or BADM 161 HOSPITALITY LAW 3,4 or BUSINESS LAW 1 3
MKRG 211 APPLIED MARKETING ESSENTIALS 3 3
Arts and Humanities Elective 3
Social Science Elective 3

Hours 16

Spring Semester

MKRG 221 CONSUMER BEHAVIOR 5 3
TRSM 226 or TRSM 285 HOSPITALITY SUPERVISION 3,4,5 2
TRSM 228 FOOD AND BEVERAGE MANAGEMENT 2,3,5 2
TRSM 287 WORK BASED LEARNING I - TRSM 5,6 or HOSPITALITY AND TOURISM PRACTICUM 1
Tourism Elective 2-3

Hours 16

Total Hours 60-61

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2 Course offered as a requirement for the hospitality fundamentals program certificate awarded by the American Hotel and Lodging Educational Institute.
3 Course offered as a requirement for the hospitality operations certificate awarded by the American Hotel and Lodging Educational Institute.
4 Course offered as a requirement for the rooms division certificate of specialization awarded by the American Hotel and Lodging Educational Institute.
5 Indicates that this course required a prerequisite or a corequisite.
6 This course offers an opportunity for experiential learning.

Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 264G</td>
<td>INTRODUCTION TO ASIAN CULTURES AND LITERATURES</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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Social Science Electives

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<tr>
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<tbody>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
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<tr>
<td>PSYN 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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Tourism Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>TRSM 111</td>
<td>INTRODUCTION TO THE TOURISM INDUSTRY</td>
<td>3</td>
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<tr>
<td>TRSM 245</td>
<td>CASINO OPERATIONS</td>
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<tr>
<td>TRSM 247</td>
<td>CRUISE AND TOUR MANAGEMENT</td>
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<tr>
<td>TRSM 248G</td>
<td>INTERNATIONAL EXPERIENCE</td>
<td>2</td>
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</tbody>
</table>

Program Contact(s):

Maria McConnell
440-366-7404
mcconnel@lorainccc.edu

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More program information can be found on our website. (https://www.lorainccc.edu/culinary/tourism/associate-of-applied-business-in-hospitality-tourism-management/hospitality-major/)

Program Learning Outcomes

1. Apply key business practices and principles in a variety of hospitality settings
2. Demonstrate proficiency in comprehension and understanding of the unique nature of the industry
3. Demonstrate effective leadership, communication and customer service skills required for success within the industry
4. Demonstrate and maintain a professional image and strong work ethics
5. Utilize critical thinking and problem solving skills to develop a framework for global awareness and understanding of cultural diversity among colleagues, customers and suppliers

Hospitality and Tourism Management - Travel Industry, Associate of Applied Business

Curriculum Code #0102

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

According to the U.S. Travel Association, travel is the seventh largest industry in terms of employment. Job growth is predicted to continue with one in every nine new jobs created being found in this industry. In order to meet the need for trained professionals to work in this exciting and fast-paced field, LCCC offers a two-year associate of applied business degree in hospitality and tourism management. A concentration in hospitality, travel or culinary arts provides students the opportunity to select a program of study in their area of interest. Dynamic coursework coupled with a practicum or work based learning will provide the student with the skills necessary to enter a variety of sectors in this industry. LCCC has articulation agreements with colleges and universities.
Hospitality and Tourism Management - Travel Industry, Associate of Applied Business

including programs offered by LCCC’s University Partnership. Students must check with each individual institution for transferability of this program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>TRSM 111</td>
<td>INTRODUCTION TO THE TOURISM INDUSTRY</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 126</td>
<td>HOSPITALITY AND TOURISM MANAGEMENT CAREER EXPLORATION</td>
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</tr>
<tr>
<td>Arts &amp; Humanities Elective</td>
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<td>3</td>
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<tr>
<td>Social Science Elective</td>
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Spring Semester

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<th>Course Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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<td>MKRG 113</td>
<td>PRINCIPLES OF SELLING</td>
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<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS</td>
<td>3</td>
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<tr>
<td>or MTHM 158</td>
<td>or QUANTITATIVE REASONING</td>
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<tr>
<td>TRSM 124</td>
<td>CONFERENCE, MEETING AND EVENT PLANNING</td>
<td>3</td>
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<tr>
<td>TRSM 224</td>
<td>AIRLINE RESERVATIONS AND TICKETING I</td>
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Second Year

Fall Semester

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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 161</td>
<td>BUSINESS LAW I</td>
<td>3</td>
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<tr>
<td>or TRSM 143</td>
<td>or HOSPITALITY LAW</td>
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<tr>
<td>BADM 211</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
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<tr>
<td>MKRG 211</td>
<td>APPLIED MARKETING ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 241G</td>
<td>WORLD LEISURE DESTINATIONS</td>
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<tr>
<td>TRSM 247</td>
<td>CRUISE AND TOUR MANAGEMENT</td>
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Spring Semester

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<th>Hours</th>
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<tbody>
<tr>
<td>MKRG 245</td>
<td>SOCIAL MEDIA MARKETING</td>
<td>3</td>
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<tr>
<td>MKRG 247</td>
<td>SERVICES MARKETING</td>
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<td>TRSM 249G</td>
<td>INTERNATIONAL TRAVEL AND WORLD EVENTS</td>
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<tr>
<td>TRSM 287</td>
<td>WORK BASED LEARNING I - TRSM</td>
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<tr>
<td>or TRSM 285</td>
<td>or HOSPITALITY AND TOURISM PRACTICUM</td>
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<tr>
<td>Tourism Elective</td>
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</table>

Total Hours 60-61

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course has a prerequisite.

3 This course offers an opportunity for experiential learning.

Arts and Humanities Electives

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<tr>
<td>HUMS 264G</td>
<td>INTRODUCTION TO ASIAN CULTURES AND LITERATURES</td>
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<td>INTRODUCTION TO WORLD RELIGIONS</td>
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Social Science Electives

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<td>GPHY 151G</td>
<td>HUMAN GEOGRAPHY</td>
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<tr>
<td>GPHY 152</td>
<td>GEOGRAPHY OF UNITED STATES/CANADA</td>
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Tourism Electives

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<thead>
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<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>TRSM 112</td>
<td>INTRODUCTION TO THE HOSPITALITY INDUSTRY</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 240</td>
<td>AIRLINE RESERVATIONS AND TICKETING</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 245</td>
<td>CASINO OPERATIONS</td>
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<tr>
<td>TRSM 248G</td>
<td>INTERNATIONAL EXPERIENCE</td>
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Program Contact(s):

Maria McConnell
440-366-7404
mcconnel@lorainccc.edu

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More program information can be found on our website. (https://www.lorainccc.edu/culinary/tourism/associate-of-applied-business-in-hospitality-tourism-management-travel-industry-major/)

Program Learning Outcomes

1. Apply key business practices and principles in a variety of hospitality settings
2. Demonstrate proficiency in comprehension and understanding of the unique nature of the industry
3. Demonstrate effective leadership, communication and customer service skills required for success within the industry
4. Demonstrate and maintain a professional image and strong work ethics
5. Utilize critical thinking and problem solving skills to develop a framework for global awareness and understanding of cultural diversity among colleagues, customers and suppliers
Alternative Energy Technology - Solar Technology Major, Associate of Applied Science

Curriculum Code #6355
(Not offered 2020-2021)

Division of Engineering, Business and Information Technologies (p. 68)

The solar technology program encompasses a wide range of electrical, mechanical and computer skills required to compete in the emerging alternate energy – solar technology industry. Typical job responsibilities will include design, testing, R&D, service, maintenance and installation assignments. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ALET 111</td>
<td>INTRODUCTION TO ALTERNATIVE ENERGY</td>
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<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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Spring Semester

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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>ALET 113</td>
<td>OSHA 10 CONSTRUCTION SAFETY</td>
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<td>ELCT 227</td>
<td>NATIONAL ELECTRIC CODE 1</td>
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<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS 1</td>
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<td>INTRODUCTION TO ENGINEERING</td>
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<td>MTHM 122</td>
<td>TECHNICAL MATHEMATICS II 1</td>
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Second Year

Fall Semester

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<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ALET 223</td>
<td>PHOTOVOLTAIC SYSTEMS 1</td>
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<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS 1</td>
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<td>ELCT 233</td>
<td>ELECTRONIC DEVICES I 1  1,3</td>
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<td>PHYC 150</td>
<td>GENERAL PHYSICS I 1</td>
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Spring Semester

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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AETC 241</td>
<td>INSTRUMENTATION AND CONTROL 1</td>
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</tr>
<tr>
<td>ALET 222</td>
<td>SOLAR THERMAL SYSTEMS 1</td>
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<td></td>
<td><strong>Total Hours</strong></td>
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</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates a student may substitute from this list: CMNW 101, CMNW 141, CMNW 145 or work-based learning (ALET 287, ALET 288 and/or ALET 289) for the equivalent number of credit hours for this course.

Arts and Humanities Electives

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<td>ENGL 251</td>
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<td>ENGL 261G</td>
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<td>ENGL 266G</td>
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<td>INTRODUCTION TO SHAKESPEARE</td>
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<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 271G</td>
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Social Science Electives

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<td>HSTR 252G</td>
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Alternative Energy Technology - Wind Turbine Major, Associate of Applied Science

Curriculum Code #6350
(Not offered 2020-2021)

The wind turbine technology program encompasses a wide range of electrical, mechanical and computer skills required to compete in the emerging alternate energy - wind turbine industry. Individuals will be prepared for a range of analysis, installation and maintenance assignments associated with the wind turbine industry. Typical job responsibilities will include design, testing, R&D, service, maintenance and installation assignments. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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Spring Semester

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<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
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<td>ALET 112</td>
<td>ALTERNATIVE ENERGY MECHANICAL</td>
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<tr>
<td>HLED 159</td>
<td>WILDERNESS AND REMOTE FIRST AID</td>
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<td>FLUID POWER</td>
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Second Year

Fall Semester

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Spring Semester

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<td>ELCT 211</td>
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Arts and Humanities Elective

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<td>ARTS</td>
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<td>WORLD ART</td>
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<td>ENGL</td>
<td>INTRODUCTION TO POETRY</td>
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</tbody>
</table>

Program Contact(s):

Kelly Zelesnik
440-366-7028
kzelesni@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
ENGL 259G INTRODUCTION TO DRAMA 3
ENGL 261G MASTERPIES OF BRITISH LITERATURE I 3
ENGL 262G MASTERPIES OF BRITISH LITERATURE II 3
ENGL 266G AFRICAN AMERICAN LITERATURE 3
ENGL 269G INTRODUCTION TO SHAKESPEARE 3
HUMS 151G INTRODUCTION TO HUMANITIES 3
HUMS 261G INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE 3
HUMS 262G INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY 3
HUMS 271G INTRODUCTION TO MYTHOLOGY 3
HUMS 274 FILM APPRECIATION 3
MUSC 262G MUSIC AS A WORLD PHENOMENON 3
PHLY 165 BIOETHICS 3
PHLY 262G INTRODUCTION TO EASTERN PHILOSOPHY 3
RELG 181G INTRODUCTION TO WORLD RELIGIONS 3
RELG 261 RELIGION IN AMERICA 3
RELG 262G INTRODUCTION TO EASTERN PHILOSOPHY 3
THTR 151G INTRODUCTION TO THEATER 3

Social Science Electives

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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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kzelesni@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Program Learning Outcomes

1. To function effectively in the wind turbine industry, with a theoretical understanding and direct hands-on experience in the installation and operation of wind turbine power generation systems
2. Be experienced in the installation of several residential scale wind turbine systems, siting of the turbine, rigging for installation, safe practices, regulatory considerations, electrical installation in a variety of off-grid applications and operation and maintenance of utility scale turbines
3. Demonstrate a high standard of professional ethics, attitudes and values
4. Communicate effectively and work collaboratively in teams

Automation Engineering Technology
- Maintenance/Repair, Associate of Applied Science

Curriculum Code #6210
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)
The automation engineering technologies degree trains students to repair, troubleshoot and maintain automated equipment commonly used in industry such as robots and computer numerical control equipment (CNC). Students become valued members of a manufacturing team. Employment opportunities include: field service representative, factory service representative, maintenance technician, automation repair technician, robotics technician or maintenance supervisor. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

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<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tr>
<td>AETC 111</td>
<td>ROBOTICS/AUTOMATED MANUFACTURING</td>
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<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
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<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS</td>
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Spring Semester

| AETC 121      | PROGRAMMABLE LOGIC CONTROLLERS | 3 |
| ELCT 112      | ELECTRICAL CIRCUITS II | 4 |
| ELCT 115      | FABRICATION PROCESS FOR ELECTRONICS | 2 |
| ENGL 161      | COLLEGE COMPOSITION I | 3 |
| MTHM 122      | TECHNICAL MATHEMATICS II | 3 |
|                | Hours | 15 |

Second Year

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<tr>
<td>AETC 211</td>
<td>WORKCELL INTERFACING</td>
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<td>ELCT 233</td>
<td>ELECTRONIC DEVICES</td>
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<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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<td>PHYC 150</td>
<td>GENERAL PHYSICS</td>
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<td>TECN 121</td>
<td>FLUID POWER</td>
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<td></td>
<td>Hours</td>
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</table>

Spring Semester

| AETC 241      | INSTRUMENTATION AND CONTROL | 3 |
| ELCT 211      | ELECTRICAL POWER AND DEVICES | 4 |

Lorain County Community College
Select six credits from the following Arts and Humanities Elective(s) OR Social Sciences Elective(s)

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<thead>
<tr>
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<th>Title</th>
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<tbody>
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<td>ARTS 243G</td>
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<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
<td>3</td>
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</table>

Program Learning Outcomes
1. Communicate effectively in an industrial/engineering/manufacturing environment
2. Think logically and critically
3. Demonstrate knowledge, skills, and use of appropriate tools in electrical and electronics industrial settings
4. Apply math, science, and engineering technology principles to solve problems in electrical and electronics applications
5. Program robots and programmable logic controllers effectively and efficiently
6. Apply voltage conversions isolation techniques, and signal conditioning necessary to communicate among various forms of industrial equipment
7. Recognize the need to maintain currency in the Automation Engineering Technology career field
8. Demonstrate professional and ethical behavior and understand the responsibilities and consequences

Automation Engineering Technology - Systems Specialist Major, Associate of Applied Science

Curriculum Code #6211
Effective May 2020

Integration is a key word in advanced technologies: combining different automated equipment, such as robots, into coordinated systems that complete specific tasks like loading/unloading machines, sorting, inspecting, and assembling parts. The automation engineering technology degree will train students to be a systems specialist. Concentration of abilities for installing and operating robots and other industrial material handling and processing technologies, as well as engineer and program equipment for systems integration. Graduates go on to become a systems design technician, factory sales/service representative, applications engineer, installation supervisor, systems integrator or production supervisor. Lorain County Community College
has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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Spring Semester

| AETC 121            | 3     |
| ENGL 161            | 3     |
| MTHM 122            | 3     |
| TECN 121            | 3     |
| TECN 133            | 3     |
|                    | 15    |

Second Year

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Spring Semester

| AETC 231            | 3     |
| AETC 241            | 3     |
| ELCT 211            | 4     |
| ENGL 162            | 3     |
| TECN 211            | 2     |
| Social Sciences Elective(s) | 3 |
|                    | 18    |

Total Hours 65

1 Indicates that this course has a prerequisite or may be taken concurrently.
2 Indicates that this course requires a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Arts and Humanities Electives

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<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<td>ARTS 244G</td>
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<td>ENGL 251</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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</tr>
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<td>ENGL 269G</td>
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</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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</tr>
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<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>PHLY 165</td>
<td>BIOETHICS</td>
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<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<td>RELG 262G</td>
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<td>THTR 151G</td>
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Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
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<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
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<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
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</tbody>
</table>

Program Contact(s):

Scott Zitek
440-366-7024
rzitek@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
More program information can be found on our website. (https://www.lorainccc.edu/engineering/automation-engineering/associate-of-applied-science-in-automation-engineering-technologies-systems-specialist/)

Program Learning Outcomes

1. Communicate effectively in an industrial/engineering/manufacturing environment
2. Think logically and critically
3. Demonstrate knowledge, skills, and use of appropriate tools in electrical and electronics industrial settings
4. Apply math, science, and engineering technology principles to solve problems in electrical and electronics applications
5. Program robots and programmable logic controllers effectively and efficiently
6. Apply voltage conversions isolation techniques, and signal conditioning necessary to communicate among various forms of industrial equipment
7. Recognize the need to maintain currency in the Automation Engineering Technology career field
8. Demonstrate professional and ethical behavior and understand the responsibilities and consequences

Blockchain Engineering Technology - Blockchain Major, Associate of Applied Science

Curriculum Code #6236

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The Blockchain Engineering Technology program provides a solid foundation in the principles of Blockchain technology, with an emphasis on the development, deployment, maintenance, troubleshooting of Blockchains, distributed applications, and smart contracts. Along with a broad general information technology background, students are given comprehensive information and training in computer programming languages that are pertinent to Blockchain technology and related applications. Typical job titles: Blockchain Developer, Blockchain Architect, Blockchain Smart Contract and Distributed Applications Specialist, Blockchain System Integrator and Applications Specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CMNW 101</td>
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<tr>
<td>BLOC 113</td>
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<td>BLOC 114</td>
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<td>BLOC 120</td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
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<tr>
<td>BLOC 111 BLOCKCHAIN SOLUTIONS USING HYPERLEDGER FABRIC</td>
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<tr>
<td>BLOC 210 DECENTRALIZED APPLICATIONS DEVELOPMENT (DAPPS)</td>
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<tr>
<td>BLOC 220 SMART CONTRACT DEVELOPMENT</td>
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<td>ENGL 161 COLLEGE COMPOSITION I</td>
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<tr>
<td>MTHM 158 QUANTITATIVE REASONING</td>
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Second Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
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<tbody>
<tr>
<td>Arts and Humanities Elective</td>
<td>3</td>
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<tr>
<td>Natural Science Elective 3</td>
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<tr>
<td>CYBR 231 ETHICAL HACKING AND COUNTERMEASURES (ETHICAL HACKING AND COUNTERMEASURES)</td>
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<tr>
<td>BLOC 130 BLOCKCHAIN LAWS, REGULATIONS, AND INDUSTRY STANDARDS</td>
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<tr>
<td>Hours</td>
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<tbody>
<tr>
<td>BLOC 230 ADVANCED SMART CONTRACT DEVELOPMENT</td>
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<tr>
<td>BLOC 247 BLOCKCHAIN CAPSTONE PROJECT AND SPECIAL TOPICS</td>
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</tr>
<tr>
<td>ENGL 164 COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
<td>3</td>
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<tr>
<td>BLOC 248 CERTIFIED BLOCKCHAIN DEVELOPER CERTIFICATION PREPARATION</td>
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<tr>
<td>Hours</td>
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<tr>
<td>Total Hours</td>
<td>60-61</td>
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</table>

1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3. Student may take any Ohio Transfer Module Natural Science course with or without a lab.

Note: Students who have transferred in from an accredited institution recognized by LCCC with a GPA of 2.0 or higher with 12 or more semester credits are exempt from taking SDEV 101.

Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
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<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<td>ARTS 245G</td>
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<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
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<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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</table>
Lorain County Community College

First Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
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<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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</tbody>
</table>

Select one of the following:

- MTHM 121    TECHNICAL MATHEMATICS I | 3
- MTHM 150    THE ART OF MATHEMATICAL THINKING | 4

Mathematics Elective

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<th>Course Title</th>
<th>Hours</th>
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<td>COLLEGE 101</td>
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**Hours** 15-16

**Spring Semester**

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<th>Course Title</th>
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<tbody>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
<td>3</td>
</tr>
<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
<td>4</td>
</tr>
<tr>
<td>CRMJ 117</td>
<td>CRIMINAL LAW</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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**Hours** 14

Second Year

**Fall Semester**

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<td>ACTG 253</td>
<td>FORENSIC ACCOUNTING</td>
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<tr>
<td>CMNW 120</td>
<td>CYBER-FOREN CYBER CRIME THE LAW</td>
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<tr>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 146</td>
<td>CRIMINAL JUSTICE INVESTIGATION</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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**Hours** 17

**Spring Semester**

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<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II</td>
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<tr>
<td>CMNW 247</td>
<td>COMPUTER FORENSICS AND DATA RECOVERY CAPSTONE</td>
<td>4</td>
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Select one of the following:

- Arts and Humanities Elective(s) | 3
- Social Science Elective(s) | 3

**Science Elective with Lab**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Arts and Humanities Elective(s)</td>
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<td></td>
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<tr>
<td>Social Science Elective(s)</td>
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</table>

**Total Hours** 60-61

1 Indicates that this course must be a college-level mathematics course.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3 Indicates that this course requires a prerequisite.

**Arts and Humanities Electives**

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<tbody>
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<tr>
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<td>ART HISTORY II</td>
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<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
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<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
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</table>

Computer Engineering Technology - Business Forensics Investigations Major, Associate of Applied Science

Curriculum Code #6220

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The business forensics investigations major provides graduates with the skills necessary to understand and determine if fraud or certain other white collar crime is present in the workplace. Certification as a fraud examiner or as a certified forensic accountant will require a bachelor's degree. Students are given comprehensive information and training in digital forensics and data recovery tools, evidence collection, proper criminal investigation practices, evidence and report preparation for litigation. This program is designed to meet the needs of new students as well as individuals already employed as criminal justice officers or persons who are preparing themselves for full- or part-time employment in investigating white collar crime. This major brings together three professional areas: accounting, digital forensics and criminal justice. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

1 Communicate Blockchain concepts and applicability in technical and non-technical environments using written, oral, and graphical communication.

2 Apply knowledge, techniques, and Blockchain-relevant programming skills to develop Blockchain solutions, implementation plans, smart contracts and distributed applications, based on best practices, regulations, and industry standards, to secure Blockchain data.

3 Conduct standard Blockchain tests, measurements, and experiments, and analyze and interpret the results.

4 Function effectively as a member of a technical team.

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).
ENGL 251 AMERICAN LITERATURE I 3
ENGL 252 AMERICAN LITERATURE II 3
ENGL 253G INTRODUCTION TO WORLD LITERATURE 3
ENGL 254G INTRODUCTION TO HISPANIC LITERATURE 3
ENGL 255G INTRODUCTION TO FICTION 3
ENGL 257G INTRODUCTION TO POETRY 3
ENGL 259G INTRODUCTION TO DRAMA 3
ENGL 261G MASTERPIECES OF BRITISH LITERATURE I 3
ENGL 262G MASTERPIECES OF BRITISH LITERATURE II 3
ENGL 266G AFRICAN AMERICAN LITERATURE 3
ENGL 269G INTRODUCTION TO SHAKESPEARE 3
HUMS 151G INTRODUCTION TO HUMANITIES 3
HUMS 261G INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE 3
HUMS 262G INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY 3
MUSC 262G MUSIC AS A WORLD PHENOMENON 3
PHLY 165 BIOETHICS 3
PHLY 262G INTRODUCTION TO EASTERN PHILOSOPHY 3
RELG 181G INTRODUCTION TO WORLD RELIGIONS 3
RELG 261 RELIGION IN AMERICA 3
RELG 262G INTRODUCTION TO EASTERN PHILOSOPHY 3
THTR 151G INTRODUCTION TO THEATER 3

Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<td>HSTR 161</td>
<td>UNITED STATES I</td>
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<td>HSTR 162</td>
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<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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<td>HSTR 176</td>
<td>OHIO HISTORY</td>
<td>3</td>
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<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<td>HSTR 267G</td>
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<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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Program Contact(s):

Hikmat Chedid
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hchedid@lorainccc.edu

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More program information can be found on our website. (https://www.lorainccc.edu/it/computer-security/associate-of-applied-science-in-computer-engineering-technology-business-forensics-investigations-major/)

1. Demonstrate knowledge, techniques, skills, and use of the appropriate digital forensics tools
2. Apply math, science, business forensics principles and tools to solve white-collar crimes in business environments
3. Develop a forensics report and communicate effectively business forensics investigation finding using written, oral and graphical communication

Accelerated Pathway
The Accelerated Pathway for the Computer Engineering Technology - Business Forensics Investigations Major, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<tr>
<td>MTHM 150</td>
<td>THE ART OF MATHEMATICAL THINKING</td>
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<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
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<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
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<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I (1st 5 week session)</td>
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<tr>
<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II (2nd 5 week session)</td>
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<tr>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
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<tr>
<td>CMNW 120</td>
<td>CYBER-FOREN CYBER CRIME THE LAW</td>
<td>4</td>
</tr>
<tr>
<td>CRMJ 146</td>
<td>CRIMINAL JUSTICE INVESTIGATION</td>
<td>3</td>
</tr>
<tr>
<td>CMNW 247</td>
<td>COMPUTER FORENSICS AND DATA RECOVERY CAPSTONE</td>
<td>4</td>
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</table>

Select one of the following: 3
Computer Engineering Technology, Computer and Digital Forensics Major, Associate of Applied Science

Curriculum Code #6120

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer engineering technology – computer and digital forensics major provides graduates with the skills necessary to enter careers in computer technology and digital forensics, and in the design, application, installation, operation and maintenance of computer, networks and other digital devices and associated equipment. Along with a general electronics background, students are given comprehensive information and training in digital forensics and data recovery tools and practices through this extensive, hands-on curriculum. Typical job titles: computer/digital forensic examiner, computer systems specialist, cybercrime specialist, installation technician and applications specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
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<tr>
<td>CMNW 120</td>
<td>CYBER-FORENSIC CYBER CRIME THE LAW</td>
<td>4</td>
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<tr>
<td>ELCT 123</td>
<td>INTRODUCTION TO DATA ACQUISITION INSTRUMENTATION 1</td>
<td>2</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>MTHM 121 or MTHM 158</td>
<td>TECHNICAL MATHEMATICS I or QUANTITATIVE REASONING 3</td>
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<td>SDEV 101</td>
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Spring Semester

<table>
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<th>Title</th>
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<tbody>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
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<tr>
<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS 1</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS 3</td>
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Arts and Humanities Elective(s) 3

Hours 14-17

Second Year

Fall Semester

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<tbody>
<tr>
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<tr>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES 3</td>
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<td>CMNW 221</td>
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<td>PHYC 150</td>
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WORLD STATES II 3

Total Hours 16
### Social Science Electives

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<tr>
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<tr>
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<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<td>HSTR 161</td>
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<td>HSTR 162</td>
<td>UNITED STATES II</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).


1. Demonstrate knowledge, techniques, skills, and use of the appropriate digital forensics investigative tools
2. Apply math, science, digital forensics principles and tools to solve crimes
3. Communicate effectively the investigation analysis, procedures, and technical report findings to a variety of stake holders using written, oral, and graphical communication

### Accelerated Pathway

The Accelerated Pathway for the Computer Engineering Technology - Computer and Digital Forensics Major, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CMNW 120</td>
<td>CYBER-FOREN CYBER CRIME THE LAW</td>
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</tr>
<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
<td>4</td>
</tr>
<tr>
<td>ELCT 123</td>
<td>INTRODUCTION TO DATA ACQUISITION INSTRUMENTATION</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</table>

**Total Hours: 59-62**

1 Indicates that this course has a prerequisite or may be taken concurrently.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3 Indicates that this course requires a prerequisite.

### Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
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<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
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<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
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</tr>
<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<tr>
<td>PHLY 165</td>
<td>BIOETHICS</td>
<td>3</td>
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<tr>
<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
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<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<tr>
<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<tr>
<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<tr>
<td>THTR 151G</td>
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### Spring Semester

<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
<td>4</td>
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<tr>
<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS ¹</td>
<td>4</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS ³</td>
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</table>

Arts and Humanities Elective            3  
Social Science Elective                3  

**Hours**  17

### Summer Semester

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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<tr>
<td>CMNW 221</td>
<td>PROGRAMMING IN C &amp; C++ FOR ENGINEERING TECHNOLOGY APPLICATIONS ³</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I (1st 5 Week Session)</td>
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<tr>
<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II (2nd 5 week session) ³</td>
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**Hours**  12

### Second Year

#### Fall Semester

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<th>Hours</th>
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<tbody>
<tr>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES ³</td>
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<tr>
<td>CMNW 224</td>
<td>CELL PHONE AND MOBILE DEVICE FORENSICS ³</td>
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<tr>
<td>CMNW 247</td>
<td>COMPUTER FORENSICS AND DATA RECOVERY CAPSTONE ³</td>
<td>4</td>
</tr>
<tr>
<td>PHYC 150</td>
<td>GENERAL PHYSICS I ³</td>
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</tr>
</tbody>
</table>

**Hours**  16

**Total Hours**  63

¹ Indicates that this course has a prerequisite or may be taken concurrently.
² A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
³ Indicates that this course requires a prerequisite.

### Arts and Humanities Electives

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
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<td>ARTS 243G</td>
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<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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</tr>
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<td>ARTS 245G</td>
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<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>AFRICAN AMERICAN LITERATURE</td>
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<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<tr>
<td>MUSC 262G</td>
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<td>RELG 261</td>
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<td>RELG 262G</td>
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### Social Science Electives

<table>
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<tr>
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<tbody>
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<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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<td>HSTR 176G</td>
<td>OHIO HISTORY</td>
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<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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</tbody>
</table>

### Computer Engineering Technology, Computer Applications Integration Specialist Major, Associate of Applied Science

Curriculum Code #6222

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer engineering technology – computer applications integration specialist major provides graduates with the skills necessary to design and implement software and hardware interfaces and networking of equipment with computers, computing devices and communication systems for a variety of industrial sectors including health care, law enforcement, manufacturing, logistics/transportation and other sectors. Graduates will be proficient in the design, application, installation, operations and maintenance of computer, networks and other digital devices and associated equipment. Along with a general electronics background, students are given comprehensive information and training in installation, networking and interfacing of industry-specific equipment for the purpose of optimizing communication. Through proper selection of the two industry-specific directed study and capstone courses, students will specialize in the equipment found in their chosen specific industry sector, providing them the experience necessary...
to enter the job market with confidence. This program articulates to The University of Akron toward a three-plus-one bachelor's degree in computing applications specialist through Lorain County Community College's University Partnership. The associate and bachelor's degree combination can be completed in three years. Graduates may easily specialize in multiple industry sectors by taking only two sector-specific courses anytime during their career.

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
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<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
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<tr>
<td></td>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
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<td></td>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td></td>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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### Spring Semester

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<thead>
<tr>
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<tbody>
<tr>
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<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<tr>
<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS</td>
<td>4</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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<td><strong>Total Hours</strong></td>
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### Second Year

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>Fall</td>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
<td>4</td>
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<td></td>
<td>CMNW 181</td>
<td>INDUSTRY SPECIFIC DIRECTED STUDIES</td>
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<td>CMNW 221</td>
<td>PROGRAMMING IN C &amp; C++ FOR ENGINEERING TECHNOLOGY APPLICATIONS</td>
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<td>PHYC 150</td>
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### Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
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<td>CMNW 230</td>
<td>DATA COMMUNICATIONS</td>
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<td>COMPUTER FORENSICS AND DATA RECOVERY CAPSTONE</td>
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<td></td>
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<td><strong>62</strong></td>
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</tbody>
</table>

1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3. Student will select industry-specific course; must have division approval.

### Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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</table>
Accelerated Pathway

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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>Arts and Humanities Elective</td>
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<tr>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
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<td>CMNW 181</td>
<td>INDUSTRY SPECIFIC DIRECTED STUDIES</td>
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<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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<td><strong>Summer Semester</strong></td>
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<tr>
<td>CMNW 221</td>
<td>PROGRAMMING IN C &amp; C++ FOR ENGINEERING TECHNOLOGY APPLICATIONS</td>
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<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I (1st 5 week Session)</td>
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<tr>
<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II (2nd 5 week session)</td>
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<td><strong>Fall Semester</strong></td>
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<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
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<td>CMNW 230</td>
<td>DATA COMMUNICATIONS</td>
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<tr>
<td>CMNW 247</td>
<td>COMPUTER FORENSICS AND DATA RECOVERY CAPSTONE</td>
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<tr>
<td>PHYC 150</td>
<td>GENERAL PHYSICS I</td>
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<tr>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>Total Hours</strong></td>
<td><strong>62</strong></td>
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</table>

1. Indicates that this course requires a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3. Student will select industry-specific course; must have division approval.

Arts and Humanities Electives

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<tr>
<th>Code</th>
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<td>ARTS 243G</td>
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<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
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<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>PHLY 165</td>
<td>BIOETHICS</td>
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<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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Construction Technology - Construction Engineering Major, Associate of Applied Science

Curriculum Code #6170

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The construction engineering major is designed to provide students with the knowledge, cognitive skills and hands-on experience necessary for the competent performance in an entry-level construction position. Employment opportunities exist in a variety of residential and commercial construction companies. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.
### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Title</th>
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<tbody>
<tr>
<td>TECN 111 TECHNICAL PROBLEM SOLVING</td>
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<tr>
<td>CNST 121 CONSTRUCTION DOCUMENT READING</td>
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<tr>
<td>CNST 122 INTRODUCTION TO CARPENTRY</td>
<td>4</td>
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<tr>
<td>MTHM 121 TECHNICAL MATHEMATICS I</td>
<td>4</td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Title</th>
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<tr>
<td>CNST 120 INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING</td>
<td>2</td>
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<td>CNST 123 INTRODUCTION TO ELECTRICAL WIRING</td>
<td>2</td>
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<tr>
<td>EMCH 111 STATICS FOR TECHNOLOGY</td>
<td>3</td>
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<tr>
<td>EMCH 112 ENGINEERING MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
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<tr>
<td>MTHM 122 TECHNICAL MATHEMATICS II</td>
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#### Hours

15

### Second Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CADD 111 INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
<td>2</td>
</tr>
<tr>
<td>CNST 124 INTRODUCTION TO PLUMBING</td>
<td>2</td>
</tr>
<tr>
<td>CNST 201 SURVEYING</td>
<td>3</td>
</tr>
<tr>
<td>CNST 205 CONSTRUCTION ESTIMATING</td>
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<td>EMCH 211 STRENGTH OF MATERIALS</td>
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#### Hours

17

#### Spring Semester

<table>
<thead>
<tr>
<th>Title</th>
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<tbody>
<tr>
<td>ARTS 254 HISTORY OF AMERICAN ARCHITECTURE</td>
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<tr>
<td>ENGL 164 COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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<tr>
<td>PHYC 150 GENERAL PHYSICS I</td>
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<td>Construction Elective</td>
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#### Hours

14

Total Hours

62

---

1 Indicates that this course requires a prerequisite.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3 Indicates that this course has a prerequisite or may be taken concurrently.

4 Indicates that a student may substitute Work-Based Learning (CNST 287, CNST 288, and/or CNST 289) for one or more credit hours for this elective. Please make an appointment with your advisor for assistance.

### Social Science Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
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</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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</table>

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For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/construction/associate-of-applied-science-in-construction-technology-construction-engineering/)

**Program Learning Outcomes**

1. Communicate effectively in a construction environment.

2. Apply math, science, and engineering, technology principles to solve problems in the field of construction.

3. Demonstrate professional and ethical behavior.

4. Perform construction tasks in a safe manner.

5. Demonstrate a sound understanding of the concepts of construction engineering technology and the technical skills needed for the successful employment in the field of construction.

6. Recognize the need to maintain currency in the construction design field.

7. Recognize problems in construction applications and develop appropriate solutions.

8. Use creativity in construction design.

---

**Construction Technology - Construction Management Major, Associate of Applied Science**

Curriculum Code #6171

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The construction management major is designed to provide students with the knowledge, cognitive skills and hands-on skills necessary for the competent performance in an entry-level construction management position. Employment opportunities exist in a variety of residential and commercial construction companies. Lorain County Community College has articulation agreements with colleges and universities including
First Year
Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>TECN 111</td>
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<td>CNST 121</td>
<td>CONSTRUCTION DOCUMENT READING</td>
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<tr>
<td>CNST 122</td>
<td>INTRODUCTION TO CARPENTRY</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<td>SDEV 101</td>
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|                   | Hours | 18   |

Spring Semester

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<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
<td>2</td>
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<tr>
<td>CNST 120</td>
<td>INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING</td>
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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS 1</td>
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<tr>
<td>MTHM 122</td>
<td>TECHNICAL MATHEMATICS II 1</td>
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|                   | Hours | 14   |

Second Year
Fall Semester

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<td>PRINCIPLES OF MANAGEMENT</td>
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<tr>
<td>CADD 215</td>
<td>ARCHITECTURAL DRAFTING USING CAD 1</td>
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<tr>
<td>CNST 124</td>
<td>INTRODUCTION TO PLUMBING</td>
<td>2</td>
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<td>CNST 201</td>
<td>SURVEYING 1</td>
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<td>CNST 205</td>
<td>CONSTRUCTION ESTIMATING 1</td>
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<tr>
<td>CNST 210</td>
<td>SAFETY IN CONSTRUCTION</td>
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Spring Semester

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<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<td>CNST 123</td>
<td>INTRODUCTION TO ELECTRICAL WIRING</td>
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<td>PHYC 150</td>
<td>GENERAL PHYSICS I 1</td>
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<td>Construction Elective 4</td>
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<tr>
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|                   | Hours | 14   |

Social Science Elective

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<tr>
<td>HSTR 161</td>
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<td>HSTR 162</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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<td>PSYH 151</td>
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<tr>
<td>SOCY 151G</td>
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Program Contact(s):
Laura Cosgriff
440-366-7022
lcosgriff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/construction/associate-of-applied-science-in-construction-technology-construction-management/)

Program Learning Outcomes

1. Communicate effectively in a construction environment.
2. Apply math, science, and engineering, technology principles to solve problems in the field of construction.
3. Demonstrate professional and ethical behavior.
4. Manage a construction site so that it operates in a safe manor.
5. Demonstrate a sound understanding of the concepts of construction engineering technology and the technical skills needed for the successful employment in the field of construction management.
6. Recognize the need to maintain currency in the field of construction management.
7. Recognize problems in construction applications and develop appropriate solutions.
8. Participate effectively in projects as innovative solution providers through planning, monitoring and managing construction in their chosen sector of industry.

Cyber and Information Security - Associate of Applied Science

Curriculum Code #6470

Effective May 2020

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course has a prerequisite or may be taken concurrently.
4 Indicates that a student may substitute Work-Based Learning (CNST 287, CNST 288, and/or CNST 289) for one or more credit hours for this elective. Please make an appointment with your advisor for assistance.
The Associate of Applied Science degree program in Cyber and Information Security prepares students for employment in a variety of careers in Cyber Security. Examples of positions can include such titles as network security specialist, information security technician, and cybersecurity specialist. In addition to basic computer and networking skills, this degree provides a solid foundation in information assurance, cybercrime investigation, ethical hacking, digital forensics, network forensics, cyber operations, Internet of Things, data collection, software exploitation, analysis of malicious code, reverse engineering, data integrity, risk assessment and mitigation techniques. Lab work and assignments will present real world cyber security scenarios encountered in the workplace. Industry standard software will be used for digital forensics studies. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
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<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
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<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES 1,2</td>
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<td>or A+ CERTIFICATION PREP II</td>
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<td>MTHM 158</td>
<td>QUANTITATIVE REASONING 3</td>
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<tr>
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<td>CMNW 120</td>
<td>CYBER-FOREN CYBER CRIME THE LAW</td>
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Second Year

<table>
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<th>Semester</th>
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<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>Fall</td>
<td>BIOG 164</td>
<td>EXPLORATIONS IN FIELD SCIENCE</td>
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<td></td>
<td>CISS 165</td>
<td>CISCO CCNA V7 INTRODUCTION TO NETWORKING</td>
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<td></td>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
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<td></td>
<td>CYBR 220</td>
<td>PYTHON SCRIPTING AND PROGRAM CONCEPTS</td>
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<td></td>
<td>CYBR 231</td>
<td>ETHICAL HACKING AND COUNTERMEASURES</td>
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<tr>
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<td>CISS 251</td>
<td>CYBER DEFENSE METHODS 1</td>
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<td>CISS 252</td>
<td>IT SECURITY CONCEPTS</td>
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<td>CYBR 110</td>
<td>FUNDAMENTALS OF INTERNET OF THINGS (IOT)</td>
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CYBR 245

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<tr>
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<td>CYBR 245</td>
<td>CYBERSECURITY STANDARDS, REGULATIONS AND COMPLIANCE</td>
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1. Indicates that this course requires a college level prerequisite.
2. Students pursuing the Cyber and Information Security degree program have divisional approval to take CISS 125 without having completed CISS 121.
3. MTHM 158 or PHL Y 171 is preferred. An Ohio Transfer Module mathematics course will also satisfy the requirement but any college level math course will be accepted.
4. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

Program Contact(s):

Lawrence Atkinson
440-366-7050
latkinso@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/associate-applied-science-cyber-information-security/)

1. Describe methods for investigating both domestic and international cybersecurity incidents.
2. Develop short and long-term organizational cybersecurity strategies and policies.
3. Implement cyber security goals, metrics, and safeguards consistent with industry best practices.
4. Conduct security assessments to identify vulnerabilities in critical infrastructure systems.
5. Evaluate a variety of cybersecurity tools.

Digital Fabrication Technologies: Digital Fabrication Major, Associate of Applied Science

Curriculum Code #6167

Effective May 2020

The Digital Fabrication Major is structured to provide students with the knowledge and skills necessary to work as an entry-level technician. The curriculum provides hands-on experience with both subtractive and additive digital fabrication tools for tasks such as prototyping, proof-of-concept exploration, and rapid tooling. Students will apply 2D, 3D, and electronics design to create integrated electro-mechanical systems. Typical job titles: Additive Manufacturing Technician, Design and Prototype Engineering Technician, Mechatronics Technician, and Digital Fabrication Specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.
agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester

<table>
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<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
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<td>CAMM 111</td>
<td>INTRO TO COMPUTER NUMERICAL CONTROL</td>
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<tr>
<td>DFAB 111</td>
<td>INTRODUCTION TO PERSONAL FABRICATION</td>
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<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
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<td>TECN 131</td>
<td>MANUFACTURING PROCESSES I</td>
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<td>DFAB 121</td>
<td>DIGITAL FABRICATION</td>
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<td>ELCT 115</td>
<td>FABRICATION PROCESS FOR ELECTRONICS</td>
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Second Year

Fall Semester

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<td>ADDITIVE MANUFACTURING AND 3D SCANNING</td>
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<td>DFAB 221</td>
<td>DIGITAL FABRICATION OF ELECTROMECHANICAL SYSTEMS</td>
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<td>ELCT 221</td>
<td>MICROCONTROLLERS</td>
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<td>COLLEGE COMPOSITION I</td>
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Spring Semester

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<tr>
<td>CAMM 235</td>
<td>CAD-CAM GRAPHICS</td>
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<td>DFAB 231</td>
<td>DIGITAL FABRICATION CAPSTONE</td>
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<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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<td>PSYH 151 or SOCY 151G</td>
<td>INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY</td>
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Arts and Humanities Elective

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<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<td>ARTS 245G</td>
<td>WORLD ART</td>
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<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>MASTERPIECES OF BRITISH LITERATURE I</td>
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<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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<td>PHLY 165</td>
<td>BIOETHICS</td>
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<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
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</table>

Program Contact(s):

Scott Zitek
440-366-7024
rzitek@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/associate-applied-science-digital-fabrication-major/)

Electric Power Utility Technology - Overhead Line Technology, Associate of Applied Science

Curriculum Code #6320
The electric power utility technology program is structured to provide a student with an application-oriented electrical background, extensive hands-on laboratory experience, and the use of standard and specialized test equipment. The relevant knowledge, the skills that the electric power utility industry needs today and the competencies that are integrated into the curriculum are intended to prepare the graduate to be job-ready in the electric power utility workplace at the end of two years, and able to enter into a rewarding career in that field. Students are selected for this program by First Energy after passing a technical evaluation, LCCC placement testing, a physical capabilities assessment and a climbing course. Once selected, students will have tuition, books and protective clothing provided by First Energy. Graduates are required to work for First Energy for at least three years. The entry job title is line worker technician. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

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<tr>
<th>Semester</th>
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<th>Course Title</th>
<th>Hours</th>
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<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
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<tr>
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<td>ELUT 121</td>
<td>OVERHEAD LINE TECHNOLOGY I</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<td>MTHM 121</td>
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<td>ELCT 112</td>
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<td>ELUT 122</td>
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<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
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<td>Summer</td>
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<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>ELCT 228</td>
<td>SWITCHGEAR, TRANSFORMERS &amp; CONTROLS</td>
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<td>ELUT 221</td>
<td>OVERHEAD LINE TECHNOLOGY III</td>
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<td>PHYC 150</td>
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<td>BADM 251</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
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<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
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<td></td>
<td>ELCT 229</td>
<td>TRANSMISSION AND DISTRIBUTION OF ELECTRICAL POWER</td>
<td>3</td>
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</table>

Program Contact(s):

David Astorino
440-366-7215
dastorin@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/electric-power-utility/associate-of-applied-science-in-electric-power-utility-technology-overhead-line-technology/)

Program Learning Outcomes

1. Math, science, and engineering technology principles to solve problems in the maintenance and operations of utility power systems
2. Demonstrate knowledge, skills, and use of appropriate tools in power utility substation settings
3. Complete substation operational maintenance exercises effectively
4. Write technical reports
5. Work productively as an individual and as a member in problem solving team in an engineering environment
6. Deploy professional and ethical behavior with the understanding of social, cultural, and political issues
7. Effectively communicate technical ideas, problem solving procedures, decision making with others

Electric Power Utility Technology - Substation Technology Major, Associate of Applied Science

Curriculum Code #6321

(Not offered 2020-2021)
technical evaluation, LCCC placement testing, a background check and a physical capabilities assessment. Once selected, students will have tuition, fees, books and protective clothing provided by First Energy. Graduates are required to work for First Energy for at least three years. The entry job title is substation technician. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

### First Year

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<tr>
<th>Semester</th>
<th>Courses</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td>ELCT 111 ELECTRICAL CIRCUITS I (^1)</td>
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<td>ELUT 123 SUBSTATION TECHNOLOGY I (^1)</td>
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<td>ENGL 161 COLLEGE COMPOSITION I</td>
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<td>MTHM 121 TECHNICAL MATHEMATICS I</td>
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<td>SDEV 101 COLLEGE 101</td>
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<tr>
<td><strong>Spring Semester</strong></td>
<td>ELCT 112 ELECTRICAL CIRCUITS II (^1)</td>
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<td>ELUT 124 SUBSTATION TECHNOLOGY II (^1)</td>
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<td></td>
<td>ENGL 164 COLLEGE COMPOSITION I WITH TECHNICAL TOPICS (^1)</td>
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<td>TECN 111 TECHNICAL PROBLEM SOLVING</td>
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<td><strong>Summer Semester</strong></td>
<td>ELCT 287 WORK-BASED LEARNING I - ELCT (^3)</td>
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<td><strong>Second Year</strong></td>
<td>CMMC 151 ORAL COMMUNICATION</td>
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<td>ELCT 228 SWITCHGEAR, TRANSFORMERS &amp; CONTROLS (^1)</td>
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<td>ELUT 224 SUBSTATION TECHNOLOGY III (^1)</td>
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<td>PHYC 150 GENERAL PHYSICS I</td>
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<td>BADM 251 PRINCIPLES OF MANAGEMENT</td>
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<td>ECNM 151 PRINCIPLES OF MACROECONOMICS</td>
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<td>ELCT 229 TRANSMISSION AND DISTRIBUTION OF ELECTRICAL POWER (^1)</td>
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\(^1\) Indicates that this course requires a prerequisite

\(^2\) A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

\(^3\) This course offers an opportunity for experiential learning.

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/electric-power-utility/associate-of-applied-science-in-electric-power-utility-utility-technology-substation-technology/)

### Program Learning Outcomes

1. Math, science, and engineering technology principles to solve problems in the maintenance and operations of utility power systems
2. Demonstrate knowledge, skills, and use of appropriate tools in power utility substation settings
3. Complete substation operational maintenance exercises effectively
4. Write technical reports
5. Work productively as an individual and as a member in problem solving team in an engineering environment
6. Deploy professional and ethical behavior with the understanding of social, cultural, and political issues
7. Effectively communicate technical ideas, problem solving procedures, decision making with others

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### Electronic Engineering Technology - Applied Electronics, Associate of Applied Science

Curriculum Code #6310

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The applied electronics program is structured to provide a student with an application-oriented, electronic/electrical background, extensive hands-on laboratory experience, and the use of standard and specialized test equipment. The relevant knowledge, the skills that industry needs today, and the competencies that are integrated into the curriculum are intended to prepare the graduate to be job-ready in the high-tech workplace at the end of two years, and enter into a rewarding career in one of the electronics fields. Typical job titles include: engineering assistant, electronic test technician, instrumentation technician, field service representative, communication specialist and sales engineer. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership. The applied electronics major is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org (http://www.abet.org/).

### First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Hours</th>
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</thead>
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<tr>
<td><strong>Fall Semester</strong></td>
<td>ELCT 111 ELECTRICAL CIRCUITS I</td>
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<td>ELCT 115 FABRICATION PROCESS FOR ELECTRONICS</td>
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<td>ENGL 161 COLLEGE COMPOSITION I</td>
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<td>MTHM 121 TECHNICAL MATHEMATICS I (^1)</td>
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<td>SDEV 101 COLLEGE 101</td>
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---

Program Contact(s):

David Astorino
440-366-7215
dastorin@lorainccc.edu
TECN 111  TECHNICAL PROBLEM SOLVING  3

Spring Semester

ELCT 112  ELECTRICAL CIRCUITS II  1  4
ELCT 121  DIGITAL ELECTRONICS  1  4
ENGL 164  COLLEGE COMPOSITION II WITH TECHNICAL TOPICS  1  3
MTHM 122  TECHNICAL MATHEMATICS II  1  3

Hours  16

Second Year

Fall Semester

ELCT 221  MICROCONTROLLERS  1  4
ELCT 233  ELECTRONIC DEVICES II  1  4
PHYC 150  GENERAL PHYSICS I  1  4

Arts and Humanities Elective  3

Hours  15

Spring Semester

ELCT 211  ELECTRICAL POWER AND DEVICES  3  4
ELCT 241  COMMUNICATIONS ELECTRONICS  1  4

Social Science Elective  3

Hours  15

Total Hours  60

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course has a prerequisite or may be taken concurrently.

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
3. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results
4. An ability to function effectively as a member of a technical team.
5. An ability to function effectively as a member of a technical team.
6. The application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building.

Arts and Humanities Electives

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>ENGL 269G</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>RELIGION IN AMERICA</td>
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Social Science Electives

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Program Contact(s):

David Astorino
440-366-7215
dastorin@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/electronic-engineering/associate-of-applied-science-in-electronic-engineering-technology-applied-electronics/)
testing, operation, and maintenance of electrical/electronic(s) systems.

7. The application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.

**Electronics Engineering Technology - Computer Maintenance and Networking, Associate of Applied Science**

Curriculum Code #6312

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer maintenance and networking program provides a solid foundation in the principles of electronics, with an emphasis on the installation, maintenance and repair of computer systems, networks and associated equipment. Along with a broad, general electronics background, students are given comprehensive information and training in computer system structure, peripheral device operation, installation procedures and troubleshooting practices through this extensive, hands-on curriculum. Typical job titles: computer systems specialist, computer maintenance technician, field service representative, installation technician, field engineer, systems integrator and applications specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

**First Year**

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tr>
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<td>CMNW 141  COMPUTER DIAGNOSTIC AND REPAIR</td>
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<tr>
<td>ELCT 111  ELECTRICAL CIRCUITS I</td>
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<tr>
<td>ENGL 161  COLLEGE COMPOSITION I</td>
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<tr>
<td>MTHM 121  TECHNICAL MATHEMATICS I</td>
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<td>ENGL 164  COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
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**Second Year**

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<td>CMNW 145  NETWORK INSTALLATION/DIAGNOSTICS</td>
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<td>CMNW 221  PROGRAMMING IN C &amp; C++ FOR ENGINEERING TECHNOLOGY APPLICATIONS</td>
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<td>ELCT 233  ELECTRONIC DEVICES I</td>
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1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

**Arts and Humanities Electives**

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**Social Science Electives**

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Program Contact(s):

Hikmat Chedid
440-366-7017
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Program Learning Outcomes

1. Demonstrate an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.

2. Demonstrate an ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline.

3. Demonstrate an ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

4. Demonstrate an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results.

5. Demonstrate an ability to function effectively as a member of a technical team.

6. Demonstrate the application of electric circuits, computer programming, associated software applications, analog and digital electronics, microcomputers, operating systems, local area networks, and engineering standards to the building, testing, operation, and maintenance of computer systems and associated software systems.

7. Demonstrate the application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of computer systems and associated software systems.

Accelerated Pathway

The Accelerated Pathway for the Electronics Engineering Technology - Computer Maintenance and Networking, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online course offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<td>ELCT 121</td>
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| Total Hours                | 61  |

1 Indicates that this course requires a prerequisite.
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Arts and Humanities Electives

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Industrial Safety Technology/Technician, Associate of Technical Studies

Curriculum Code #6720

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The Industrial Safety Technology/Technician prepares individuals to assist engineers and other professionals in implementing and enforcing industrial safety standards. The graduate will be prepared for a wide range of positions in the areas of Occupational and Industrial safety. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

First Year

Fall Semester

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Spring Semester

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<tr>
<td>CHMY 171</td>
<td>GENERAL CHEMISTRY I</td>
<td>5</td>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<tr>
<td>SAFE 130</td>
<td>RESPIRATOR PROTECTION</td>
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<tr>
<td>SAFE 140</td>
<td>OSHA STANDARDS FOR GENERAL INDUSTRY</td>
<td>2</td>
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<tr>
<td>SAFE 220</td>
<td>OSHA ELECTRICAL STANDARDS</td>
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<tr>
<td>SAFE 240</td>
<td>LOCKOUT TAGOUT - CONTROLLING HAZARDOUS ENERGY</td>
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Summer Semester

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>SAFE 287</td>
<td>WORK BASED LEARNING I - SAFE</td>
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Second Year

Fall Semester

<table>
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<th>Code</th>
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<tbody>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
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<tr>
<td>PSYH 151 or SOCY 151G</td>
<td>INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SAFE 205</td>
<td>HAZARDOUS MATERIALS</td>
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<tr>
<td>SAFE 210</td>
<td>OSHA ACCIDENT INVESTIGATION</td>
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<tr>
<td>SAFE 215</td>
<td>FALL ARREST SYSTEMS</td>
<td>2</td>
</tr>
<tr>
<td>Arts and Humanities Elective</td>
<td>to be selected from the Ohio Transfer Module.</td>
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Spring Semester

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
<td>3</td>
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<tr>
<td>SAFE 110</td>
<td>COMBUSTIBLE DUSTS</td>
<td>1</td>
</tr>
<tr>
<td>SAFE 118</td>
<td>GENERAL SAFETY MANAGEMENT II</td>
<td>2</td>
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<td>SAFE 135</td>
<td>HAZWOPER</td>
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<tr>
<td>SAFE 225</td>
<td>OSHA GUIDE TO INDUSTRIAL HYGIENE</td>
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<tr>
<td>SAFE 230</td>
<td>PRINCIPLES OF ERGONOMICS</td>
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<tr>
<td>SAFE 245</td>
<td>PERMIT REQUIRED CONFINED SPACE</td>
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</table>

Total Hours 63

1 Indicates that this course requires a prerequisite.
2 Arts and Humanities electives to be selected from the Ohio Transfer Module.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

Program Contact(s):

Glenn Vasiloff
440-366-7009
gvasilof@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
More program information can be found on our website: (https://www.lorainccc.edu/engineering/industrial-safety/)

1. Demonstrate understanding of industrial safety standards
2. Recognize industrial safety violations and develop appropriate solutions
3. Communicate industrial safety standards, applications, techniques and tools

**Manufacturing Engineering Technology - Computer Aided Machining Major, Associate of Applied Science**

Curriculum Code #6213

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer aided machining major prepares the student with the knowledge, skills and hands-on experience needed to program, set-up and operate Computer Numerical Controlled (CNC) machines, specifically the machining and turning center. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
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<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
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<tr>
<td>TECN 131</td>
<td>MANUFACTURING PROCESSES I</td>
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#### Spring Semester

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<thead>
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<tbody>
<tr>
<td>CAMM 111</td>
<td>INTRO TO COMPUTER NUMERICAL CONTROL</td>
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<tr>
<td>EMCH 112</td>
<td>ENGINEERING MATERIALS</td>
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</table>
| ENGL 164  | COLLEGE COMPOSITION II WITH TECHNICAL TOPICS | 3 | 2
| MTHM 122  | TECHNICAL MATHEMATICS II                   | 3     |
| QLTY 122  | BASIC QUALITY TOOLS AND APPLICATIONS       | 3     |
| TECN 132  | MANUFACTURING PROCESSES II                 | 3     |
|           | **Total Hours**                            | **17**|

### Second Year

#### Fall Semester

<table>
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<td>GENERAL PHYSICS I</td>
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### Spring Semester

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<th>Title</th>
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<tr>
<td>CAMM 225</td>
<td>ADVANCED CNC LATHES</td>
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<td>CAMM 235</td>
<td>CAD-CAM GRAPHICS</td>
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<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
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<tr>
<td>TECN 245</td>
<td>GEOMETRIC DIMENSIONING AND TOLERANCING</td>
<td>2</td>
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<td></td>
<td><strong>Total Hours</strong></td>
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1. Indicates that this course has a prerequisite or may be taken concurrently.
2. Indicates that this course requires a prerequisite.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
4. Indicates that a student may substitute work-based learning (CAMM 287, CAMM 288, and/or CAMM 289) for the equivalent number of credit hours for this course.

### Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<tr>
<td>ENGL 253G</td>
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<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
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<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<tr>
<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
<td>3</td>
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<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 165</td>
<td>BIOETHICS</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
</tr>
<tr>
<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
<td>3</td>
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</table>
Manufacturing Engineering Technology - Industrial Electrical Technician, Associate of Applied Science

Curriculum Code #6215

Effective May 2020

Division of Engineering, Business and Information Technologies
(p. 68)

The industrial electrical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level electrical maintenance technician. The graduate will repair, test, adjust or install electronic equipment. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
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<tr>
<td>ELCT 111 ELECTRICAL CIRCUITS I</td>
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<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>ENGR 120 INTRODUCTION TO ENGINEERING</td>
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<tr>
<td>MTHM 121 TECHNICAL MATHEMATICS I</td>
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<tr>
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<td>3</td>
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<td>CMMC 151 ORAL COMMUNICATION</td>
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<tr>
<td>ELCT 112 ELECTRICAL CIRCUITS II</td>
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<td>ELCT 121 DIGITAL ELECTRONICS</td>
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<td>TECN 133 MECHANICAL SYSTEMS</td>
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<tr>
<td>ELCT 287 WORK-BASED LEARNING I - ELCT</td>
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Second Year

<table>
<thead>
<tr>
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<th>Hours</th>
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<tbody>
<tr>
<td>AETC 223 PROGRAMMABLE LOGIC CONTROLLERS II</td>
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<tr>
<td>AETC 241 INSTRUMENTATION AND CONTROL</td>
<td>3</td>
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<td>ELCT 211 ELECTRICAL POWER AND DEVICES</td>
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<tr>
<td>PHYC 150 GENERAL PHYSICS I</td>
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<tr>
<td>ELCT 223 ELECTRICAL BLUEPRINT READING</td>
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<td>ELCT 224 INDUSTRIAL ELECTRONICS</td>
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<td>QLTY 236 RELIABILITY CENTERED MAINTENANCE</td>
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<td>Arts and Humanities Elective</td>
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</table>
Social Sciences Elective 3

Hours 15

Total Hours 62

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2 Indicates that this course requires a prerequisite.
3 This course offers an opportunity for experiential learning.
4 Indicates that this course has a prerequisite or may be taken concurrently.

Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
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</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
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<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
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<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
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<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<tr>
<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
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<td>ENGL 262G</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>PHL Y 165</td>
<td>BIOETHICS</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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Social Science Electives

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<tr>
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<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
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HSTR 162  UNITED STATES II 3
HSTR 171G  THE WORLD SINCE 1900 3
HSTR 252G  WOMEN IN WORLD HISTORY 3
HSTR 267G  AFRICAN AMERICAN HERITAGE 3
PLSC 156  AMERICAN NATIONAL GOVERNMENT 3
PSYH 151  INTRODUCTION TO PSYCHOLOGY 3
SOCY 151G  INTRODUCTION TO SOCIOLOGY 3

Program Contact(s):
David Astorino
440-366-7215
dastorin@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/associate-of-applied-science-in-manufacturing-engineering-technology-industrial-electrical-technician/)

1. Communicate effectively in an industrial manufacturing environment.
2. Apply math, science, and engineering, technology principles to solve problems in an industrial manufacturing facility.
3. Demonstrate professional and ethical behavior.
4. Perform industrial electrical manufacturing tasks in a safe manner.
5. Function effectively when performing the tasks of an industrial electrical technician by applying relevant technical knowledge and skills in the industrial manufacturing setting.
6. Recognize the need to maintain currency with equipment, tools and devices used by the industrial electrical technician in an industrial manufacturing environment.
7. Complete industrial electrical maintenance exercises effectively.
First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ¹</td>
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<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
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<td>CYBR 110</td>
<td>FUNDAMENTALS OF INTERNET OF THINGS (IOT)</td>
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<tr>
<td>IIOT 120</td>
<td>PROGRAMMING ESSENTIALS</td>
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Select one of the following:

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
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<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
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**Total Hours: 17**

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
<td>3</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>IIOT 130</td>
<td>IIOT SENSORS</td>
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<tr>
<td>IIOT 140</td>
<td>IIOT PRIVACY, SECURITY, AND CLOUD SERVICES</td>
<td>4</td>
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</table>

**Total Hours: 14**

Second Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AETC 223</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS II</td>
<td>3</td>
</tr>
<tr>
<td>CYBR 231</td>
<td>ETHICAL HACKING AND COUNTERMEASURES</td>
<td>4</td>
</tr>
<tr>
<td>IIOT 220</td>
<td>PROGRAMMING EMBEDDED SYSTEMS</td>
<td>4</td>
</tr>
<tr>
<td>PSSC 153</td>
<td>PHYSICAL SCIENCE</td>
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**Total Hours: 15**

Spring Semester

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
<td>3</td>
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<tr>
<td>CMNW 230</td>
<td>DATA COMMUNICATIONS</td>
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<tr>
<td>IIOT 247</td>
<td>CAPSTONE PROJECTS AND SPECIAL TOPICS</td>
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**Arts and Humanities Elective**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
</table>

**Total Hours: 15**

**Total Hours: 61**

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course has a prerequisite or may be taken concurrently.

3. Indicates that this course requires a prerequisite.

4. This course offers an opportunity for experiential learning.

**Arts and Humanities Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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**Manufacturing Engineering Technology - Industrial Mechanical Technician, Associate of Applied Science**

Curriculum Code #6216
Manufacturing Engineering Technology - Industrial Mechanical Technician, Associate of Applied Science

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial mechanical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level mechanical maintenance technician. The graduate will be able to perform journeyman level work in installing, repairing, maintaining, and testing of mechanical systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

### First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Code/Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
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<tr>
<td>ELCT 124</td>
<td>INDUSTRIAL ELECTRICITY</td>
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<tr>
<td>ENGR 120</td>
<td>INTRODUCTION TO ENGINEERING</td>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td>4</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>WTTEC 108</td>
<td>OXY-FUEL WELDING AND CUTTING</td>
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<td>WTTEC 111</td>
<td>WELDING SPECIFICATIONS/PRINT READING</td>
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<tr>
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<th>Code/Title</th>
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<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
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<tr>
<td>TECN 121</td>
<td>FLUID POWER</td>
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<tr>
<td>TECN 131</td>
<td>MANUFACTURING PROCESSES I</td>
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<tr>
<td>TECN 133</td>
<td>MECHANICAL SYSTEMS</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<tr>
<td>QLTY 122</td>
<td>BASIC QUALITY TOOLS AND APPLICATIONS</td>
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<td>PHYC 150</td>
<td>GENERAL PHYSICS I</td>
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<td>WTTEC 116</td>
<td>BASIC SHIELDED METAL ARC WELDING</td>
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<tr>
<td>EMCH 112</td>
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<td>RELIABILITY CENTERED MAINTENANCE</td>
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<td>TECN 220</td>
<td>INDUSTRIAL PIPING &amp; TUBING</td>
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<tr>
<td>WTTEC 216</td>
<td>WIRE FED PROCESSES</td>
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<td>Social Sciences Elective</td>
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<tr>
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<td><strong>Total Hours</strong></td>
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</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course has a prerequisite or may be taken concurrently.

3. Indicates that this course requires a prerequisite.

4. This course offers an opportunity for experiential learning.

### Arts and Humanities Electives

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
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<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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</tr>
<tr>
<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
<td>3</td>
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<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
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<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE</td>
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<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
<td>3</td>
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<tr>
<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
<td>3</td>
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<tr>
<td>PHL Y 165</td>
<td>BIOETHICS</td>
<td>3</td>
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<tr>
<td>PHL Y 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
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<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<tr>
<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
<td>3</td>
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<tr>
<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>THTR 151G</td>
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### Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>HSTR 151G</td>
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<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
<td>3</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
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<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
</tbody>
</table>
Lorain County Community College

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/associate-of-applied-science-in-manufacturing-engineering-technology-industrial-mechanical-technician/)

1. Demonstrate knowledge, techniques, skills, and use of the appropriate tools to install, repair, maintain and test mechanical systems

2. Demonstrate an ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature

3. Demonstrate an ability to function effectively as a member of a technical team

Manufacturing Engineering Technology - Mechanical Design Major, Associate of Applied Science

Curriculum Code #6212

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The mechanical design major is designed to provide students with the knowledge and cognitive skills necessary for the competent performance as an entry-level mechanical drafter/designer or CAD operator. Employment opportunities exist in a variety of manufacturing companies such as automotive, steel, plastics and others. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 111 INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
<td>2</td>
</tr>
<tr>
<td>MTHM 121 TECHNICAL MATHEMATICS I</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111 TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 115 INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
</tr>
<tr>
<td>TECN 131 MANUFACTURING PROCESSES I</td>
<td>3</td>
</tr>
<tr>
<td>Hours</td>
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</table>

Spring Semester

| CADD 235 DETAILING AND DIMENSIONING | 3 |

<table>
<thead>
<tr>
<th>Second Year</th>
</tr>
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<tbody>
<tr>
<td>Fall Semester</td>
</tr>
<tr>
<td>EMCH 211 STRENGTH OF MATERIALS</td>
</tr>
<tr>
<td>ENGL 164 COLLEGE COMPOSITION II WITH TECHNICAL TOPICS</td>
</tr>
<tr>
<td>PHYC 150 GENERAL PHYSICS I</td>
</tr>
<tr>
<td>QLTY 122 or TECN 121 BASIC QUALITY TOOLS AND APPLICATIONS</td>
</tr>
<tr>
<td>or FLUID POWER</td>
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<tr>
<td>Arts and Humanities Elective</td>
</tr>
<tr>
<td>Hours</td>
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<thead>
<tr>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>Select one of the following:</td>
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<tr>
<td>CADD 212 INTRODUCTION TO CREO PARAMETRIC (PRO/ENGINEER)</td>
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<tr>
<td>CADD 213 INTRODUCTION TO SOLIDWORKS</td>
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<td>CADD 214 INTRODUCTION TO INVENTOR</td>
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<tr>
<td>EMCH 221 MACHINE DESIGN</td>
</tr>
<tr>
<td>TECN 245 GEOMETRIC DIMENSIONING AND TOLERANCING</td>
</tr>
<tr>
<td>Social Sciences Elective</td>
</tr>
<tr>
<td>Hours</td>
</tr>
<tr>
<td>Total Hours</td>
</tr>
</tbody>
</table>

1 Indicates that this course has a prerequisite or may be taken concurrently.
2 Indicates that this course requires a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
4 Indicates that a student may substitute work-based learning (CADD 287, CADD 288, and/or CADD 289) for the equivalent number of credit hours for this course.

Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
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<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
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<tr>
<td>ARTS 245G</td>
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<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
<td>3</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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</table>
Manufacturing Engineering Technology - Quality Assurance Major, Associate of Applied Science

Curriculum Code #6224

Division of Engineering, Business and Information Technologies (p. 68)

The quality assurance program is designed to provide students with the knowledge and cognitive skills necessary for the competent proficiencies as an entry-level quality technician. Employment opportunities exist as a quality technician or inspector, process control specialist, reliability lab technician or analyst, quality auditor, gauge control technician, or quality assurance analyst. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

Students may select a Manufacturing Engineering Technology – Quality Assurance Maintenance Option*

First Year

Fall Semester

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
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<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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</tr>
<tr>
<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCEINT WORLD TO THE RENAISSANCE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 165</td>
<td>BIOETHICS</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
</tr>
<tr>
<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
<td>3</td>
</tr>
<tr>
<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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Spring Semester

<table>
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<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>CADD 235</td>
<td>DETAILING AND DIMENSIONING</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
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<td>TECHNICAL MATHEMATICS I</td>
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</tr>
<tr>
<td>QLTY 111</td>
<td>QUALITY MEASUREMENTS - METROLOGY</td>
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<td>SDEV 101</td>
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<td>TECHNICAL PROBLEM SOLVING</td>
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<tr>
<td>TECN 115</td>
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Social Science Electives

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<tbody>
<tr>
<td>HSTR 151G</td>
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<tr>
<td>HSTR 152G</td>
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<tr>
<td>HSTR 161</td>
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<tr>
<td>HSTR 162</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<tr>
<td>PLSC 156</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<td>SOCY 151G</td>
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Second Year

Fall Semester

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<thead>
<tr>
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<tbody>
<tr>
<td>ENGL 164</td>
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<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
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<td>PHYC 150</td>
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<td>TECN 131</td>
<td>MANUFACTURING PROCESSES I</td>
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Spring Semester

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<tr>
<td>QLTY 221</td>
<td>QUALITY MANAGEMENT PRINCIPLES AND PRACTICES</td>
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<tr>
<td>QLTY 234</td>
<td>LEAN SIX SIGMA FOR PROCESS IMPROVEMENT 2, 5</td>
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Program Contact(s):

Glenn Vasiloff
440-366-7009
gvasilof@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

For more program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/associate-of-applied-science-in-manufacturing-engineering-technology-computer-aided-design/)
QLTY 236 RELIABILITY CENTERED MAINTENANCE 2 3
QLTY 287 WORK-BASED LEARNING I - QLTY 2,4 1
TECN 132 MANUFACTURING PROCESSES II 2 3

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Program Contact(s):
Laura Cosgriff
440-366-7022
lcosgriff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Demonstrate an ability to identify manufacturing process centered problems and apply basic quality problem solving tools and techniques in solving the problems to enhance quality improvement successfully.
2. Have an ability to understand an institutional organization system and use principles of quality management concepts to improve all processes for increased profitability.
3. Have an ability to choose appropriate software applications and Microsoft EXCEL statistical packages for organizing quality measurement data tables, prepare graphs and control charts for statistical process capability analyses for effective improvements.
4. Develop and implement effective quality improvement plans and procedures to encourage team work and employees involvement leading for quality success.
5. Communicate effectively using lean principles and six sigma process applications with coworkers, supervisors, customers, and suppliers via oral presentations and written legal documents.

Mechatronics Technology - Micro-Electromechanical Systems (MEMS) Major, Associate of Applied Science
Curriculum Code #6520
Effective May 2020

The micro-electromechanical systems (MEMS) major is structured to provide students with the knowledge and skills necessary to work as an entry-level technician. Training is provided in the fundamental concepts of micro-electromechanical systems and how these devices are designed and fabricated. The student will learn and apply principles in actual cleanroom activities. The program will utilize state-of-the-art laboratory equipment and state-of-the-art software packages.
facilities containing equipment for testing, troubleshooting, calibrating, analyzing and designing electronic and MEMS systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
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<tr>
<td>ELCT 115</td>
<td>FABRICATION PROCESS FOR ELECTRONICS</td>
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<tr>
<td>MEMS 122</td>
<td>INTRODUCTION TO MICRO-ELECTROMECHANICAL SYSTEMS (MEMS)</td>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tbody>
<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
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<td>CADD 216</td>
<td>INTRODUCTION TO 3D MODELING AND PRINTING</td>
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<td>DFAB 111</td>
<td>INTRODUCTION TO PERSONAL FABRICATION</td>
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<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS</td>
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<td>MEMS 132</td>
<td>MEMS PACKAGING</td>
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<td>MTHM 168</td>
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Second Year

Fall Semester

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<td>ELCT 233</td>
<td>ELECTRONIC DEVICES I</td>
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<td>MEMS 211</td>
<td>MICRO-FABRICATION PROCESSING</td>
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<td>MEMS 287</td>
<td>WORK-BASED LEARNING I - MEMS</td>
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Spring Semester

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<tr>
<td>ENGL 164</td>
<td>COLLEGE COMPOSITION II WITH TECHNICAL TOPICS I</td>
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<td>MEMS 221</td>
<td>MICRO-SYSTEM CAPSTONE PROJECT</td>
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<td>MEMS 288</td>
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1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course has a prerequisite or may be taken concurrently.
4 This course offers an opportunity for experiential learning.

Arts and Humanities Electives

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
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<td>ART HISTORY I</td>
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<td>ART HISTORY II</td>
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<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
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<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
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<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
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<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>PHL Y 165</td>
<td>BIOETHICS</td>
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<td>PHL Y 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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Social Science Electives

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HSTR 151G</td>
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<td>HSTR 152G</td>
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<td>HSTR 162</td>
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<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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<td>WOMEN IN WORLD HISTORY</td>
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<td>AFRICAN AMERICAN HERITAGE</td>
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</tr>
<tr>
<td>SOCY 151G</td>
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Program Contact(s):

Johnny Vanderford
440-366-4206
jvanderford@lorainccc.edu
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More program information can be found on our website. (https://www.lorainccc.edu/engineering/mechatronics/associate-of-applied-science-in-mechatronics-technology-micro-electromechanical-systems-mems/)

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline of microelectronics and MicroElectroMechanical Systems (MEMS).
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline of microelectronics and MEMS.
3. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results.
5. An ability to function effectively as a member of a technical team.
6. The curriculum must provide associate degree graduates with instruction in the knowledge, techniques, skills, and use of modern equipment in manufacturing engineering technology. Graduates typically enter the professions in manufacturing operations and service functions or are prepared for transfer to a baccalaureate degree program, as appropriate to the program educational objectives. The curriculum must include instruction in the following topics:
   a. materials and manufacturing processes.
   b. product design process, tooling, and assembly.
   c. manufacturing systems, automation, and operations.
   d. statistics, quality and continuous improvement, and industrial organization and management.

Objectives

An accreditable program will prepare graduates with technical skills necessary for entry into industry of the manufacturing, inspecting, testing, rework, and troubleshooting of PCB and related microelectronic products. Graduates of the associate degree programs are expected to have strengths in the knowledge of equipment operations, assembly, testing, and troubleshooting of prototyping a PCB and associated microelectronic components with introductory skills in PCB design of schematic and layout.

Program Educational Objectives

1. Use technical skills, techniques, tools and equipment in the field of microelectronics and microsystems.
2. Recognize industry standard terminology materials and processes related to microelectronic manufacturing.

3. Assemble and perform verifications such as inspection, testing, and rework of functioning printed circuit boards.
4. Successfully complete a paid internship demonstrating professional and technical responsibilities to working as a part of an engineering team in a quality manufacturing environment.

Welding Technology, Associate of Applied Science

Curriculum Code #6410

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The welding technology program is designed to provide students with the knowledge, skills and behaviors necessary for the competent performance as a welding technician. The welding technician is the liaison between the welding engineer and the welder. The program is based on the occupational analyses and needs of the maintenance and fabrication welding industries. Employment opportunities exist in a variety of industries such as steel, construction, fabrication, pipelines, and others. Students who excel in the program may be qualified to take certain welding certification tests. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
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<tr>
<td>WTEC 108</td>
<td>OXY-FUEL WELDING AND CUTTING</td>
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<tr>
<td>WTEC 111</td>
<td>WELDING SPECIFICATIONS/PRINT READING</td>
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<td>WTEC 116</td>
<td>BASIC SHIELDED METAL ARC WELDING</td>
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Spring Semester

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<tbody>
<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
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<tr>
<td>EMCH 142</td>
<td>ENGINEERING MATERIALS</td>
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<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>TECN 131</td>
<td>MANUFACTURING PROCESSES</td>
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Summer Semester

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<tr>
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<td>WELDING CODES AND STANDARDS</td>
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<td>WTEC 212</td>
<td>WELDING FABRICATION, LAYOUT/DESIGN</td>
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Second Year

Fall Semester

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<th>Credits</th>
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<tbody>
<tr>
<td>AETC 111</td>
<td>ROBOTICS/AUTOMATED MANUFACTURING</td>
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ENGL 164 COLLEGE COMPOSITION II WITH TECHNICAL TOPICS 1 3
PHYC 150 GENERAL PHYSICS I 1 4
Arts and Humanities Elective^ 3

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<tr>
<td>WTEC 216</td>
<td>WIRE FED PROCESSES 1</td>
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<td>WTEC 217</td>
<td>GAS TUNGSTEN ARC WELDING 1</td>
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<td>WTEC 219</td>
<td>ADVANCED ARC WELDING 1,4</td>
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<td>WTEC 221</td>
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1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course requires a prerequisite or may be taken concurrently.
4 Indicates that a student may substitute work-based learning (WTEC 287, WTEC 288, and/or WTEC 289) for the equivalent number of credit hours for this course.

Note: This program can be taken as part of the Boilermakers training program. Welding Technology (WTEC) courses should be taken under the subject code of Boilermakers (BMKR).

Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

Hikmat Chedid
440-366-7012
hchedid@lorainccc.edu

Larry Waller
440-366-7030
lwaller@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/welding/associate-of-applied-science-in-welding-technology/)

In the associate of applied science of the Engineering, Business and Information Technologies program, it is possible to get co-op course credit for a work-based learning experience. This option is available to students who have successfully completed at least 15 credit hours in their program and have a 2.0 GPA, with a 2.5 GPA in their major field. The work placement must be related to the student’s major. The work experience is supervised by a faculty advisor and graded on an S/U basis. More details are available from the Engineering, Business and Information Technologies division or the Work-Based Learning office located in the Employment, Financial and Career Services division.

1. Demonstrate knowledge, techniques, skills, and use of the appropriate tools in welding applications
2. Apply math, blue print reading, and engineering technology principles to solve problems in welding engineering technology
3. Recognize problems in welding applications and processes and develop appropriate solutions
Alternative Energy Technology - Solar Technology, One-Year Technical Certificate

Curriculum Code #6356
(Not offered 2020-2021)

Division of Engineering, Business and Information Technologies (p. 68)

The solar technology one-year technical certificate prepares the student for a range of analysis, installation and maintenance skills associated with the solar thermal industry. Typical job responsibilities will include design, testing, R&D, service, maintenance and installation assignments. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALET 111</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO ALTERNATIVE ENERGY</td>
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<tr>
<td>ALET 112</td>
<td>4</td>
</tr>
<tr>
<td>ALTERNATIVE ENERGY MECHANICAL SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>ELCT 111</td>
<td>3</td>
</tr>
<tr>
<td>ELECTRICAL CIRCUITS I</td>
<td></td>
</tr>
<tr>
<td>MTHM 121</td>
<td>4</td>
</tr>
<tr>
<td>TECHNICAL MATHEMATICS I</td>
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<td>SDEV 101</td>
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<td>COLLEGE 101</td>
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**Total Hours:** 15

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ALET 222</td>
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<tr>
<td>SOLAR THERMAL SYSTEMS</td>
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<td>ALET 223</td>
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<td>PHOTOVOLTAIC SYSTEMS</td>
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<td>ELCT 227</td>
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<td>NATIONAL ELECTRIC CODE</td>
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<td>ENGL 161</td>
<td>3</td>
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<tr>
<td>COLLEGE COMPOSITION I</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

- Arts and Humanities Elective
- Social Science Elective

**Total Hours:** 16

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course requires a prerequisite.

Arts and Humanities and Social Science Electives

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<td>ARTS 243G</td>
<td>ART HISTORY I</td>
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<td>ARTS 244G</td>
<td>ART HISTORY II</td>
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<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<tr>
<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
<td>3</td>
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<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
</tr>
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<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<tr>
<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
<td>3</td>
</tr>
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<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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<td>HSTR 151G</td>
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<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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</tr>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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</tr>
<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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</tr>
<tr>
<td>MUSC 261G</td>
<td>MUSIC APPRECIATION</td>
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<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
<td>3</td>
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<tr>
<td>PHL Y 165</td>
<td>BIOETHICS</td>
<td>3</td>
</tr>
<tr>
<td>PHL Y 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 151G</td>
<td>COMPARATIVE POLITICS</td>
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<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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<td>PLSC 157G</td>
<td>CONTEMPORARY WORLD PROBLEMS</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
</tr>
<tr>
<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
<td>3</td>
</tr>
<tr>
<td>RELG 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
<td>3</td>
</tr>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<tr>
<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):
Kelly Zelesnik
440-366-7028
kzelesni@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Alternative Energy Technology - Wind Turbine, One-Year General Certificate

Curriculum Code #6351
(Not offered 2020-2021)
Division of Engineering, Business and Information Technologies (p. 68)

The wind turbine technology one-year general certificate encompasses a wide range of electrical, mechanical and computer skills required to compete in the emerging alternate energy - wind turbine industry. Individuals will be prepared for a range of analysis, installation and maintenance assignments associated with the wind turbine industry. Typical job responsibilities will include design, testing, R&D, service, maintenance and installation assignments. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALET 111</td>
<td>INTRODUCTION TO ALTERNATIVE ENERGY</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>2</td>
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<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td></td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AETC 121</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
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</tr>
<tr>
<td>ALET 112</td>
<td>ALTERNATIVE ENERGY MECHANICAL SYSTEMS</td>
<td>4</td>
</tr>
<tr>
<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS I</td>
<td>4</td>
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<td>TECN 121</td>
<td>FLUID POWER</td>
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<tr>
<td>Social Science Elective</td>
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<td></td>
<td>Hours</td>
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</tr>
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<td></td>
<td>Total Hours</td>
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</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Social Science Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
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</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

Kelly Zelesnik
440-366-7028
kzelesni@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

### Blockchain Engineering Technology, One-Year Technical Certificate

Curriculum Code #6234

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The Blockchain Engineering Technology One Year Technical Certificate provides a foundation in the principles of Blockchain technology, with an emphasis on the development, deployment, maintenance, troubleshooting of Blockchains, distributed applications, and smart contracts. Along with a broad general information technology background, students are given comprehensive information and training in computer programming languages that are pertinent to Blockchain technology and related applications. Typical job titles: Blockchain System Architect, and Blockchain Smart Contract and Distributed Applications Specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

#### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
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<tr>
<td>BLOC 111</td>
<td>BLOCKCHAIN SOLUTIONS USING HYPERLEDGER FABRIC</td>
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</tr>
<tr>
<td>BLOC 113</td>
<td>BLOCKCHAIN ARCHITECTURE AND PLATFORMS</td>
<td>1</td>
</tr>
<tr>
<td>BLOC 114</td>
<td>BASICS OF BLOCKCHAIN</td>
<td>3</td>
</tr>
<tr>
<td>BLOC 120</td>
<td>PROGRAMMING ESSENTIALS</td>
<td>5</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>2</td>
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<td></td>
<td>Hours</td>
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#### Spring Semester

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BLOC 130</td>
<td>BLOCKCHAIN LAWS, REGULATIONS, AND INDUSTRY STANDARDS</td>
<td>3</td>
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<tr>
<td>BLOC 210</td>
<td>DECENTRALIZED APPLICATIONS DEVELOPMENT (DAPPS)</td>
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<tr>
<td>BLOC 220</td>
<td>SMART CONTRACT DEVELOPMENT</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Note: Students who have transferred in from an accredited institution recognized by LCCC with a GPA of 2.0 or higher with 12 or more semester credits are exempt from taking SDEV 101.
A dedicated computer lab, equipped with specific software and hardware are required for this program.

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Communicate Blockchain concepts and applicability in technical and non-technical environments using written, oral, and graphical communication.

2. Apply knowledge, techniques, and Blockchain-relevant programming skills to develop Blockchain solutions, implementation plans, smart contracts and distributed applications, based on best practices, regulations, and industry standards, to secure Blockchain data.

3. Conduct standard Blockchain tests, measurements, and experiments, and analyze and interpret the results.

4. Function effectively as a member of a technical team.

Business Management, One-Year Technical Certificate

Curriculum Code #0127

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This one-year technical certificate in business management offers opportunities for individuals to learn about and develop some of the basic skills that may be utilized in business administration, with a deeper exposure to some of the functional areas of business management. Completion of the one-year technical certificate in business management may be applied to fulfill at least 50% of the requirements of the management major for the business administration associate of applied business. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>4</td>
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<tr>
<td>BADM 165</td>
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<tr>
<td>CISS 121</td>
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<td>ECNM 151</td>
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<td>SDEV 101</td>
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</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
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<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td></td>
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<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA 3</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 15-16

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course requires a prerequisite.

3 MTHM 171 is required for the partner universities and most transfer institutions.

Program Contact(s):

Tony Cioffi
440-366-7409
acioffi@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/management-and-entrepreneurship/business-management-one-year-certificate/)

Computer Engineering Technology - Business Forensics Investigations, One-Year Technical Certificate

Curriculum Code #6218

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The business forensics investigations one-year technical certificate provides current criminal justice professionals and others with basic skills used for investigations of fraud and other white collar crimes. This certificate brings together three professional areas: accounting, digital forensics and criminal justice. Students are trained in digital forensics and data recovery tools, evidence collection, proper criminal investigation practices, evidence and report preparation for litigation. Coursework listed below can be used to satisfy the requirements of the associate of applied science in computer engineering technology – forensics accounting investigations major. Certification as a fraud examiner or as a certified forensic accountant will require a bachelor's degree. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 211</td>
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<td>BADM 251</td>
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<td>BADM 255</td>
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<td>ENTR 200</td>
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Fall Semester

<table>
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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 151</td>
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<td>A+ CERTIFICATION PREPARATION I</td>
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<tr>
<td>CRMJ 146</td>
<td>CRIMINAL JUSTICE INVESTIGATION</td>
<td>3</td>
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<td></td>
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<td>11</td>
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</table>

Total Hours: 32-33
The computer engineering technology – computing applications integration specialist certificate provides graduates with the skills necessary to design and implement software and hardware interfaces and networking of equipment with computers, computing devices and communication systems for a variety of industrial sectors including health care, law enforcement, manufacturing, logistics/transportation and other sectors. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
<td>4</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>2</td>
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</table>


Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 221</td>
<td>PROGRAMMING IN C &amp; C++ FOR ENGINEERING TECHNOLOGY APPLICATIONS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
</tbody>
</table>

Arts and Humanities Elective(s)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

More program information can be found on our website. (https://www.lorainccc.edu/it/computer-security/computer-engineering-technology-business-forensics-investigations-one-year-certificate/)

Program Learning Outcomes

1. Demonstrate knowledge, techniques, skills, and use of the appropriate digital forensics tools
2. Develop a forensics report and communicate effectively business forensics investigation finding using written, oral and graphical communication

Computer Engineering Technology - Computer Applications Integration Specialist, One-Year Technical Certificate

Curriculum Code #6122

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)
HUMS 151G INTRODUCTION TO HUMANITIES 3
HUMS 261G INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE 3
HUMS 262G INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY 3
HUMS 271G INTRODUCTION TO MYTHOLOGY 3
HUMS 274 INTRODUCTION TO MYTHOLOGY 3
MUSC 262G MUSIC AS A WORLD PHENOMENON 3
PHLY 165 BIOETHICS 3
PHLY 262G INTRODUCTION TO EASTERN PHILOSOPHY 3
RELG 181G INTRODUCTION TO WORLD RELIGIONS 3
RELG 261 RELIGION IN AMERICA 3
RELG 262G INTRODUCTION TO EASTERN PHILOSOPHY 3
THTR 151G INTRODUCTION TO THEATER 3

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/computer-science-engineering-and-technology/computer-engineering-technology-application-integration-specialist-one-year-certificate/)

Program Learning Outcomes

1. Demonstrate knowledge, techniques, skills, and use of the appropriate device networking and application integration tools
2. Communicate analytical procedures and technical report findings to a variety of stakeholders using written, oral, and graphical communication

Computer Engineering Technology - Computer and Digital Forensics, One-Year Technical Certificate

Curriculum Code #6121

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer engineering technology – computer and digital forensics one-year technical certificate provides graduates with the skills necessary to enter careers in computer technology and digital forensics, and in the design, application, installation, operation and maintenance of computers, networks and other digital devices and associated equipment. Students are given comprehensive information and training in digital forensics and data recovery tools and practices through this extensive, hands-on curriculum. Typical job titles: computer/digital forensic examiner, computer systems specialist, cybercrime specialist, installation technician and applications specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 120</td>
<td>SAME CYBER-FORENSIC CYBER CRIME THE LAW</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION AND FORENSIC TOOLS</td>
<td>4</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td>3/4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Hours 13-16

Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 221</td>
<td>PROGRAMMING IN C &amp; C++ FOR ENGINEERING TECHNOLOGY APPLIED TO APPLICATIONS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 223</td>
<td>NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elective(s)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 31-34

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 161G</td>
<td>UNITED STATES I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 162G</td>
<td>UNITED STATES II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
More program information can be found on our website. (https://www.lorainccc.edu/it/computer-science-engineering-and-technology/computer-digital-forensics-one-year-certificate/)

Program Learning Outcomes

1. Demonstrate knowledge, techniques, skills, and use of the appropriate digital forensics investigative tools

2. Communicate effectively the investigation analysis, procedures, and technical report findings to a variety of stake holders using written, oral, and graphical communication

Computer Information Systems - Mobile Device Application Development, One-Year Technical Certificate

Curriculum Code #6629

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The one-year technical certificate in mobile device application development prepares students to design and develop applications for modern mobile computing platforms including the iPhone/iPad and Android phones and tablets. Students also learn to write web-based applications specifically targeted at mobile devices. The technical courses are complemented by general education courses in composition, communications and mathematics. The credits earned for this certificate may be applied to an associate of applied business degree in mobile device application development. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 151 or MTHM 158</td>
<td>COLLEGE MATHEMATICS 1 or QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Hours: 17

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 260</td>
<td>INTRODUCTION TO IPHONE/IPAD PROGRAMMING</td>
<td>4</td>
</tr>
<tr>
<td>CISS 264</td>
<td>INTRODUCTION TO ANDROID PROGRAMMING 1,3</td>
<td>3</td>
</tr>
<tr>
<td>CISS 268</td>
<td>MOBILE WEB DEVELOPMENT 1,3</td>
<td>4</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 16

Program Contact(s):

Mike Zellers
440-366-4796
mzellers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Construction Technology - Residential Building and Renovation, One-Year General Certificate

Curriculum Code #6176

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The residential building and renovation one-year general certificate is designed to provide students with the knowledge, cognitive skills and hands-on skills necessary to perform in an entry-level construction position. Employment opportunities exist in a variety of residential construction companies. Every course in the one-year technical certificate program can be applied to the two-year associate of applied science degree in construction technology. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 121</td>
<td>CONSTRUCTION DOCUMENT READING</td>
<td>3</td>
</tr>
<tr>
<td>CNST 122</td>
<td>INTRODUCTION TO CARPENTRY</td>
<td>4</td>
</tr>
<tr>
<td>CNST 123</td>
<td>INTRODUCTION TO ELECTRICAL WIRING</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
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</tbody>
</table>

Total Hours: 34

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 This course offers an opportunity for experiential learning.
### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
<td>2</td>
</tr>
<tr>
<td>CNST 120</td>
<td>INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING</td>
<td>2</td>
</tr>
<tr>
<td>CNST 124</td>
<td>INTRODUCTION TO PLUMBING</td>
<td>2</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td>4</td>
</tr>
<tr>
<td>Construction Elective ³</td>
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<td>2</td>
</tr>
</tbody>
</table>

**Total Hours:** 15

---

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course requires a prerequisite or may be taken concurrently.

3. Indicates that a student may substitute Work-Based Learning (CNST 287, CNST 288, and/or CNST 289) for one or more credit hours for this elective. Please make an appointment with your advisor for assistance.

Program Contact(s):

**Laura Cosgriff**
440-366-7022
lcosgriff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/construction/residential-building-renovation-one-year-certificate/)

### Digital Forensics for Law Enforcement, One-Year Technical Certificate

Curriculum Code #6119

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This digital forensics for law enforcement certificate provides graduates the skills necessary to enter careers that require knowledge and proper criminal investigative practices in digital forensics of computers, networks, digital devices, cyberspace and associated equipment. Students are given comprehensive information and training in digital forensics and data recovery tools, practices and proper criminal investigation practices. Typical job titles: computer/digital forensics examiner, computer systems specialist and cyber-crime specialist. This program is designed to meet the needs of new students as well as individuals already employed as criminal justice officers or persons who are preparing themselves for full- or part-time employment in a local police agency. All course work listed below can be used to satisfy the requirements of the associate degree in police science. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 120</td>
<td>CYBER-FOREN CYBER CRIME THE LAW ³</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
<td>4</td>
</tr>
<tr>
<td>CRMJ 110</td>
<td>INTRODUCTION TO CRIMINAL JUSTICE</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ¹</td>
<td>1</td>
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</tbody>
</table>

**Total Hours:** 16

---

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course requires a prerequisite.

3. Students in law enforcement may take the following three courses CMNW 115 and CMNW 149 and CMNW 215 with divisional approval in lieu of CMNW 120 and CMNW 224

Program Contact(s):

**Hikmat Chedid**
440-366-7017
Hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/computer-security/digital-forensics-for-law-enforcement-one-year-certificate/)

### Program Learning Outcomes

1. Conduct digital forensic investigations using industry approved procedures and methods.

2. Communicate digital forensic concepts in technical and non-technical environments using written, oral, and graphical communication.

3. Function effectively as a member of a digital forensics team.
Electronic Engineering Technology
- Applied Electronics, One-Year Technical Certificate
Curriculum Code #6309
Effective May 2020
Division of Engineering, Business and Information Technologies (p. 68)

The one-year technical certificate in electronic engineering technology in applied electronics is structured to provide a student with an application-oriented, electronic/electrical background, hands-on laboratory experience and the use of standard and specialized test equipment. The relevant knowledge, the skills that industry needs today and the competencies that are integrated into the curriculum are intended to prepare the graduate for an entry-level position or an internship in the field of electronics. Every course in the one-year technical certificate program can be applied to the two-year associate of applied science degree in electronic engineering technology – applied electronics major. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership. The Applied Electronics major is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org (http://www.abet.org/).

### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 115</td>
<td>FABRICATION PROCESS FOR ELECTRONICS</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>16</strong></td>
</tr>
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</table>

### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT 112</td>
<td>ELECTRICAL CIRCUITS II</td>
<td>4</td>
</tr>
<tr>
<td>ELCT 121</td>
<td>DIGITAL ELECTRONICS</td>
<td>4</td>
</tr>
<tr>
<td>ELCT 211</td>
<td>ELECTRICAL POWER AND DEVICES</td>
<td>4</td>
</tr>
<tr>
<td>Social Science Elective</td>
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<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
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### Social Science Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite.
2 A student may register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course requires a prerequisite or may be taken concurrently.

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.
2. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature
3. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results
4. An ability to function effectively as a member of a technical team.

Electronic Engineering Technology
- Computer Maintenance and Networking, One-Year Technical Certificate
Curriculum Code #6450
Effective May 2020
Division of Engineering, Business and Information Technologies (p. 68)

This program is designed to provide students with the knowledge and practical skills to install, upgrade and maintain personal computer systems and networks. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION I</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 141</td>
<td>COMPUTER DIAGNOSTIC AND REPAIR</td>
<td>3</td>
</tr>
<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
<td>4</td>
</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Contact(s):

David Astorino
440-366-7215
dastorin@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/electronic-engineering/electronic-engineering-technology-one-year-certificate/)
Arts and Humanities Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
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<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
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</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
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<tr>
<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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</tr>
<tr>
<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<tr>
<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
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<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>PHL 165</td>
<td>BIOETHICS</td>
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<td>PHL 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<td>RELG 262G</td>
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Social Science Electives

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<td>HSTR 151G</td>
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<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<td>HSTR 161</td>
<td>UNITED STATES I</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
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<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>SOCY 151G</td>
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Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/electronic-engineering/electronic-engineering-technology-one-year-certificate/)

Program Learning Outcomes

1. Demonstrate an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline

2. Demonstrate an ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature

3. Demonstrate an ability to function effectively as a member of a technical team

Entrepreneurship, One-Year Technical Certificate

Curriculum Code #0225

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This certificate offers opportunities for individuals to learn about and develop entrepreneurial skills. The entire one-year technical certificate in entrepreneurship is accepted in the associate of applied business – entrepreneurship major.

Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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</tr>
<tr>
<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
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</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td></td>
<td><strong>Hours</strong></td>
<td><strong>17</strong></td>
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<td><strong>Spring Semester</strong></td>
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<tr>
<td>ENTR 200</td>
<td>ENTREPRENEURSHIP</td>
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<td>ENTR 201</td>
<td>ENTREPRENEURIAL FINANCE</td>
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<tr>
<td>ENTR 202</td>
<td>ENTREPRENEURIAL MARKETING</td>
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<td>ENTR 203</td>
<td>ENTREPRENEURIAL MANAGEMENT</td>
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<tr>
<td><strong>Select one of the following:</strong></td>
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<td><strong>3-4</strong></td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td></td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td></td>
</tr>
<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA</td>
<td></td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td></td>
<td><strong>15-16</strong></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>32-33</strong></td>
</tr>
</tbody>
</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2. This course offers an opportunity for experiential learning.
3. MTHM 171 is required for the partner universities and most transfer institutions.

Program Contact(s):

Lee Kolczun  
440-366-4737  
lkolczun@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).  

More program information can be found on our website.  

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**Hospitality Operations, One-Year Technical Certificate**

Curriculum Code #0106

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The hospitality operations one-year technical certificate will prepare students with a foundation in hospitality, specifically the lodging sector. This course of study focuses on developing competencies in a wide variety of operational areas of the hospitality industry. Students successfully completing the courses indicated will receive a hospitality operations certificate from the American Hotel and Lodging Educational Institute. Completion of this one-year technical certificate may also be applied to fulfill partial requirements for the associate of applied business degree, hospitality and tourism management, hospitality track. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 211</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
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<tr>
<td>MTHM 151</td>
<td>3</td>
</tr>
<tr>
<td>TRSM 101</td>
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<tr>
<td>TRSM 112</td>
<td>3</td>
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<tr>
<td>TRSM 119</td>
<td>2</td>
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<tr>
<td>TRSM 126</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td><strong>16</strong></td>
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</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2. Course offered as a requirement for the hospitality fundamentals program certificate awarded by the American Hotel and Lodging Educational Institute.
3. Course offered as a requirement for the hospitality operations certificate awarded by the American Hotel and Lodging Educational Institute.
4. Course offered as a requirement for the rooms division certificate of specialization awarded by the American Hotel and Lodging Educational Institute.
5. Indicates that this course requires a prerequisite.

Program Contact(s):

Maria McConnell  
440-366-7404  
mconnel@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website.  
(https://www.lorainccc.edu/culinary/tourism/hospitality-operations-one-year-certificate/)
Human Resource Management, One-Year Technical Certificate
Curriculum Code #0129
Effective May 2020
Division of Engineering, Business and Information Technologies (p. 68)

This certificate in human resource management offers opportunities for individuals to learn about and develop a variety of skills that relate to the human resource function in an organization. Completion of this certificate in human resource management may be applied to satisfy at least 50 percent of the requirements for the business administration – human resource management associate of applied business degree. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<tr>
<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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Total Hours: 17

Spring Semester

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BADM 154</td>
<td>COMPENSATION AND BENEFITS</td>
<td>3</td>
</tr>
<tr>
<td>BADM 164</td>
<td>LABOR LAW</td>
<td>3</td>
</tr>
<tr>
<td>BADM 255</td>
<td>HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
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<tr>
<td>BADM 264</td>
<td>LABOR-MANAGEMENT RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<td>3-4</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td></td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td></td>
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<tr>
<td>MTHM 171</td>
<td>COLLEGE ALGEBRA 2</td>
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</table>

Total Hours: 3-4

Total Hours: 15-16

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Tony Cioffi
440-366-7409
acioffi@lorainccc.edu

More program information can be found on our website.
(https://www.lorainccc.edu/business-programs/human-resources/human-resources-management-one-year-certificate/)

Industrial Safety Technology/ Technician - Professional Safety, One-Year Technical Certificate
Curriculum Code #6710
Effective May 2020
Division of Engineering, Business and Information Technologies (p. 68)

The industrial safety technology/technician prepares individuals to assist engineers and other professionals in implementing and enforcing industrial safety standards. The graduate will be prepared for a wide range of positions in the areas of occupational and industrial safety. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>HLED 153</td>
<td>FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>SAFE 116</td>
<td>GENERAL SAFETY MANAGEMENT I</td>
<td>2</td>
</tr>
<tr>
<td>SAFE 120</td>
<td>EMERGENCY PLANNING</td>
<td>2</td>
</tr>
<tr>
<td>SAFE 145</td>
<td>SAFETY IN GENERAL INDUSTRY</td>
<td>2</td>
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<tr>
<td>SAFE 235</td>
<td>MACHINE GUARDING BASICS</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
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Total Hours: 16

Spring Semester

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<th>Hours</th>
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<td>TECHNICAL MATHEMATICS I</td>
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</tr>
<tr>
<td>SAFE 130</td>
<td>RESPIRATOR PROTECTION</td>
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</tr>
<tr>
<td>SAFE 140</td>
<td>OSHA STANDARDS FOR GENERAL INDUSTRY</td>
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<tr>
<td>SAFE 220</td>
<td>OSHA ELECTRICAL STANDARDS</td>
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<td>SAFE 240</td>
<td>LOCKOUT TAGOUT - CONTROLLING HAZARDOUS ENERGY</td>
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Total Hours: 16

A student must register for the orientation course when enrolling for more than six credit hours per semester OR any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Glenn Vasiloff

1 Indicates that this course requires a prerequisite.
2 Indicates that this course requires a prerequisite.
440-366-7009
gvasilof@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/one-year-technical-certificate-professional-safety/)

1. Demonstrate understanding of industrial safety standards
2. Recognize industrial safety violations and develop appropriate solutions

Information Systems Support, One-Year Technical Certificate

Curriculum Code #6603

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

To help businesses succeed and empower their personnel in a technology-rich work environment, highly-skilled employees are needed to provide support to the non-technical workforce. This certificate is designed to provide the breadth of technical and user application focus to enable the graduate to provide such support. Upon successful completion the student will have developed the skills necessary to support the non-technical users’ workspace including software, networking, small scale application development needs and basic hardware. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 122</td>
<td>MICROCOMPUTER APPLICATIONS II</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 212</td>
<td>SPREADSHEET APPLICATIONS</td>
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</tr>
<tr>
<td>CISS 215</td>
<td>MULTIMEDIA FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT</td>
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<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION</td>
<td>3-4</td>
</tr>
<tr>
<td>or CMNW 141</td>
<td>COMPUTER DIAGNOSTIC AND REPAIR</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td></td>
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</table>

Total Hours: 33-34

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Douglas Huber
440-366-4785
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/hardware-maintenance-and-information-systems-support/information-systems-support-one-year-certificate/)

Manufacturing Engineering Technology - Computer Aided Design Operator, One-Year Technical Certificate

Curriculum Code #6111

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The CAD operator certificate program is designed to provide students with the knowledge and cognitive skills necessary for the competent performance as an entry-level CAD operator. Employment opportunities exist in a variety of manufacturing companies, such as automotive, steel, plastics and others. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
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</tr>
<tr>
<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
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<tr>
<td>TECN 131</td>
<td>MANUFACTURING PROCESSES</td>
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</tr>
<tr>
<td>Arts and Humanities Elective</td>
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Total Hours: 18

Sprin Semester

Select one of the following:

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<tr>
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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CADD 212</td>
<td>INTRODUCTION TO CREO PARAMETRIC (PRO/ENGINEER)</td>
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</tr>
<tr>
<td>CADD 213</td>
<td>INTRODUCTION TO SOLIDWORKS</td>
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## Arts and Humanities Electives

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<tr>
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<td>INTRODUCTION TO FICTION</td>
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<tr>
<td>ENGL 257G</td>
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<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<tr>
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<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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<tr>
<td>HUMS 151G</td>
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<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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<td>HUMS 262G</td>
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## Social Science Electives

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<tr>
<td>HSTR 152G</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
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<td>HSTR 162</td>
<td>UNITED STATES II</td>
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<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
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</tbody>
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1 Indicates that this course has a prerequisite or may be taken concurrently.
2 Indicates that this course has a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

### Program Contact(s):

Glenn Vasiloff  
440-366-7009  
gvasilof@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/computer-aided-design-operator-one-year-certificate/)

## Manufacturing Engineering Technology - Computer Aided Machining Operator, One-Year Technical Certificate

Curriculum Code #6112  
Effective May 2020  
Division of Engineering, Business and Information Technologies (p. 68)

Computer aided machining (CAM) operator is a one-year certificate program designed to provide students with knowledge, skills and competencies in programming, set-up and operating CNC machines, in a manufacturing setting. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

### Fall Semester

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
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<td>MTHM 121</td>
<td>TECHNICAL MATHEMATICS I 2</td>
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<td>COLLEGE 101</td>
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<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
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<td>TECN 131</td>
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#### Arts and Humanities Elective

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<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
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<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<td>SOCY 151G</td>
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<td>TECN 121</td>
<td>FLUID POWER 1</td>
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Social Science Electives

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<td>HSTR 162</td>
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Program Contact(s):
Phil Hashier
440-366-7018
phashier@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

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Manufacturing Engineering Technology - Industrial Electrical Technician, One-Year Technical Certificate

Curriculum Code #6115
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial electrical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level electrical maintenance technician. The graduate will repair, test, adjust, or install electronic equipment. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

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<tr>
<th>Code</th>
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<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>COLLEGE COMPOSITION I</td>
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<td>ENGR 120</td>
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<tr>
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<td>TECHNICAL MATHEMATICS I</td>
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</tbody>
</table>

1 Indicates that this course has a prerequisite or may be taken concurrently.
2 Indicates that this course has a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Arts and Humanities Electives

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<thead>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
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</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course has a prerequisite.

Program Contact(s):

David Astorino  
440-366-7215  
dastorin@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/industrial-electrical-technician-one-year-certificate/)

**Manufacturing Engineering Technology - Industrial Internet of Things (IIoT), One-Year Technical Certificate**

Curriculum Code #6243

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial mechanical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level Industrial Internet of Things (IIoT) technician. The graduate will be able to install, repair, maintain, and test IIoT systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

<table>
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<th>First Year</th>
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<td>IIOT 120</td>
<td>PROGRAMMING ESSENTIALS</td>
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<tr>
<td>AETC 121</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
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| **Spring Semester** |                                |       |
| CMNW 145   | NETWORK INSTALLATION/DIAGNOSTICS         | 4     |
| IIOT 130   | IIOT SENSORS                            | 4     |
| IIOT 140   | IIOT PRIVACY, SECURITY, AND CLOUD SERVICES | 4    |
| IIOT 220   | PROGRAMMING EMBEDDED SYSTEMS             | 4     |
| **Total Hours** |                                |       | 35   |

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course has a prerequisite or may be taken concurrently.

3. Indicates that this course requires a prerequisite.

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<tbody>
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<tr>
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</table>
RELG 261  RELIGION IN AMERICA  3
RELG 262G  INTRODUCTION TO EASTERN PHILOSOPHY  3
THTR 151G  INTRODUCTION TO THEATER  3

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Communicate IIoT concepts and applicability, in technical and non-technical environments, using written, oral, and graphical communication.
2. Apply knowledge, techniques, and IIoT-relevant programming skills to develop IIoT solutions.
3. Conduct standard IIoT tests and measurements.

Manufacturing Engineering Technology - Industrial Mechanical Technician, One-Year Technical Certificate

Curriculum Code #6116

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial mechanical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level mechanical maintenance technician. The graduate will be able to perform journeyman level work in installing, repairing, maintaining, and testing of mechanical systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester   Hours
CISS 121  MICROCOMPUTER APPLICATIONS I  3
ELCT 124  INDUSTRIAL ELECTRICITY  3
ENGR 120  INTRODUCTION TO ENGINEERING  1
MTHM 121  TECHNICAL MATHEMATICS I  4
SDEV 101  COLLEGE 101  1
WTCE 108  OXY-FUEL WELDING AND CUTTING  2
WTCE 111  WELDING SPECIFICATIONS/PRINT READING  2

Total Hours  16

Spring Semester   Hours
CMMC 151  ORAL COMMUNICATION  3
ENGL 161  COLLEGE COMPOSITION I  3
TECN 115  INDUSTRIAL BLUEPRINT READING  2
TECN 121  FLUID POWER  3
TECN 131  MANUFACTURING PROCESSES I  3
TECN 133  MECHANICAL SYSTEMS  3

Total Hours  17

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2 Indicates that this course has a prerequisite or may be taken concurrently.

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/industrial-mechanical-technician-one-year-certificate/)

Program Learning Outcomes

1. Demonstrate knowledge, techniques, skills, and use of the appropriate tools to install, repair, maintain and test mechanical systems
2. Demonstrate an ability to function effectively as a member of a technical team

Manufacturing Engineering Technology - Quality Technician, One-Year Technical Certificate

Curriculum Code #6007

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The quality technician one-year technical certificate is designed to provide students with the knowledge and cognitive skills required to work as quality control technicians or improvement personnel in business and industry. They may assist quality engineers and managers in basic metrology and statistical process control charting. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester   Hours
MTHM 121  TECHNICAL MATHEMATICS I  3-4
or MTHM 168  or STATISTICS
QLTY 111  QUALITY MEASUREMENTS - METROLOGY  3
QLTY 122 BASIC QUALITY TOOLS AND APPLICATIONS 1,2 3
SDEV 101 COLLEGE 101 3 1
TECN 111 TECHNICAL PROBLEM SOLVING 3
TECN 115 INDUSTRIAL BLUEPRINT READING 2

Hours 15-16

Spring Semester
ENGL 161 COLLEGE COMPOSITION I 3
QLTY 221 QUALITY MANAGEMENT PRINCIPLES AND PRACTICES 4 3
QLTY 234 LEAN SIX SIGMA FOR PROCESS IMPROVEMENT 4 4
TECN 245 GEOMETRIC DIMENSIONING AND TOLERANCING 4 2

Select one of the following:
Arts and Humanities Elective
Social Science Elective

Hours 15

Total Hours 30-31

1 This course offers an opportunity for experiential learning.
2 Indicates that this course has a prerequisite or may be taken concurrently.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
4 Indicates that this course has a prerequisite.

Arts and Humanities Electives

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<td>ENGL 259G</td>
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<td>ENGL 269G</td>
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<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
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<td>HUMS 261G</td>
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<td>HUMS 262G</td>
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<td>HUMS 271G</td>
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<td>HUMS 274</td>
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<td>MUSIC AS A WORLD PHENOMENON</td>
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Social Science Electives

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Program Contact(s):
Laura Cosgriff
440-366-7022
lcosgriff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Mechatronics Technology - Micro-Electromechanical Systems (MEMS), One-Year Technical Certificate

Curriculum Code #6510

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The micro-electromechanical systems (MEMS) one-year technical certificate is structured to provide students with the knowledge and skills necessary to work as an entry-level technician. Training is provided in the fundamental concepts of micro-electromechanical systems and how these devices are designed and fabricated. The student will learn and apply principles in actual cleanroom activities. The program will utilize state-of-the-art laboratory facilities containing equipment for testing, troubleshooting, calibrating, analyzing and designing electronic and MEMS systems. Every course in the one-year technical certificate can be applied to the two-year associate of applied science degree in the MEMS major of the mechatronics program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year
Fall Semester

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<td>INTRODUCTION TO MICRO-ELECTROMECHANICAL SYSTEMS (MEMS)</td>
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**Spring Semester**

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<td>CADD 216</td>
<td>INTRODUCTION TO 3D MODELING AND PRINTING</td>
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<td>INTRODUCTION TO PERSONAL FABRICATION</td>
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<td>ELCT 121</td>
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<td>MEMS 132</td>
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**Select one of the following:**

**Arts and Humanities Elective**

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<td>HSTR 252G</td>
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<td>PLSC 156</td>
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**Program Contact(s):**

Johnny Vanderford  
440-366-4206  
jvanderford@loraincc.edu

For more program information, please contact your advising team (https://www.loraincc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.loraincc.edu/engineering/mechatronics/micro-electromechanical-systems-mems-one-year-certificate/)

**Program Learning Outcomes**

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline of microelectronics and MicroElectroMechanical Systems (MEMS).
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline of microelectronics and MEMS.
3. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results.
5. An ability to function effectively as a member of a technical team.

**Objectives**
An accreditable program will prepare graduates with technical skills necessary for entry into industry of the manufacturing, inspecting, testing, rework, and troubleshooting of PCB and related microelectronic products. Graduates of the one year certificate are expected to use skills and techniques in the knowledge of equipment operations, assembly, testing, and troubleshooting of prototyping a PCB and associated microelectronic components.

Program Educational Objectives

1. Use technical skills, techniques, tools and equipment in the field of microelectronics and microsystems.
2. Recognize industry standard terminology materials and processes related to microelectronic manufacturing.
3. Assemble and perform verifications such as inspection, testing, and rework of functioning printed circuit boards.

Professional Sales, One-Year Technical Certificate

Curriculum Code #0126

Effective May 2020

Division of Engineering, Business and Information Technologies

This one-year technical certificate in professional sales offers opportunities for individuals to learn about both basic and advanced sales techniques. Sales positions are found in a wide variety of industries including pharmaceutical, information technology, construction and health care, among several others. Completion of this certificate may be applied to fulfill some of the core requirements for the AAB degree, marketing major. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

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1 Indicates that this course requires a college-level prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Maria McConnell
440-366-7404
mcconnel@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/professional-sales/)

Welding Technology - Welding Operator, One-Year Technical Certificate

Curriculum Code #6008

Effective May 2020

Division of Engineering, Business and Information Technologies

The welding technology program is designed to provide students with the knowledge, skills and behaviors necessary for the competent performance as an entry-level welding technician. The welding technician is the liaison between the welding engineer and the welder. The program is based on the occupational analyses and needs of the maintenance and fabrication welding industries. Employment opportunities exist in a variety of industries such as steel, construction, fabrication, pipelines and others. Students who complete the program may choose to take certain welding certification tests. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

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<tr>
<td>TECN 111</td>
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<td>WTEC 108</td>
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<td>WTEC 111</td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>CADD 111</td>
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</tr>
<tr>
<td>ENGL 161</td>
<td>3</td>
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<tr>
<td>WTEC 216</td>
<td>3</td>
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WTEC 217  GAS TUNGSTEN ARC WELDING 1 3

Select one of the following:

Arts and Humanities Elective

Social Sciences Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 254</td>
<td>HISTORY OF AMERICAN ARCHITECTURE</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 251</td>
<td>AMERICAN LITERATURE I</td>
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</tr>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
<td>3</td>
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<td>ENGL 253G</td>
<td>INTRODUCTION TO WORLD LITERATURE</td>
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<td>ENGL 254G</td>
<td>INTRODUCTION TO HISPANIC LITERATURE</td>
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<td>ENGL 255G</td>
<td>INTRODUCTION TO FICTION</td>
<td>3</td>
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<tr>
<td>ENGL 257G</td>
<td>INTRODUCTION TO POETRY</td>
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<tr>
<td>ENGL 259G</td>
<td>INTRODUCTION TO DRAMA</td>
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<td>ENGL 261G</td>
<td>MASTERPIECES OF BRITISH LITERATURE I</td>
<td>3</td>
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<tr>
<td>ENGL 262G</td>
<td>MASTERPIECES OF BRITISH LITERATURE II</td>
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<tr>
<td>ENGL 266G</td>
<td>AFRICAN AMERICAN LITERATURE</td>
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</tr>
<tr>
<td>ENGL 269G</td>
<td>INTRODUCTION TO SHAKESPEARE</td>
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</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 261G</td>
<td>INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 262G</td>
<td>INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY</td>
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<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
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<tr>
<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
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<tr>
<td>MUSC 262G</td>
<td>MUSIC AS A WORLD PHENOMENON</td>
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<td>PHLY 165</td>
<td>BIOETHICS</td>
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<td>PHLY 262G</td>
<td>INTRODUCTION TO EASTERN PHILOSOPHY</td>
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<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
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<td>RELG 261</td>
<td>RELIGION IN AMERICA</td>
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<th>Title</th>
<th>Hours</th>
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<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
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</tr>
<tr>
<td>HSTR 152G</td>
<td>CIVILIZATION II</td>
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<tr>
<td>HSTR 161</td>
<td>UNITED STATES I</td>
<td>3</td>
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<tr>
<td>HSTR 162</td>
<td>UNITED STATES II</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 171G</td>
<td>THE WORLD SINCE 1900</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
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</tbody>
</table>

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course requires a prerequisite or may be taken concurrently.

Note: This program can be taken as part of the Boilermakers training program. Welding Technology (WTEC) courses should be taken under the subject code of Boilermakers (BMKR).

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

Larry Waller
440-366-7030
lwaller@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/welding/welding-operator-one-year-certificate/)

Program Learning Outcomes

1. Demonstrate knowledge, techniques, skills, and use of the appropriate tools in welding applications
2. Apply math, blue print reading, and basic engineering technology principles to solve problems in welding engineering technology

Accounting - Bookkeeper I, Short-Term Technical Certificate

Curriculum Code #0007

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The bookkeeper I short-term technical certificate prepares the certificate holder for employment in an entry-level (clerical) bookkeeper position. Since the payroll clerk certificate is also achieved with this curriculum, routine payroll can also be prepared. All of these skills can be used to perform routine clerical functions. To build upon this certificate the bookkeeper II short-term technical certificate will take these skills to the next level.
For more information visit Program Website (https://www.lorainccc.edu/business-programs/accounting/bookkeeper-1/)

### First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151 ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>8</strong></td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACTG 152 ACCOUNTING II - MANAGERIAL</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 161 PAYROLL ACCOUNTING</td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Fall Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACTG 265 COST ACCOUNTING</td>
<td>3</td>
<td></td>
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<tr>
<td>CISS 212 SPREADSHEET APPLICATIONS</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
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</table>

**Total Hours**: **21**

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course has a prerequisite.

3. This course offers an opportunity for experiential learning.

This short-term technical certificate contains basic academic and technical courses that are designed for entry-level employment situations. Some occupations or employers require an associate degree or higher.

Program Contact(s):

Gerald McFadden
440-366-7473
gmcfadden@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/accounting/bookkeeper-1/)

### Accounting - Bookkeeper II, Short-Term Technical Certificate

Curriculum Code #0008

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The bookkeeper II certificate prepares the certificate holder for employment in a bookkeeper capacity above the clerical level. This certificate can only be completed after the Bookkeeper I short-term technical certificate is earned. The skills obtained should prepare a candidate to take the National Certification for Bookkeepers exam through the American Institute of Professional Bookkeepers. “Certified Bookkeeper” is a registered mark of The American Institute of Bookkeepers.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACTG 251 INTERMEDIATE ACCOUNTING I</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 257 FEDERAL INCOME TAX PROCEDURES-INDIVIDUAL</td>
<td>4</td>
</tr>
<tr>
<td>BADM 165 LEGAL ENVIRONMENT OF BUSINESS</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<th>Spring Semester</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACTG 252 INTERMEDIATE ACCOUNTING II</td>
<td>4</td>
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<tr>
<td>ACTG 253 FORENSIC ACCOUNTING</td>
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</tr>
<tr>
<td>BADM 251 PRINCIPLES OF MANAGEMENT</td>
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<td><strong>Total</strong></td>
<td><strong>10</strong></td>
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</tbody>
</table>

1. Indicates that this course has a prerequisite.

This short-term technical certificate contains basic academic and technical courses that are designed for entry-level employment situations. Some occupations or employers require an associate degree or higher.

Program Contact(s):

Gerald McFadden
440-366-7473
gmcfadden@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/accounting/bookkeeper-2/)

### Accounting - Payroll Clerk, Short-Term Technical Certificate

Curriculum Code #0005

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The payroll clerk short-term technical certificate prepares the certificate holder for employment in a basic payroll clerk position performing routine functions.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151 ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
</tbody>
</table>
### Alternative Energy Technology - Wind Turbine, Short-Term Technical Certificate

Curriculum Code #6352

(Not offered 2020-2021)

Division of Engineering, Business and Information Technologies (p. 68)

The wind turbine technology short-term technical certificate encompasses a wide range of electrical, mechanical and computer skills required to compete in the emerging alternate energy – wind turbine industry. Individuals will be prepared for a range of analysis, installation and maintenance assignments associated with the wind turbine industry. Typical job responsibilities will include design, testing, R&D, service, maintenance and installation assignments. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</tbody>
</table>

**Hours**

8

**Spring Semester**

<table>
<thead>
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<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ACTG 161</td>
<td>PAYROLL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>BADM 211</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 212</td>
<td>SPREADSHEET APPLICATIONS</td>
<td>3</td>
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</table>

**Total Hours**

17

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course has a prerequisite.

This short-term technical certificate contains basic academic and technical courses that are designed for entry-level employment situations. Some occupations or employers require an associate degree or higher.

Program Contact(s):

Gerald McFadden
440-366-7473
gmcfadden@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/accounting/payroll-clerk/)

### Automation Engineering Technology - Maintenance Technician, Short-Term Technical Certificate

Curriculum Code #6181

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This automation engineering technologies short-term certificate will train students to become maintenance technicians. This certificate offers the broad-based skills and hands-on experience needed to start in a career maintaining high technology systems that utilize automated control of electrical, mechanical, hydraulic and pneumatic systems. Learn how to program, troubleshoot, repair and maintain the automated systems that are used in a variety of fields. This certificate can be applied towards the automation engineering technology systems specialist associate degree. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AETC 111</td>
<td>ROBOTICS/AUTOMATED MANUFACTURING</td>
<td>3</td>
</tr>
<tr>
<td>AETC 121</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 121</td>
<td>FLUID POWER</td>
<td>3</td>
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</tbody>
</table>

**Total Hours**

13

1 Indicates that this course requires a prerequisite.

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Kelly Zelesnik
440-366-7028
kzelesni@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
### Spring Semester

<table>
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<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>AETC 223</td>
<td>Programmable Logic Controllers II</td>
<td>3</td>
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<tr>
<td>AETC 241</td>
<td>Instrumentation and Control</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 211</td>
<td>Electrical Power and Devices</td>
<td>3</td>
</tr>
<tr>
<td>TECN 133</td>
<td>Mechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>TECN 211</td>
<td>Fluid Power Control Systems</td>
<td>2</td>
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</table>

**Hours:** 15
**Total Hours:** 28

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course has a prerequisite or may be taken concurrently.

3. Indicates that this course requires a prerequisite.

### Program Contact(s):  
Ronald Scott Zitek  
440-366-7024  
rzitek@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).

More program information can be found on our website. ([https://www.lorainccc.edu/engineering/automation-engineering/maintenance-technician-short-term-certificate/](https://www.lorainccc.edu/engineering/automation-engineering/maintenance-technician-short-term-certificate/))

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### Blockchain Bootcamp I - Blockchain System Architect, Short-Term Technical Certificate

**Curriculum Code #6230**

**Effective May 2020**

Division of Engineering, Business and Information Technologies (p. 68)

The Blockchain Engineering Technology Short-Term Technical Certificate provides a foundation in the principles of Blockchain technology, with an emphasis on the deployment, maintenance, troubleshooting of Blockchains, distributed applications, and smart contracts. Along with a broad general information technology background, students are given comprehensive information and training in computer programming languages that are pertinent to Blockchain technology and related applications. Typical job titles: Blockchain architect, and blockchain smart contract and distributed applications deployment specialist.

Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

---

### First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>BLOC 111</td>
<td>Blockchain Solutions Using Hyperledger Fabric</td>
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<td></td>
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<tr>
<td>BLOC 113</td>
<td>Blockchain Architecture and Platforms</td>
<td>1</td>
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<tr>
<td>BLOC 114</td>
<td>Basics of Blockchain</td>
<td>3</td>
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<tr>
<td>BLOC 120</td>
<td>Programming Essentials</td>
<td>5</td>
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<tr>
<td>SDEV 101</td>
<td>College 101</td>
<td>1</td>
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</table>

**Hours:** 13
**Total Hours:** 29

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2. Indicates that this course requires a prerequisite.

Note: Students who have transferred in from an accredited institution recognized by LCCC with a GPA of 2.0 or higher with 12 or more semester credits are exempt from taking SDEV 101.

Program Contact(s):  
Hikmat Chedid  
440-366-7017  
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).

---

1. Communicate Blockchain concepts and applicability in technical and non-technical environments using written, oral, and graphical communication.

2. Apply knowledge, techniques, and Blockchain-relevant programming skills to deploy implementation plans, smart contracts and distributed applications, based on best practices, regulations, and industry standards.

3. Conduct standard Blockchain tests, measurements, and experiments.

4. Function effectively as a member of a technical team.

### Blockchain Bootcamp II – Blockchain Developer, Short-Term Technical Certificate

**Curriculum Code #6231**
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

Students must successfully complete Blockchain Bootcamp I prior to enrolling in Blockchain Bootcamp II. The Blockchain Bootcamp II - Blockchain Developer provides a solid foundation in the principles of Blockchain technology, with an emphasis on the development, deployment, maintenance, troubleshooting of Blockchains, distributed applications, and smart contracts. Along with a broad general information technology background, students are given comprehensive information and training in computer programming languages that are pertinent to Blockchain technology and related applications. Typical job titles: Blockchain developer, blockchain architect, blockchain smart contract and distributed applications specialist, blockchain system integrator and applications specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

### First Year

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BLOC 230</td>
<td>ADVANCED SMART CONTRACT DEVELOPMENT</td>
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</tr>
<tr>
<td>BLOC 247</td>
<td>BLOCKCHAIN CAPSTONE PROJECT AND SPECIAL TOPICS</td>
<td>4</td>
</tr>
<tr>
<td>CYBR 231</td>
<td>ETHICAL HACKING AND COUNTERMEASURES</td>
<td>4</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>BLOC 248</td>
<td>CERTIFIED BLOCKCHAIN DEVELOPER CERTIFICATION PREPARATION</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours**: 19

---

1 Indicates that this course has a prerequisite.

**Program Contact(s):**

**Hikmat Chedid**
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Communicate Blockchain concepts and applicability in technical and non-technical environments using written, oral, and graphical communication.

2. Apply knowledge, techniques, and Blockchain-relevant programming skills to deploy implementation plans, smart contracts and distributed applications, based on best practices, regulations, and industry standards.

3. Conduct standard Blockchain tests, measurements, and experiments.

4. Function effectively as a member of a technical team.

---

## Computer Information Systems - Business IT Fundamentals, Short-Term Technical Certificate

Curriculum Code #6602

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The short-term technical certificate in IT Fundamentals prepares the certificate holder with the foundation of core IT basic knowledge and skills required to pursue additional education in various IT fields.

### Code | Title                        | Hours |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CMNW 141</td>
<td>COMPUTER DIAGNOSTIC AND REPAIR</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Hours**: 16-17

1 Indicates that this course has a prerequisite.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

### Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 260</td>
<td>INTRODUCTION TO IPHONE/IPAD PROGRAMMING</td>
<td>4</td>
</tr>
</tbody>
</table>

**Program Contact(s):**

**Doug Huber**
440-366-4785
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
Computer Information Systems - Information Security for Business, Short-Term Technical Certificate

Curriculum Code #6623
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The short-term technical certificate of information security for business provides the certificate holder a foundation in information security concepts starting with understanding risk concepts and addressing them through organizational elements and technology. A broad understanding of information security concerns such as: business continuity planning, policy development, IT security concepts, technology solutions, physical security issues, legal compliance topics, investigative techniques and accounting principles focused on the detection of fraud. This certificate is designed for the business major who does not have extensive hands-on technology background, but has experience in a managerial or other senior-level position and needs an understanding of information security issues and processes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
<td>4</td>
</tr>
<tr>
<td>ACTG 152</td>
<td>ACCOUNTING II - MANAGERIAL</td>
<td>1</td>
</tr>
<tr>
<td>ACTG 253</td>
<td>FORENSIC ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>CISS 252</td>
<td>IT SECURITY CONCEPTS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 120</td>
<td>CYBER-FOREN CYBER CRIME THE LAW</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Hours 20

1 Indicates that this course has a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester OR any course that would result in an accumulation of 13 or more credit hours.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a degree program to gain employment in a business-related field.

Program Contact(s):
Doug Huber
440-366-4785
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/computer-security/computer-information-systems-information-security-for-business-short-term-certificate/)

Computer Information Systems - Mobile Device Application Development, Short-Term Technical Certificate

Curriculum Code #6619
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The short-term technical certificate in mobile device application development prepares students to design and develop applications for modern mobile computing platforms including the iPhone/iPad and Android phones and tablets. Students also learn to write web-based applications specifically targeted at mobile devices. A course in entrepreneurship is included to promote the entrepreneurial aspect of mobile application development. The credits earned for this certificate may be applied to an associate of applied business degree in mobile device application development.

This certificate is designed for those with previous professional software development experience (including web design) or those with an existing AAB or BS degree that includes significant coursework in programming (Java, C#, or C++) and web design. The prerequisite courses for the courses in this certificate are met by those students already holding an AAB degree in software development or web development from Lorain County Community College. All other students will be required to fulfill the prerequisite requirements by either taking the prerequisite courses or by requesting prerequisite waivers for the missing courses and providing evidence of past education or experience to satisfy those prerequisites.

First Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 264</td>
<td>INTRODUCTION TO ANDROID PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>CISS 268</td>
<td>MOBILE WEB DEVELOPMENT</td>
<td>4</td>
</tr>
<tr>
<td>ENTR 200</td>
<td>ENTREPRENEURSHIP</td>
<td>3</td>
</tr>
</tbody>
</table>

Hours 10

Second Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CISS 260</td>
<td>INTRODUCTION TO IPHONE/IPAD PROGRAMMING</td>
<td>4</td>
</tr>
<tr>
<td>CISS 266</td>
<td>ADVANCED ANDROID PROGRAMMING</td>
<td>4</td>
</tr>
</tbody>
</table>

Hours 8

Total Hours 18

1 Indicates that this course requires a prerequisite.
2 This course offers an opportunity for experiential learning.

Program Contact(s):
Michael Zellers
440-366-4796
mzellers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
More program information can be found on our website. [https://www.lorainccc.edu/it/programming-and-software-development/mobile-device-application-development-short-term-certificate/]

Program Learning Outcomes

1. Design applications for smart-phone and tablet platforms
2. Learn basic principles in complimentary I.T. areas such as business computer applications, database, operating system, and networking fundamentals

Computer Information Systems - Network Administration, Short-Term Technical Certificate

Curriculum Code #6604

Effective May 2020

Division of Engineering, Business and Information Technologies

The short-term technical certificate network administration provides the certificate holder a foundation in server administration in a Windows server environment. Areas of knowledge covered include but are not limited to: network infrastructure, active directory, server virtualization, server security, fault tolerance, video conferencing, data management and security storage networks. Students will install, configure and maintain file servers, application servers, web servers, email servers, DNS servers and DHCP servers in an integrated and virtualized environment. Certificate is enhanced with exposure to Linux-based servers.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>CISS 161</td>
<td>CISCO CCNA INTRODUCTION TO NETWORK</td>
<td>3</td>
</tr>
<tr>
<td>CISS 227</td>
<td>INTRANET/INTERNET NETWORKING</td>
<td>4</td>
</tr>
<tr>
<td>CISS 245</td>
<td>NETWORK INTEGRATION AND MANAGEMENT</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

1 Indicates that this course has a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

Program Contact(s):

Doug Huber
440-366-4785
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team [https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/].

More program information can be found on our website. [https://www.lorainccc.edu/it/network-systems/computer-information-systems-network-administration-short-term-certificate/]

Computer Information Systems - Network Infrastructure Technology/CCNA, Short-Term Technical Certificate

Curriculum Code #6606

Effective May 2020

Division of Engineering, Business and Information Technologies

The short-term technical certificate in network infrastructure technology provides the certificate holder a foundation in the support and implementation of data communication networks. The certificate demonstrates that the student has developed an understanding and hands-on competence in local area wireless and wide-area network technologies which are deployed throughout the diversity of organizations. Students who have completed the certificate can apply network implementation and troubleshooting skills to converged networks that support voice, video and data while adhering to fundamental security guidelines. Successful completion of the certificate will prepare students to take the Cisco Certified Network Association (CCNA) exam. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CISS 165</td>
<td>CISCO CCNA V7 INTRODUCTION TO NETWORK</td>
<td>3</td>
</tr>
<tr>
<td>CISS 166</td>
<td>CISCO CCNA V7 LOCAL AREA NETWORK OPERATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 167</td>
<td>CISCO CCNA V7 ROUTING AND WIDE AREA NETWORK OPERATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
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<tr>
<td><strong>Total Hours</strong></td>
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</table>

1 Indicates that this course has a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.
information systems degree program to gain employment in an IT-related field.

Program Contact(s):

Doug Huber  
440-366-4785  
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/network-systems/computer-information-systems-network-infrastructure-technologies-ccna-short-term-certificate/)

Computer Information Systems  
- Network Security Foundations, Short-Term Technical Certificate

Curriculum Code #6609

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This short term certificate in network security will provide the certificate holder with essential networking knowledge to understand how networks are built and the potential security risks that are inherent in all networks. The completion of this certificate demonstrates knowledge of network equipment, topology and configuration fundamentals. Students who complete this certificate are well-prepared with the knowledge to pursue a number of cyber security topics.

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 252 IT SECURITY CONCEPTS</td>
<td>4</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 125 OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>3</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Semester III</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 145 LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>4</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester IV</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 251 CYBER DEFENSE METHODS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 165 CISCO CCNA V7 INTRODUCTION TO NETWORKING</td>
<td>3</td>
</tr>
<tr>
<td>CISS 166 CISCO CCNA V7 LOCAL AREA NETWORK OPERATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 167 CISCO CCNA V7 ROUTING AND WIDE AREA NETWORK OPERATIONS</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

1. Indicates that this course has a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester OR any course that would result in an accumulation of 13 or more credit hours.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

Student will need access to free Cisco Academy account, and a minimal cost Infosec Learning account.

Program Contact(s):

Doug Huber  
440-366-4785  
dhuber@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/computer-security/computer-information-systems-network-security-foundations-short-term-certificate/)

1. Describe the role of various network components in building a secure infrastructure.
2. Describe the risk elements that are inherent in an organizations network topology and implementation.
3. Understand the role of a network engineer in building secure networks.

Computer Information Systems - Software Development Fundamentals, Short-Term Technical Certificate

Curriculum Code #6620

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The short-term technical certificate software development fundamentals represents the successful completion of select computer programming courses that prepare the student to develop business computer applications. Emphasis is placed on the very popular Microsoft.NET and JAVA development technologies. Completion of this certificate prepares the student for entry-level software development positions or for further study leading to an associate degree in software development, mobile
device development or web development. It is also especially well-suited for those individuals with experience in "legacy" technologies who wish to upgrade their skills.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>CISS 222</td>
<td>ADVANCED PROGRAMMING IN C# 1</td>
<td>3</td>
</tr>
<tr>
<td>CISS 216</td>
<td>INTRODUCTION TO PROGRAMMING IN JAVA 1</td>
<td>3</td>
</tr>
<tr>
<td>CISS 232</td>
<td>SCRIPTING IN THE CLIENT SERVER ENVIRONMENT 1</td>
<td>3</td>
</tr>
<tr>
<td>CISS 260</td>
<td>INTRODUCTION TO IPHONE/IPAD PROGRAMMING 1</td>
<td>4</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

1 Indicates that this course has a prerequisite.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

Program Contact(s):

Mark Harms
440-366-7023
jharms@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/software-development/computer-information-systems-software-development-fundamentals-short-term-certificate/)

Program Learning Outcomes

1. Design software solutions
2. Develop software programs and components

Computer Information Systems - Web Design Fundamentals, Short-Term Technical Certificate

Curriculum Code #6621

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The short-term technical certificate web design fundamentals represent the successful completion of select web development courses that prepare the student to develop simple web sites. The topics in the coursework include: HTML, XHTML, CSS, XML, JavaScript, server-side scripting languages (PHP, ASP.NET or equivalent), Web 2.0 technologies - such as AJAX basic programming logic, basic web design principles, basic Flash animation, basic image editing, basic audio editing and basic video editing. Completion of this certificate prepares the student for entry-level web design positions or for further study leading to an associate degree in web development. It is also especially well-suited for those individuals with professional experience and/or a degree, especially IT-related, that may want to upgrade their skills to include web design.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
<tr>
<td>CISS 215</td>
<td>MULTIMEDIA FUNDAMENTALS 1</td>
<td>3</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>CISS 232</td>
<td>SCRIPTING IN THE CLIENT SERVER ENVIRONMENT 1</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
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<td>16</td>
</tr>
</tbody>
</table>

1 Indicates that this course has a prerequisite.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

Program Contact(s):

Michael Zellers
440-366-4796
mzellers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/web-development/computer-information-systems-web-design-fundamentals-short-term-certificate/)
principles, basic Flash animation, basic image editing, basic audio editing and basic video editing. Completion of this certificate prepares the student for entry-level web design positions or for further study leading to an associate degree in web development. It is also especially well-suited for those individuals with professional experience and/or a degree, especially IT-related, that may want to upgrade their skills to include web design.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS 1 ¹</td>
<td>3</td>
</tr>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION ¹</td>
<td>3</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C# ¹</td>
<td>4</td>
</tr>
<tr>
<td>CISS 215</td>
<td>MULTIMEDIA FUNDAMENTALS ¹</td>
<td>3</td>
</tr>
<tr>
<td>CISS 216</td>
<td>WEB DEVELOPMENT ¹</td>
<td>3</td>
</tr>
<tr>
<td>CISS 232</td>
<td>SCRIPTING IN THE CLIENT SERVER ENVIRONMENT ¹</td>
<td>3</td>
</tr>
<tr>
<td>CISS 243</td>
<td>WEB DATABASE INTEGRATION ¹</td>
<td>4</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

¹ Indicates that this course has a prerequisite.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer information systems degree program to gain employment in an IT-related field.

Program Contact(s):

Michael Zellers
440-366-4796
mzellers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/web-development/computer-information-systems-web-programming-fundamentals-short-term-certificate/)

Program Learning Outcomes

1. Create effective back end code including database interactivity for web based applications

Construction Technology - Construction and Renovation Tradesman, Short-Term Technical Certificate

Curriculum Code #6175

Effective May 2020

Division of Engineering, Business and Information Technologies
(p. 68)

The construction and renovation tradesman short-term general certificate is designed to provide students with the knowledge, cognitive skills and hands-on skills necessary to perform in an entry-level construction position. Employment opportunities exist in a variety of residential construction companies. Every course in the short-term technical certificate program can be applied to the two-year associate of applied science degree in construction technology. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 121</td>
<td>CONSTRUCTION DOCUMENT READING</td>
<td>3</td>
</tr>
<tr>
<td>CNST 122</td>
<td>INTRODUCTION TO CARPENTRY</td>
<td>4</td>
</tr>
<tr>
<td>CNST 123</td>
<td>INTRODUCTION TO ELECTRICAL WIRING</td>
<td>2</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ¹</td>
<td>1</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNST 120</td>
<td>INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING</td>
<td>2</td>
</tr>
<tr>
<td>CNST 124</td>
<td>INTRODUCTION TO PLUMBING</td>
<td>2</td>
</tr>
<tr>
<td>Construction Elective ²</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Hours</td>
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<td>6</td>
</tr>
</tbody>
</table>

¹ A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

² Indicates that a student may substitute Work-Based Learning (CNST 287, CNST 288, and/or CNST 289) for one or more credit hours for this elective. Please make an appointment with your advisor for assistance.

Program Contact(s):

Laura Cosgriff
440-366-7022
lcosgriff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/construction/construction-renovation-tradesman-short-term-certificate/)

Customer Service, Short-Term Technical Certificate

Curriculum Code #0001

Effective May 2020

Division of Engineering, Business and Information Technologies
(p. 68)

The customer service short-term technical certificate will provide participants with the knowledge and skills needed to work in a growing
field and to effectively deal with the public as customers. Customer service positions are found in many areas of business including manufacturing, banking, retail stores, tourism and hospitals. Completion of this short-term technical certificate may be applied to fulfill partial requirements in a variety of majors for the associate of applied business degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER CURRICULUM</td>
<td></td>
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</tr>
<tr>
<td>BADM 211</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 113</td>
<td>PRINCIPLES OF SELLING</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 211</td>
<td>APPLIED MARKETING ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>MKRG 245</td>
<td>SOCIAL MEDIA MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>Total Hours</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

1. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

Program Contact(s):

Maria McConnell
440-366-7404
mcconnel@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/customer-service/)

CyberSecurity Bootcamp I - Cybersecurity Specialist, Short-Term Technical Certificate

Curriculum Code #6475

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The Cybersecurity Short Term Technical certificate provides a foundation in computing technology, information assurance, cybercrime investigation, ethical hacking and countermeasures, digital forensics, software exploitation, data integrity, risk assessment and mitigation techniques. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CMNW 101</td>
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<tr>
<td>CMNW 120</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 145</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>13</td>
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</tbody>
</table>

1. Indicates that this course requires a college level prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

Program Contact(s):

Lawrence Atkinson
440-366-7050
latkinso@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Program Learning Outcomes

1. Implement cyber security goals, metrics, and safeguards consistent with industry best practices.
2. Conduct security assessments to identify vulnerabilities in critical infrastructure systems.
3. Evaluate a variety of cybersecurity tools.

Electronic Engineering Technology - Computer Maintenance and Networking, Short-Term Technical Certificate

Curriculum Code #6003

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer maintenance and networking (CMNW) short-term technical certificate is designed to provide the student with the knowledge and practical skills necessary for entry-level employment in the areas of installation, upgrading and maintaining personal computer systems and networks. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Hours</th>
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<tr>
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Fall Semester

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<tr>
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<td>3</td>
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</table>


CMNW 145 NETWORK INSTALLATION/DIAGNOSTICS 4
SDEV 101 COLLEGE 101 1 1

Hours 12

Spring Semester
CMNW 201 A+ CERTIFICATION PREP II 2 4
CMNW 241 ADVANCED COMPUTER AND NETWORK DIAGNOSTICS 2 5

Hours 9
Total Hours 21

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in accumulation of 13 or more credit hours.
2 Indicates that this course requires a prerequisite.

Program Contact(s):
Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/it/hardware-maintenance-and-information-systems-support/computer-maintenance-networking-short-term-certificate/)

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.

2. An ability to function effectively as a member of a technical team.

Engineering Technology - General Technician, Short-Term Technical Certificate

Curriculum Code #6050

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The general technician short term technical certificate is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level technician. The graduate will repair, test, adjust, operate or install engineering equipment. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 241</td>
<td>ADVANCED COMPUTER AND NETWORK DIAGNOSTICS</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Hours 21

Indicates that this course requires a prerequisite.

This course offers an opportunity for experiential learning.

Program Contact(s):
Glenn Vasiloff
440-366-7009
gvasilof@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

General Business Administration - Short-Term Technical Certificate

Curriculum Code #0027

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This short-term technical certificate in general business administration offers opportunities for individuals to learn about and develop some of the basic skills that may be utilized in business administration. Completion of this short-term technical certificate in general business administration may be applied to fulfill some of the core requirements of each major covered under the business administration associate of applied business degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>ACTG 151</td>
<td>ACCOUNTING I - FINANCIAL</td>
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<td>BADM 165</td>
<td>LEGAL ENVIRONMENT OF BUSINESS</td>
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</tr>
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<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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</table>

SEMESTER CURRICULUM
Government/Not-for-Profit Accounting Specialist, Short-Term Technical Certificate

Curriculum Code #0035

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The Government/Not-for-Profit Accounting Specialist Short-Term Technical Certificate prepares the certificate holder for employment in an entry level position. These skills can be used to perform fund accounting functions in various not-for-profit environments. Short-term Certificates contain basic academic and technical courses that are designed for entry-level employment situations. Some occupations or employers require an associate degree or higher.

Program Contact(s):

Tony Cioffi
440-366-7409
acioffi@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/accounting/)

Program Learning Outcomes

1. Formulate professional opinions and guidance by analyzing both financial and non-financial data using critical thinking skills within ethical guidelines and standards.

Industrial Safety Technology/Technician - General Safety, Short-Term Technical Certificate

Curriculum Code #6700

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial safety technology/technician prepares individuals to assist engineers and other professionals in implementing and enforcing industrial safety standards. The graduate will be prepared for a wide range of positions in the areas of occupational and industrial safety. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Program Learning Outcomes

1. Formulate professional opinions and guidance by analyzing both financial and non-financial data using critical thinking skills within ethical guidelines and standards.
IT Fast Track, Short-Term Technical Certificate

Curriculum Code #6005
(Not offered 2020-2021)

Division of Engineering, Business and Information Technologies (p. 68)

The short-term technical certificate along with NCIS 249 Network+ and Microsoft certified technical specialist training in non-credit, continuing education provides the certificate holder a foundation in IT Support. The certificate plus aforementioned non-credit courses demonstrates that the student has developed an understanding of basic hardware, software, operating systems and networking. Students who have completed the certificate can apply coursework toward various LCCC associate degrees. Successful completion of the certificate and non-credit coursework will assist in the preparation to take A+, Network+ and Microsoft certified technical specialist certifications. Contact the Business division’s continuing education representative for admission into the program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 125</td>
<td>OPERATING SYSTEM INTERFACES</td>
<td>3</td>
</tr>
<tr>
<td>CISS 145</td>
<td>LOCAL AREA NETWORKS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 101</td>
<td>A+ CERTIFICATION PREPARATION</td>
<td>4</td>
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<tr>
<td>CMNW 201</td>
<td>A+ CERTIFICATION PREP II</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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<tr>
<td>SDEV 104</td>
<td>JOB SEARCH STRATEGIES</td>
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Total Hours: 20

1 Indicates that this course requires a prerequisite or may be taken concurrently.

Manufacturing Engineering Technology - Computer Aided Design, Short-Term Technical Certificate

Curriculum Code #6002
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The computer aided design (CAD) short-term technical certificate recognizes the student who has completed a core group of CAD and CAD-related courses. This collection of courses will provide the student with specialized knowledge and skills to be prepared for entry-level employment in a variety of industries that utilize CAD. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester
Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CADD 111</td>
<td>INTRODUCTION TO COMPUTER AIDED DRAFTING</td>
<td>2</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
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Total Hours: 8

Spring Semester

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 212</td>
<td>INTRODUCTION TO CREO PARAMETRIC (PRO/ENGINEER)</td>
<td>3</td>
</tr>
<tr>
<td>CADD 213</td>
<td>INTRODUCTION TO SOLIDWORKS</td>
<td></td>
</tr>
<tr>
<td>CADD 214</td>
<td>INTRODUCTION TO INVENTOR</td>
<td>3</td>
</tr>
<tr>
<td>CADD 235</td>
<td>DETAILING AND DIMENSIONING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 131</td>
<td>MANUFACTURING PROCESSES</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 9

1 Indicates that this course requires a prerequisite or may be taken concurrently.
A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course requires a prerequisite.

Program Contact(s):
Glenn Vasiloff
440-366-7009
gvasilof@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/computer-aided-design-short-term-certificate/)

Manufacturing Engineering Technology - Computer Aided Machining/Manufacturing Processes, Short-Term Technical Certificate
Curriculum Code #6012
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

Computer aided machining/manufacturing processes (CAM) short-term technical certificate is designed to provide the student with the knowledge and practical skills necessary for entry-level employment in the manufacturing processes/computer numerical control field. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CAMM 111 INTRO TO COMPUTER NUMERICAL CONTROL 1</td>
<td>2</td>
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<tr>
<td>SDEV 101 COLLEGE 101 2</td>
<td>1</td>
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<tr>
<td>TECN 111 TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 115 INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
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<tr>
<td>TECN 131 MANUFACTURING PROCESSES I 3</td>
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<tbody>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
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<tr>
<td>ELCT 111 ELECTRICAL CIRCUITS I</td>
<td>3</td>
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<tr>
<td>ENGR 120 INTRODUCTION TO ENGINEERING</td>
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<td>SDEV 101 COLLEGE 101 1</td>
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<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CAMM 215 ADVANCED CNC MILLING MACHINES 1</td>
<td>3</td>
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<tr>
<td>or CAMM 225 or ADVANCED CNC LATHES</td>
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<tr>
<td>TECN 132 MANUFACTURING PROCESSES II 1</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AETC 121 PROGRAMMABLE LOGIC CONTROLLERS</td>
<td>3</td>
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<tr>
<td>ELCT 223 ELECTRICAL BLUEPRINT READING</td>
<td>2</td>
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<tr>
<td>TECN 133 MECHANICAL SYSTEMS</td>
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Fall Semester Hours: 19

Indicates that this course requires a prerequisite.

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that course requires a prerequisite or may be taken concurrently.

Program Contact(s):
Phil Hashier
440-366-7018
phashier@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/computer-aided-machiningmanufacturing-process-short-term-certificate/)

Manufacturing Engineering Technology - Industrial Electrical Technician, Short-Term Technical Certificate
Curriculum Code #6015
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial electrical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level electrical maintenance technician. The graduate will repair, test, adjust, or install electronic equipment. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
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<tr>
<td>ELCT 111 ELECTRICAL CIRCUITS I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 120 INTRODUCTION TO ENGINEERING</td>
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<td>SDEV 101 COLLEGE 101 1</td>
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<table>
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<th>Hours</th>
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<tbody>
<tr>
<td>AETC 121 PROGRAMMABLE LOGIC CONTROLLERS</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 223 ELECTRICAL BLUEPRINT READING</td>
<td>2</td>
</tr>
<tr>
<td>TECN 133 MECHANICAL SYSTEMS</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMM 111 INTRO TO COMPUTER AIDED DRAFTING 1</td>
<td>2</td>
</tr>
<tr>
<td>CAMM 215 ADVANCED CNC MILLING MACHINES 1</td>
<td>3</td>
</tr>
<tr>
<td>or CAMM 225 or ADVANCED CNC LATHES</td>
<td></td>
</tr>
<tr>
<td>TECN 132 MANUFACTURING PROCESSES II 1</td>
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<tr>
<td></td>
<td></td>
</tr>
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<td>Total Hours</td>
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</table>
A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):
David Astorino
440-366-7215
dastorin@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/industrial-electrical-technician-short-term-certificate/)

Manufacturing Engineering Technology - Industrial Internet of Things (IIOT), Short Term Technical Certificate

Curriculum Code #6241

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

This short term certificate provides the student with a quality, relevant technical education and applied technical training in the basic installation, building, operation, maintenance, and selection of Industrial Internet of Things (IIoT) devices and systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AETC 121</td>
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<tr>
<td>CYBR 110</td>
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<td>IIOT 120</td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>IIOT 130</td>
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<tr>
<td>IIOT 140</td>
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<td>IIOT 220</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td>12</td>
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</table>

Total Hours 25

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course has a prerequisite or may be taken concurrently.

Program Contact(s):
Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Communicate IIoT concepts and applicability, in technical and non-technical environments
2. Function effectively as a member of a technical team

Manufacturing Engineering Technology - Industrial Mechanical Technician, Short-Term Technical Certificate

Curriculum Code #6016

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The industrial mechanical technician program is designed to provide students with the knowledge and skills necessary for the competent performance as an entry-level mechanical maintenance technician. The graduate will be able to perform journeyman level work in installing, repairing, maintaining, and testing of mechanical systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ELCT 124</td>
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<tr>
<td>SDEV 101</td>
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<tr>
<td>WTEC 108</td>
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<td>WTEC 111</td>
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<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECN 115</td>
<td>2</td>
</tr>
<tr>
<td>TECN 131</td>
<td>3</td>
</tr>
<tr>
<td>TECN 133</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Total Hours 16

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course has a prerequisite or may be taken concurrently.
Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/manufacturing-engineering/industrial-mechanical-technician-short-term-certificate/)

Manufacturing Engineering Technology - Quality Inspector - Short-Term Technical Certificate

Curriculum Code #6004

Division of Engineering, Business and Information Technologies (p. 68)

The quality assurance short-term technical certificate is designed to provide students with the knowledge and applied skills necessary for an entry-level employment in a manufacturing related business or industry as a quality inspector, production process control or gauge control technician, or quality corrective action analyst. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHM 121 or MTHM 168</td>
<td>TECHNICAL MATHEMATICS I or STATISTICS</td>
<td>3-4</td>
</tr>
<tr>
<td>QLTY 111</td>
<td>QUALITY MEASUREMENTS - METROLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>2</td>
</tr>
<tr>
<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Hours:** 12-13

### Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>QLTY 122</td>
<td>BASIC QUALITY TOOLS AND APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>TECN 245</td>
<td>GEOMETRIC DIMENSIONING AND TOLERANCING</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Hours:** 17-18

1. Indicates that this course has a prerequisite or may be taken concurrently.
2. Indicates that this course requires a prerequisite or may be taken concurrently.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Laura Cosgriff
440-366-7022
lcosgriff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Manufacturing Engineering Technology - Right Skills Now, Short-Term Technical Certificate

Curriculum Code #6031

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The Right Skills Now program is designed to provide students with the knowledge, skills and competencies necessary to perform as an entry-level CNC technician. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

### First Year

#### First Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMM 111</td>
<td>INTRO TO COMPUTER NUMERICAL CONTROL</td>
<td>2</td>
</tr>
<tr>
<td>SAFE 105</td>
<td>OSHA GENERAL SAFETY 10 HR</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 104</td>
<td>JOB SEARCH STRATEGIES</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Hours:** 15

1. Indicates that this course requires a prerequisite.
2. Indicates that this course requires a prerequisite or may be taken concurrently.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Glenn Vasiloff

This certificate requires completion of the two (2) non-credit courses listed below:

1. NQUA 101 - Quality Basics
2. NTEC 115A - NIMS Exam Prep
For information about admissions, enrollment, transfer, graduation and other general questions, please contact your Advising and Counseling Team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/). (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)

More program information can be found on our website. (https://www.lorainccc.edu/engineering/right-skills-now-short-term-technical-certificate/)

**Mechatronics Technology - Micro-Electromechanical Systems, Short-Term Technical Certificate**

Curriculum Code #6500

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The micro-electromechanical systems (MEMS) short-term technical certificate is structured to provide students with the knowledge and skills necessary to work as an entry-level technician. Training is provided in the fundamental concepts of micro-electromechanical systems and how these devices are designed and fabricated. The student will learn and apply principles in actual clean room activities. The program will utilize state-of-the-art laboratory facilities containing equipment for testing, troubleshooting, calibrating, analyzing and designing electronic and MEMS systems. Every course in the short-term technical certificate can be applied to the two-year associate of applied science degree in the MEMS major of the mechatronics program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ELCT 111</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELCT 115</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MEMS 122</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MTHM 121</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>SDEV 101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>TECN 111</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

1. Indicates that this course has a prerequisite.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 more credit hours.

Program Contact(s):

Johnny Vanderford

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/mechatronics/micro-electromechanical-systems-mems-short-term-certificate/)

**Program Learning Outcomes**

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline of microelectronics and MicroElectroMechanical Systems (MEMS).
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline of microelectronics and MEMS.
3. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results.

**Objectives**

An accreditable program will prepare graduates with technical skills necessary for entry into industry of the manufacturing, inspecting, testing, rework, and troubleshooting of PCB and related microelectronic products. Graduates of the one year certificate are expected to use introductory skills and techniques in the knowledge of equipment operations, assembly, testing, and troubleshooting of prototyping a PCB and associated microelectronic components.

**Program Educational Objectives**

1. Use technical skills, techniques, tools and equipment in the field of microelectronics and Microsystems.
2. Recognize industry standard terminology materials and processes related to microelectronic manufacturing.
3. Assemble and perform verifications such as inspection, testing, and rework of functioning printed circuit boards.

**Real Estate Short-Term Technical Certificate**

Curriculum Code #0231

Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)
This short-term technical certificate in real estate offers opportunities for individuals to learn about and develop some of the basic knowledge and skills required for the State of Ohio Real Estate Salesperson’s License. Completion of this Short-Term Certificate in Real Estate may be applied to fulfill some of the course requirements of this major covered under the Associate of Applied Business. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

**First Year**

**Semester I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>ECNM 151</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 111</td>
<td>REAL ESTATE PRINCIPLES &amp; PRACTICES</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 112</td>
<td>REAL ESTATE LAW</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 115</td>
<td>REAL ESTATE FINANCE</td>
<td>1</td>
</tr>
<tr>
<td>FNCE 118</td>
<td>REAL ESTATE APPRAISAL</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Hours**: 18

---

* A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

---

**Spring Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 212</td>
<td>SPREADSHEET APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ACTG 268</td>
<td>FEDERAL INCOME TAX PROCEDURES-BUSINESS ENTITIES</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours**: 7

---

* A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

---

Program Contact(s):

**Tony Cioffi**  
440-366-7409  
acioffi@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/business-programs/real-estate/)

**Tax Specialist, Short-Term Technical Certificate**

Curriculum Code #0037  
Effective May 2020  
Division of Engineering, Business and Information Technologies (p. 68)

The Tax Specialist Certificate prepares graduates for employment in tax preparation in the public, private and governmental sectors. The certificate integrates software and technology with tax theory.

Short-term Certificates contain basic academic and technical courses that are designed for entry-level employment situations. Some occupations or employers require an associate degree or higher.

---

**Welding Technology - Advanced Welding, Short-Term Technical Certificate**

Curriculum Code #6011  
Effective May 2020  
Division of Engineering, Business and Information Technologies (p. 68)

The welding short-term technical certificate recognizes the student who has completed a core group of welding courses. This collection of courses will provide the student with specialized knowledge and skills...
to be prepared for entry-level employment in a variety of industries that utilize advanced welding positions and processes. Students that excel in the program may be qualified to take certain welding certification tests. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTEC 108</td>
<td>2</td>
</tr>
<tr>
<td>OXY-FUEL WELDING AND CUTTING ¹</td>
<td></td>
</tr>
<tr>
<td>WTEC 111</td>
<td>2</td>
</tr>
<tr>
<td>WELDING SPECIFICATIONS/PRINT READING</td>
<td></td>
</tr>
<tr>
<td>WTEC 116</td>
<td>3</td>
</tr>
<tr>
<td>BASIC SHIELDED METAL ARC WELDING ¹</td>
<td></td>
</tr>
<tr>
<td>WTEC 216</td>
<td>3</td>
</tr>
<tr>
<td>WIRE FED PROCESSES ²</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester II</td>
<td>Hours</td>
</tr>
<tr>
<td>WTEC 212</td>
<td>4</td>
</tr>
<tr>
<td>WELDING FABRICATION, LAYOUT/DESIGN</td>
<td></td>
</tr>
<tr>
<td>WTEC 217</td>
<td>3</td>
</tr>
<tr>
<td>GAS TUNGSTEN ARC WELDING ²</td>
<td></td>
</tr>
<tr>
<td>WTEC 219</td>
<td>3</td>
</tr>
<tr>
<td>ADVANCED ARC WELDING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Total Hours</td>
<td>20</td>
</tr>
</tbody>
</table>

¹ Indicates that this course requires a prerequisite or may be taken concurrently.
² Indicates that this course requires a prerequisite.
³ Indicates that a student may substitute work-based learning (WTEC 287, WTEC 288, and/or WTEC 289) for the equivalent number of credit hours for this course.

Note: This program can be taken as part of the Boilermakers training program. Welding Technology (WTEC) courses should be taken under the subject code of Boilermakers (BMKR).

Program Contact(s):

Hikmat Chedid
440-366-7017
hchodid@lorainccc.edu

Larry Waller
440-366-7030
lwaller@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/advanced-welding-short-term-technical-certificate/)

Welding Technology - Basic Welding, Short-Term Technical Certificate

Curriculum Code #6006
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)

The welding short-term technical certificate recognizes the student who has completed a core group of welding courses. This collection of courses will provide the student with specialized knowledge and skills to be prepared for entry-level employment in a variety of industries that utilize welding. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDEV 102</td>
<td>STRATEGIES FOR CREATING COLLEGE SUCCESS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 104</td>
<td>JOB SEARCH STRATEGIES</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>WTEC 111</td>
<td>WELDING SPECIFICATIONS/PRINT READING</td>
<td>2</td>
</tr>
<tr>
<td>WTEC 112</td>
<td>WELDING CODES AND STANDARDS ¹</td>
<td>2</td>
</tr>
<tr>
<td>WTEC 116</td>
<td>BASIC SHIELDED METAL ARC WELDING ²</td>
<td>3</td>
</tr>
<tr>
<td>WTEC 216</td>
<td>WIRE FED PROCESSES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>17</td>
</tr>
</tbody>
</table>

¹ Indicates that this course has a prerequisite.
² Indicates that this course requires a prerequisite or may be taken concurrently

Note: This program can be taken as part of the Boilermakers training program. Welding Technology (WTEC) courses should be taken under the subject code of Boilermakers (BMKR).

Program Contact(s):

Hikmat Chedid
440-366-7017
hchodid@lorainccc.edu

Larry Waller
440-366-7030
lwaller@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/welding/basic-welding-short-term-certificate/)

Welding Technology - Welding, Short-Term Technical Certificate

Curriculum Code #6009
Effective May 2020

Division of Engineering, Business and Information Technologies (p. 68)
The welding short-term technical certificate recognizes the student who has completed a core group of welding courses. This collection of courses will provide the student with specialized knowledge and skills to be prepared for entry-level employment in a variety of industries that utilize welding. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>WTEC 108</td>
<td>OXY-FUEL WELDING AND CUTTING</td>
<td>2</td>
</tr>
<tr>
<td>WTEC 111</td>
<td>WELDING SPECIFICATIONS/PRINT READING</td>
<td>2</td>
</tr>
<tr>
<td>WTEC 116</td>
<td>BASIC SHIELDED METAL ARC WELDING</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 17

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTEC 216</td>
<td>WIRE FED PROCESSES</td>
<td>3</td>
</tr>
<tr>
<td>WTEC 217</td>
<td>GAS TUNGSTEN ARC WELDING</td>
<td>3-4</td>
</tr>
<tr>
<td>or WTEC 212</td>
<td>or WELDING FABRICATION, LAYOUT/DESIGN</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 6-7

Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTEC 112</td>
<td>WELDING CODES AND STANDARDS</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Hours: 2

Total Hours: 19-20

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course requires a prerequisite or may be taken concurrently.

3 Indicates that this course requires a prerequisite.

Note: This program can be taken as part of the Boilermakers training program. Welding Technology (WTEC) courses should be taken under the subject code of Boilermakers (BMKR).

Program Contact(s):

Hikmat Chedid
440-366-7017
hchedid@lorainccc.edu

Larry Waller
440-366-7030
lwaller@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/engineering/welding/welding-technology-short-term-certificate/)
More program information can be found on our website. (https://www.lorainccc.edu/engineering/welding-visual-inspection-short-term-technical-certificate/)

Division of Enrollment, Financial and Career Services
Division Offices: LC102
Division Telephone: 440-366-4032

Short-Term General Certificate
 • Success Coaching and Mentoring #8100 (p. 161)

Success Coaching and Mentoring Certificate, Short-Term General Certificate
Curriculum Code #8100
Effective May 2020
Division of Enrollment, Financial and Career Services (p. 161)

The coaching and mentoring short-term certificate prepares the certificate holder for employment as a coach and mentor in higher education, non-profit and private industries. Typical jobs would include student success coach, business coaching, life coaching, and career coaching and organizational mentoring. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 104</td>
<td>JOB SEARCH STRATEGIES</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 111</td>
<td>SUCCESS COACHING AND MENTORING I</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 112</td>
<td>SUCCESS COACHING AND MENTORING II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
2 Indicates that this course has a prerequisite.

This short-term general certificate contains basic academic and technical courses that are designed for entry-level employment situations. Some occupations or employers require an associate degree or higher.

Program Contact(s):
Wendy Stone Scott
440-366-7742
wstonesc@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/success-coaching-and-mentoring-short-term-general-certificate/)

Division of Health and Wellness Sciences
Allied Health Offices: HS 223
Allied Health Telephone: 440-366-4015
Health, Physical Education and Recreation Offices: PE 104
Health, Physical Education and Recreation Telephone: 440-366-4028

Associate of Applied Science Degree Programs
 • Associate Degree Nursing (RN) #2400 (p. 162)
 • Clinical Laboratory Science Technology #2406 (p. 163)
 • Dental Hygiene #2409 (p. 164)
 • Diagnostic Medical Sonography #2402 (p. 167)
 • Fire Science #2072 (p. 170)
 • Medical Assisting Administrative Focus #2143 (p. 171)
 • Medical Assisting Clinical Focus #2142 (p. 172)
 • Occupational Therapy Assistant #2420 (p. 173)
 • Physical Therapist Assisting #2411 (p. 175)
 • Radiologic Technology #2045 (p. 176)
 • Sports and Fitness Management #3002 (p. 177)
 • Surgical Technology #2407 (p. 179)

One-Year Technical and General Certificates
 • Activities Director #3009 (p. 180)
 • Emergency Medical Services – Paramedic #2116 (p. 181)
 • Medical Assisting #2006 (p. 182)
 • Personal Trainer #3003 (p. 182)
 • Practical Nursing #2091 (p. 183)
 • Sterile Processing #2105 (p. 184)

Short-Term Technical and General Certificates
 • Emergency Medical Services #2114 (p. 185)
 • Group Exercise Instructor #3004 (p. 185)
 • Health & Wellness Coaching & Promotion #3030 (p. 186)
 • Phlebotomy #2241 (p. 186)
 • Sterile Processing #2103 (p. 187)
 • Wellness #3005 (p. 188)

Certificate of Completion
 • State Tested Nurse Aide (STNA) #C201 (p. 188)
The associate degree nursing program prepares graduates to function as registered nurses in hospitals, nursing homes and other health care agencies. Registered nurses promote health for clients through hygienic care; teaching; assessment of body systems; implementation of the nursing process, including treatment modalities ordered by the physician; and rehabilitative care. Upon completion of the program, the graduate is eligible to take the NCLEX examination for licensure as a registered nurse. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Note: LPNs and Paramedics will be given prior learning credit and advanced placement for the ADN Degree.

<table>
<thead>
<tr>
<th>Preadmission Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 121 ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
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<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168 STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
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<tr>
<td>SDEV 101 COLLEGE 101</td>
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| Hours | 14 |

<table>
<thead>
<tr>
<th>Semester II</th>
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<tbody>
<tr>
<td>BIOG 122 ANATOMY AND PHYSIOLOGY II</td>
</tr>
<tr>
<td>NURS 123 PHARMACOLOGY I</td>
</tr>
<tr>
<td>NURS 120 NURSING CONCEPTS I</td>
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| Hours | 14 |

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<thead>
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<th>Semester III</th>
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<tbody>
<tr>
<td>ALHN 112 INTRO TO MEDICAL TERMINOLOGY</td>
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<tr>
<td>NURS 122 NURSING CONCEPTS II</td>
</tr>
<tr>
<td>NURS 124 PHARMACOLOGY II</td>
</tr>
<tr>
<td>NURS 224 BEHAVIORAL HEALTH NURSING</td>
</tr>
<tr>
<td>PSYH 251 HUMAN GROWTH AND DEVELOPMENT</td>
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| Hours | 12 |

<table>
<thead>
<tr>
<th>Semester IV</th>
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<tbody>
<tr>
<td>CHMY 161 GENERAL, ORGANIC AND BIOCHEMISTRY</td>
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<tr>
<td>NURS 116 MATERNAL-NEWBORN NURSING</td>
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<tr>
<td>NURS 119 CONCEPTS IN PEDIATRIC NURSING</td>
</tr>
<tr>
<td>NURS 221 NURSING CONCEPTS III</td>
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<td>NURS 223 PHARMACOLOGY III</td>
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| Hours | 12 |

<table>
<thead>
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<th>Semester V</th>
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</thead>
<tbody>
<tr>
<td>BIOG 251 GENERAL MICROBIOLOGY</td>
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<tr>
<td>NURS 222 NURSING CONCEPTS IV</td>
</tr>
<tr>
<td>NURS 225 MANAGER OF CARE/CAPSTONE</td>
</tr>
</tbody>
</table>

| Hours | 13 |

Note: LCCC offers its Accreditation Commission for Education in Nursing (ACEN) accredited associated degree nursing (ADN) program at the BGSU-Firelands College campus providing nursing education to the Huron, Ottawa, Erie and Sandusky county residents. The satellite program provides the opportunity for residents of the area to earn the associate of applied science degree in nursing from LCCC. All support courses taken at Firelands College will transfer to LCCC. The clinical courses are offered at regional health care agencies.

Program Contact(s):
Dr. Mary Grady
440-366-4177
mgrady@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/nursing/associate-degree-in-nursing-rn/)

**Admission Requirements for Associate Degree Nursing**

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. GPA of 2.5 or higher on all completed college-level coursework (includes transfer/transient courses).
3. Have completed BIOG 121 with a grade of C or better.
4. Have completed ENGL 161 with a grade of C or better.
5. Have completed PSYH 151 or equivalent with a grade of C or better.
6. Have completed MTHM 168 or equivalent with a grade of C or better.
7. Obtain a score of PROFICIENT on the ATI TEAS Exam.
8. Recognized state tested nursing assistant (STNA) status

Learn more about Allied Health program requirements (p. 50)

For the LPN to RN and the Paramedic to RN pathways see list of entry requirements below:

**Advanced Placement Nursing Program (LPN TO RN)**

This program allows licensed practical nurses advanced placement in the associate degree nursing (RN) program. Through this program, the
licensed practical nurse will receive credit for prior nursing coursework, thereby eliminating excessive course repetition.

Admission Requirements for Advanced Placement Nursing Program (LPN to RN):
1. Be a graduate of a state board approved practical nursing program.
2. Be licensed as an LPN in the United States or U.S. territory without restrictions or conditions.
3. Have completed all practical nursing courses with a grade of C or better.
4. GPA of 2.5 or higher on all completed college-level coursework (includes transfer/transient courses).
5. Have completed ENGL 161 with a grade of C or better.
6. Have completed BIOG 121 with a grade of C or better.
7. Have completed MTHM 168 or equivalent with a grade of C or better.
8. Have completed MTHM 168 or equivalent with a grade of C or better.
9. Obtain a score of PROFICIENT on the ATI TEAS Exam.
10. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records Office.

Once admission requirements have been completed, students are eligible to register for NURS 101 ADVANCED PLACEMENT LPN TO RN. Upon successful completion with a grade of C or better of NURS 101 students will be given credit for NURS 120 NURSING CONCEPTS I, NURS 123 PHARMACOLOGY I. The Accelerated students will substitute NURS 116 MATERNAL-NEWBORN NURSING and NURS 119 CONCEPTS IN PEDIATRIC NURSING with NURS 138 MATERNAL-PEDIATRIC NURSING which is a blended course with no required clinical practice. The remainder of the support courses must be completed as REQUIRED in the associate degree nursing program NURS 101 may not be repeated if failed.

Advanced Placement Paramedic to RN Program
The paramedic to RN program allows certified paramedics advanced placement in the associate degree nursing (RN) program. Through this program, the certified paramedic will receive credit for prior paramedic coursework, thereby eliminating excessive course repetition.

Admission Requirements for the Advanced Placement Paramedic to RN program:
1. Be a graduate of an approved EMT-paramedic program.
2. Be certified as an EMT-paramedic through the Ohio Department of Public Safety Division of Emergency Medical Services.
3. GPA of 2.5 or higher on all completed college-level coursework (includes transfer/transient courses).
4. Have completed BIOG 121 with a grade of C or better.
5. Have completed ENGL 161 with a grade of C or better.
6. Have completed MTHM 168 or equivalent with a grade of C or better.
7. Have completed MTHM 168 or equivalent with a grade of C or better.
8. Obtain a score of PROFICIENT on the ATI TEAS Exam.
9. Submit verification of two years of employment as a paramedic.
10. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records Office.

Once admission requirements have been completed, students are eligible to register for transition to NURS 130 ADVANCED PLACEMENT CERTIFIED PARAMEDIC TO RN. Upon successful completion (with a grade of C or better) of NURS 130, students will be given credit for NURS 120 and NURS 123. The remainder of the support courses must be completed as REQUIRED in the associate degree nursing program. NURS 130 may not be repeated if failed.

Program Learning Outcomes
1. Evaluate the role of the patient or designee as the source of control and full partner in providing compassionate and coordinated care based on respect for patient’s preferences, values, and needs (patient centered care)
2. Integrate best current evidence with clinical expertise and patient/family preferences and values for delivery of optimal health care. (EBP)
3. Prioritize data to monitor the outcomes of care processes in order to ensure patient safety and minimize risk of harm.
4. Use information and technology to communicate, manage knowledge, mitigate error, and support decision making. (informatics and technology)
5. Interact effectively with patients and families and within nursing and inter-professional teams, to foster open communication, mutual respect, and shared decision-making, to achieve quality patient care and positive health outcomes, and to enhance patient satisfaction. (communication, teamwork & collaboration)
6. Demonstrate accountability for the delivery of standard-based nursing care consistent with moral, altruistic, legal, ethical, regulatory, and humanistic principles. (leadership & professionalism)

Clinical Laboratory Science Technology, Associate of Applied Science
Curriculum Code #2406
Effective May 2020
Division of Health and Wellness Sciences (p. 161)
The clinical laboratory science technology program at LCCC prepares its graduates for employment in hospital, urgent care, physicians’ office, research and industry laboratory settings. Examination and analysis of body fluids, tissues and cells play a crucial role in a physician’s ability to diagnose and treat disease. The clinical laboratory science technology program trains students to work in various areas of a clinical laboratory, including hematology, urinalysis, immunohematology (blood bank), microbiology and chemistry. Students collect blood samples, work with state-of-the-art clinical laboratory instrumentation, perform chemical and microscope analysis of urine, cross-match blood for transfusion, identify abnormal blood cells under the microscope and identify infectious bacteria-causing infection in various body locations. Upon completion of the accredited program, graduates will possess an associate of applied science degree and are eligible to take the American Society of Clinical Pathologists (ASCP) Board of Certification national certifying examination. Those passing the examination are certified as medical laboratory technicians (MLT-ASCP), Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.
### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOG 161</td>
<td>PRINCIPLES OF BIOLOGY I</td>
<td>4</td>
</tr>
<tr>
<td>CLSC 111</td>
<td>INTRODUCTION TO CLINICAL LABORATORY SCIENCE TECHNOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>CLSC 131</td>
<td>INTRODUCTION TO HEMATOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>CLSC 132</td>
<td>BODY FLUIDS AND URINALYSIS</td>
<td>2</td>
</tr>
<tr>
<td>CLSC 133</td>
<td>HEMATOLOGY I/URINALYSIS CLINICAL PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 162</td>
<td>or BIOG 251 PRINCIPLES OF BIOLOGY II</td>
<td>4</td>
</tr>
<tr>
<td>CLSC 134</td>
<td>ADVANCED HEMATOLOGY AND HEMOSTASIS</td>
<td>2</td>
</tr>
<tr>
<td>CLSC 135</td>
<td>IMMUNOHEMATOLOGY CONCEPTS &amp; PROCEDURES</td>
<td>2</td>
</tr>
<tr>
<td>CLSC 136</td>
<td>HEMATOLOGY II/IMMUNOHEMATOLOGY CLINIC PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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#### Summer Semester

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
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### Second Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHMY 161</td>
<td>GENERAL, ORGANIC AND BIOCHEMISTRY I</td>
<td>4</td>
</tr>
<tr>
<td>CLSC 213</td>
<td>CLINICAL MICROBIOLOGY, IMMUNOLOGY AND SEROLOGY</td>
<td>9</td>
</tr>
<tr>
<td>PHL Y 165</td>
<td>BIOETHICS</td>
<td>3</td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHMY 162</td>
<td>GENERAL, ORGANIC AND BIOCHEMISTRY II</td>
<td>4</td>
</tr>
<tr>
<td>CLSC 221</td>
<td>CLINICAL CHEMISTRY</td>
<td>10</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
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</table>

**Total Hours**: 64

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1. Indicates that this course has a prerequisite.
2. Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 more credit hours.

American Heart Association Healthcare Provider certification is required upon entrance into the program.

Students who expect to continue on for a Baccalaureate degree should consider taking MTHM 171, CHMY 171, CHMY 172, and ENGL 162 and consult with a college advisor.

Program Contact(s):

Cheryl Selvage
440-366-4139
cselvage@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).

More program information can be found on our website. ([https://www.lorainccc.edu/health/clinical-lab-science/](https://www.lorainccc.edu/health/clinical-lab-science/))

### Admission Requirements for Clinical Laboratory Science Technology

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Program application form on file.
3. High school algebra or equivalent.
4. Minimum GPA of 2.0 on all college-level course work (includes transfer/transient work).

Learn more about Allied Health program requirements (p. 50)

### Program Learning Outcomes

1. Patient and quality control test results, recognizing normal, abnormal, and critical values, and take appropriate follow up action when necessary
2. Sufficient technical skill in the use of laboratory information systems to meet the needs of the laboratory
3. Collect and process biological specimens appropriately in the clinical laboratory
4. Perform routine clinical laboratory testing in the Hematology, Immunohematology, Chemistry, Microbiology, Immunology / Serology, and Coagulation areas of the clinical laboratory
5. Operate and maintain laboratory instrumentation in the Hematology, Immunohematology, Chemistry, Microbiology, Immunology / Serology, and Coagulation areas of the clinical laboratory
6. Recognize the clinical significance of laboratory results in the diagnosis and treatment of disease
7. Participate in the appropriate aspects of a laboratory quality assurance program
8. Demonstrate sufficient use of oral and written communication to meet the needs of the laboratory, and patient care
9. Demonstrate a professional attitude in appearance, work ethic, and laboratory safety
10. Demonstrate the performance of routine procedures to students or new employees as assigned by their supervisor
11. Successfully pass a National Certification Exam (ASCP) in Clinical Laboratory Science Technology

### Dental Hygiene, Associate of Applied Science

Curriculum Code #2409

Effective May 2020

Division of Health and Wellness Sciences (p. 161)
The dental hygiene program at LCCC will prepare students to perform dental hygiene services in accordance with the state practice act and reflective of current theory and practice. The student will also be prepared to acknowledge the role of the dental hygienist as a member of the dental health team. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year
Fall Semester
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
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<tr>
<td>CHMY 161</td>
<td>GENERAL, ORGANIC AND BIOCHEMISTRY</td>
<td>4</td>
</tr>
<tr>
<td>DNHY 111</td>
<td>HEAD AND NECK ANATOMY/TOOTH MORPHOLOGY</td>
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<tr>
<td>DNHY 121</td>
<td>DENTAL HYGIENE TECHNIQUES I</td>
<td>4</td>
</tr>
<tr>
<td>DNHY 124</td>
<td>DENTAL RADIOLOGY</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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Spring Semester
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<tr>
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<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOG 122</td>
<td>ANATOMY AND PHYSIOLOGY II</td>
<td>4</td>
</tr>
<tr>
<td>BIOG 251</td>
<td>GENERAL MICROBIOLOGY</td>
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<tr>
<td>DNHY 122</td>
<td>DENTAL HYGIENE TECHNIQUES II</td>
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<tr>
<td>DNHY 125</td>
<td>PERIODONTICS</td>
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<td>DNHY 131</td>
<td>ORAL PATHOLOGY</td>
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<td>DNHY 236</td>
<td>DENTAL HYGIENE PAIN MANAGEMENT I LECTURE</td>
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Summer Semester
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<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 268</td>
<td>CLINICAL NUTRITION</td>
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</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<tr>
<td>DNHY 123</td>
<td>DENTAL MATERIALS</td>
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<tr>
<td>DNHY 133</td>
<td>DENTAL HYGIENE TECHNIQUES III</td>
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<tr>
<td>DNHY 237</td>
<td>DENTAL HYGIENE PAIN MANAGEMENT II LAB</td>
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<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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Second Year
Fall Semester
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<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DNHY 221</td>
<td>DENTAL PHARMACOLOGY</td>
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<tr>
<td>DNHY 224</td>
<td>DENTAL HYGIENE TECHNIQUES IV</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>PHLY 165</td>
<td>BIOETHICS</td>
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Spring Semester
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<tr>
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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DNHY 231</td>
<td>COMMUNITY/DENTAL HYGIENE TRENDS</td>
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</tr>
<tr>
<td>DNHY 235</td>
<td>DENTAL HYGIENE TECHNIQUES V</td>
<td>4</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<td></td>
<td>Total Hours</td>
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</table>

1. Indicates that this course has a prerequisite.
2. Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

American Heart Association Healthcare Provider certification is required upon entrance into the program.

Program Contact(s):
Ihor Suszko
440-366-7196
isuszko@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/dental-hygiene/)

Admission Requirements for Dental Hygiene

All requirements for admission into the Lorain County Community College (LCCC) Dental Hygiene Program must be met before applying to the program. All of the admission requirements must be met and a COMPLETE application must be received before the screening/selection process can be initiated. Incomplete applications may be returned followed by a delay of the screening/selection process.

A COMPLETE application includes the following:

If you are interested in applying to the Dental Hygiene Program, you must:

1. Complete the LCCC Application for Admission (https://www.lorainccc.edu/admissions-and-enrollment/apply-to-lccc/). The LCCC Dental Hygiene Program is a competitive and limited enrollment program; therefore the interested student must apply to LCCC separately AND apply to the Dental Hygiene Program.
3. Complete all program Pre-Admission Requirements as specified on the program check list. (The checklist provides you with information regarding the application requirements and admissions procedures for a particular Health & Wellness program. It can be obtained from an academic advisor.)
4. Meet with an academic advisor (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/) to verify that all requirements have been fulfilled. Upon verification of requirements, you may then file a Program Application.

Completed program application forms must be on file by February 1 to be considered for fall program admission.

Admission Requirements

1. Official high school or GED and college/program transcripts (if applicable)
2. Minimum GPA of 2.5 on all college level coursework
(includes transfer/transient work)

3. Official high school (or GED) and college/program transcripts by February 1 each year to be considered for fall program admission

4. Official LCCC transcripts indicating completion of Science Support courses and grades awarded and attendance dates by February 1 each year to be considered for fall Dental Hygiene Program admission.

5. Recent completion of the following science support courses (with at least a 2.5 in each course) is strongly suggested prior to applying to the Dental Hygiene Program: CHMY 161 (General, Organic, and Biochemistry I), BIOG 121/122 (Anatomy and Physiology I and II), and BIOG 251 (General Microbiology). It is strongly recommended that applicants, who have not completed the science support courses within the last five years, consider auditing them as a refresher.

6. Official college transcripts from institutions other than Lorain County Community College (LCCC) indicating completion of Science Support courses and grades awarded and attendance dates by February 1 each year to be considered for fall Dental Hygiene Program admission

7. If there are transfer credits from another college or university, the transcripts will be evaluated for course equivalency. To ensure that the processing of non-LCCC transcripts is completed well in advance of the LCCC Dental Hygiene program application deadline, the Records office must receive all transcripts at least 12 weeks prior to the time in which the student intends to complete a program application. Students are encouraged to schedule an appointment with an advisor. It is always the prerogative of the degree granting institution to accept or reject courses taken at an institution other than Lorain County Community College.

8. Completed program application forms must be on file by February 1 each year to be considered for fall Dental Hygiene Program admission. If there are transfer credits from another college or university, the transcripts will be evaluated for course equivalency. To ensure that the processing of non-LCCC transcripts is completed well in advance of the LCCC dental hygiene program application deadline, the records office must receive all transcripts at least 12 weeks prior to the time in which the student intends to complete a program application. Students are encouraged to schedule an appointment with a counselor. It is always the prerogative of the degree granting institution to accept or reject courses taken at an institution other than Lorain County Community College.

9. Completion of six hours of Observation in a dental setting which employs a Registered Dental Hygienist. An observation of a dental hygienist for six hours (three hours in one dental office location and three hours in another dental office location). The dental offices must be different and must not be where the interested student may be employed. Observation Form (https://www.lorainccc.edu/health/wp-content/uploads/sites/33/2016/10/DNHYOBSERVATIONFORM.pdf). The observations must take place within a year that the candidate has applied for fall Dental Hygiene Program admission.

10. Interview

11. A writing sample/essay- Testing Center

12. Non-native English speaking applicants: The Commission on Dental Accreditation and Lorain County Community College (LCCC) Dental Hygiene Program Competencies mandate that students must be competent in interpersonal and communication skills to effectively interact with diverse population groups. The ability to communicate verbally and in written form is basic to the provision of oral health services in a safe and effective manner. Therefore, applicants whose native language is not English must take the TOEFL, IBT http://www.toefl.org (http://www.toefl.org/) and score minimally, 21 Reading and Listening, 23-Writing, and 25-Speaking. Arrangements and costs incurred for the TOEFL is the responsibility of the student.

13. (See Information for: Students Who Were Previously Enrolled in Another Dental Hygiene Program. All Dental Hygiene courses are scheduled in a designed sequence and approved by the Commission on Dental Accreditation.)

Please note: Selection for program entry is competitive and based on a combination of factors including grade point average, interview, completion of six observation hours, a writing sample/essay and completion of program supporting non-technical courses. Only selected candidates (initially based on support coursework completed and GPA) will be asked to interview and submit a narrative form, along with observation hour documentation.

Important Notes for Students in this Program

- Students applying to a program in the Health & Wellness Pathway must successfully complete all deficiencies shown during the placement assessment process with a grade of C or better prior to the submission of a program application.
- Students are REQUIRED to attend lectures, college laboratories, and clinical sections.
- Transportation to and from community sites is the responsibility of the student. Transportation is not provided.
- Standardized examinations prepared by state and/or national organizations may be given. The cost of these examinations is the responsibility of the student.
- To assure compliance with specific state licensure or certification agency examination eligibility, students who have been previously convicted of a felony must schedule an appointment with the appropriate program coordinator (program director) and division dean prior to enrollment (entry or re-entry) into any Allied Health program. Certain programs require students to be fingerprinted and/or drug tested prior to program entry.

If you are transferring from another college or university, the Records office should receive all transcripts at least 12 weeks before you complete a program application. This ensures that the processing of non-LCCC transcripts is completed well in advance of specific Allied Health program application deadlines.

Learn more about Allied Health program requirements (p. 50)

Program Learning Outcomes

1. Successfully perform dental hygiene examination, assessments, dental treatments an post treatment evaluations to provide dental hygiene services to LCCC dental hygiene patients.
2. Effectively interview patients through a dialogue history with appropriate follow up questions to obtain an accurate and comprehensive medical/dental health history for total treatment planning.
3. Successful completion of the National Dental Hygiene Board Examination (NDHBE) and commission on Dental Competency Assessments (CDCA) practicum and all required State license written certifications.
4. Synthesize information effectively to support clinical dental hygiene treatment through critical thinking, careful assessment and appropriate decision-making actions.
5. Comprehensively prepare competent students in the discipline of dental hygiene science.
6. Demonstrate a professional and mature acknowledgement of diverse populations in all clinical interactions.

**Diagnostic Medical Sonography, Associate of Applied Science**

Curriculum Code #2402  
Effective May 2020

Division of Health and Wellness Sciences (p. 161)

Diagnostic medical sonography is an imaging process used to assist physicians in gathering sonographic data necessary to reach diagnostic decisions. Sonographers are highly-skilled professionals qualified by technological education to provide patient services using diagnostic ultrasound under the supervision of a physician. American Heart Association Healthcare Provider certification is required upon entrance into the program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

**Note:** Preadmission courses must be completed before a program application can be submitted.

### Preadmission Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALHN 107</td>
<td>CAREER EXPLORATIONS IN DIAGNOSTIC MEDICAL SONOGRAPHY</td>
<td>1</td>
</tr>
<tr>
<td>ALHN 112</td>
<td>INTRODUCTION TO MEDICAL TERMINOLOGY</td>
<td>1</td>
</tr>
<tr>
<td>ALHN 113</td>
<td>INTRODUCTION TO PATIENT CARE</td>
<td>1,3</td>
</tr>
<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
</tr>
<tr>
<td>BIOG 122</td>
<td>ANATOMY AND PHYSIOLOGY II</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

**First Year**

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALHN 121</td>
<td>GENERAL PATHOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>BIOG 123</td>
<td>CROSS-SECTIONAL ANATOMY</td>
<td>2</td>
</tr>
<tr>
<td>PEFT 151</td>
<td>LIFETIME FITNESS</td>
<td>1</td>
</tr>
<tr>
<td>SONO 111</td>
<td>ORIENTATION TO DIAGNOSTIC MEDICAL SONOGRAPHY</td>
<td>1</td>
</tr>
<tr>
<td>PHYC 115</td>
<td>PHYSICS FOR THE ALLIED HEALTH SCIENCES</td>
<td>4</td>
</tr>
<tr>
<td>PSYH 151 or SOCY 151G</td>
<td>INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SONO 131</td>
<td>INTRODUCTION TO DIAGNOSTIC MEDICAL SONOGRAPHY</td>
<td>7</td>
</tr>
<tr>
<td>SONO 221</td>
<td>ULTRASOUND PHYSICS AND INSTRUMENTATION I</td>
<td>2</td>
</tr>
</tbody>
</table>

All courses listed prior to the first year fall semester must be completed prior to admission to the sonography program.

A minimum GPA of 3.0 is required in college-level coursework for admission into the program.

**Program Contact(s):**

**Craig Peneff**  
440-366-7189  
cpeneff@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).
More program information can be found on our website.
(https://www.lorainccc.edu/health/sonography/)

Admission Requirements for Diagnostic Medical Sonography

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Program application form on file by January 5 of each year to be considered for program admission the following year.
3. Satisfactory completion with a grade of C or better of the pre-admission courses on the diagnostic medical sonography curriculum guide which includes the following college or post-secondary education coursework:
   - ALHN 107 CAREER EXPLORATIONS IN DIAGNOSTIC MEDICAL SONOGRAPHY
   - ALHN 112 INTRODUCTION TO MEDICAL TERMINOLOGY
   - ALHN 113 INTRODUCTION TO PATIENT CARE
   - BIOG 121 ANATOMY AND PHYSIOLOGY I
   - BIOG 122 ANATOMY AND PHYSIOLOGY II
   - ENGL 161 COLLEGE COMPOSITION I
   - MTHM 168 STATISTICS
   - PHYC 115 PHYSICS FOR THE ALLIED HEALTH SCIENCES
4. Minimum GPA of 3.0 for college-level courses including transfer/transient work (excludes developmental education and more than two physical education courses).
5. Completion of HESI A2 test with a minimum composite score of 75 (vocabulary and general knowledge, reading comprehension, grammar, basic math, biology, anatomy and physiology, physics, critical thinking and the learning style inventory). Can be taken after completion of BIOG 121, MTHM 168 and PHYC 115. May remediate and wait one month to repeat and must be completed within six months of initial test date. Scores will be valid for a three year period; therefore a three year wait is required prior to the third attempt. A composite score below 75 on the retest will disqualify the program application.
6. Anatomy & Physiology course grades (BIOG 121 & BIOG 122) and number of attempts to pass with a grade of C or better are used in the acceptance process.

Allied health professionals: Applicants from a patient care related allied health/nursing background may transfer credit or receive credit through prior learning assessment for the following diagnostic medical sonography preadmission courses:
   - ALHN 112 INTRODUCTION TO MEDICAL TERMINOLOGY
   - ALHN 113 INTRODUCTION TO PATIENT CARE

This will be handled on a case-by-case basis with the program director.

Radiologic technologists who are graduates of an appropriately accredited college-based degree radiologic technology program would be eligible for receiving credit for all of the diagnostic medical sonography preadmission and support courses plus SONO 122 IMAGING MODALITIES. Graduates of a hospital-based certificate radiologic technology program may receive credit for:
   - ALHN 112 INTRODUCTION TO MEDICAL TERMINOLOGY
   - ALHN 113 INTRODUCTION TO PATIENT CARE
   - PHYC 115 PHYSICS FOR THE ALLIED HEALTH SCIENCES
   - SONO 122 IMAGING MODALITIES

Learn more about Allied Health program requirements (p. 50)

Program Learning Outcomes

1. Demonstrate competence and proficiency in performing abdominal, small parts, obstetric, gynecologic and basic vascular (carotid/venous leg) ultrasound examinations.
2. Apply principles of ultrasound physics to patient examinations to obtain diagnostic information.
3. Correlate clinical history, patient symptoms, and laboratory test results with sonographic findings.
4. Identify common pathologic diseases and differential diagnoses through correlation of sonographic appearances, clinical symptoms and laboratory test results.
5. Provide basic patient care, comfort and nursing skills.
7. Be prepared to take and pass the ARDMS registry examinations in ultrasound physics & instrumentation, abdomen and obstetrics & gynecology.
8. Practice lifelong learning by staying current in sonography through continuing education, achieving certifications in additional specialties and achieving advanced degrees.
9. Be a productive team-player.
10. Be an efficient, cost-effective member of the health care team.
11. Recognize the importance of the multidisciplinary health care team.

JRCDMS - EXIT COMPETENCIES

Prior to graduation, all Diagnostic Medical Sonography students must satisfactorily have met and completed all course, classroom and clinical objectives. In addition, we endorse and have incorporated into the appropriate courses, the terminal competencies mandated by the Joint Review Committee of Education in Diagnostic Medical Sonography (JRCDMS). The terminal competencies of the JRCDMS are listed below.

The graduate shall be able to:

1. Utilize oral and written communication.
   a. Maintain clinical record
   b. Interact with the interpreting physician or other designated physician with oral or written summary of findings as permitted by employer policy and procedure
   c. Recognize significant clinical information and historical facts from the patient and the medical records which may impact on the diagnostic examination.
   d. Comprehend and employ appropriate medical terminology, abbreviations, symbols, terms, and phrases.
   e. Educate other health care providers and the public in the appropriate applications of ultrasound/non-invasive diagnostic vascular evaluation, including the following:
      • Medical terminology
• Sonographic/other non-invasive diagnostic vascular terminology
• Pertinent clinical signs, symptoms and laboratory tests
• Pertinent legal principles

2. Provide basic patient care and comfort.
   a. Maintain infection control and utilize universal precautions.
   b. Anticipate and be able to respond to the needs of the patient.
   c. Identify life-threatening situations and implement emergency care as permitted by agency procedure, including the following:
      • Infection control and universal precautions procedures
      • Pertinent patient care procedures
      • Principles of psychological support
      • Emergency conditions and procedures
      • First aid and resuscitation techniques

3. Demonstrate knowledge and understanding of human gross and sectional anatomy.
   a. Evaluate anatomic structures in the region of interest.
   b. Recognize the sonographic appearance of normal tissue structures, including the following:
      • Gross sectional anatomy
      • Embryology
      • Normal sonographic patterns

4. Demonstrate knowledge and understanding of physiology, pathology and pathophysiology.
   a. Obtain and evaluate pertinent patient history and physical findings.
   b. Extend standard diagnostic testing protocol as required by patient history or initial findings.
   c. Review data from current and previous examinations to produce a written/oral summary of technical findings, including relevant interval changes for the interpreting physician’s reference.
   d. Recognize examination findings that require immediate clinical response and notify the interpreting physician of such findings, including the following:
      • Patient interview and examination techniques
      • Chart and referral evaluation
      • Diagnostic testing protocols related to specific disease conditions
      • Physiology including blood flow dynamics
      • Pertinent pathology and paraphysiology
      • Pertinent legal issues

5. Demonstrate knowledge and understanding of acoustical physics, Doppler ultrasound principles and ultrasound instrumentation.
   a. Select the appropriate technique(s) for examination(s) being performed.
   b. Adjust instrument controls to optimize image quality.
   c. Perform linear, area, circumference and other related measurements from sonographic images or data.
   d. Recognize and compensate for acoustical artifacts.
   e. Utilize hard-copy devices to obtain pertinent documentation of examination findings.
   f. Minimize patient exposure to acoustical energy which includes the following:
      • Acoustical physics
      • Sound production and propagation
      • Interaction of sound and matter
      • Instrument options and transducer selection
      • Principles of ultrasound instruments and modes of operation
      • Operator control options
      • Physics of Doppler
      • Principles of Doppler techniques
      • Methods of Doppler flow analysis
      • Techniques for recording static and dynamic images
      • Acoustical artifacts

6. Demonstrate knowledge and understanding of the interaction between ultrasound and tissue and the probability of biological effects in clinical examinations, including the following:
   • Biologic effects
   • Pertinent in-vitro and in-vivo studies

7. Employ professional judgment and discretion.
   a. Protect the patient’s right to privacy.
   b. Maintain confidentiality.
   c. Perform with the scope of practice.
   d. Adhere to the professional codes of conduct/ethics through the following:
      • Medical ethics
      • Pertinent legal principles
      • Professional interaction skills
      • Professional scopes of practice
8. Understand the fundamental elements for implementing a quality assurance and improvement program, and the policies, protocols, and procedures for the general function of the ultrasound laboratory, including the following:

• Administrative procedures
• Quality control procedures
• Elements of quality assurance program
• Records maintenance
• Personnel and fiscal management
• Trends in health care systems

9. Recognize the importance of continuing education, through the following:

• Professional journals
• Conferences
• Lectures
• In-house educational offerings
• Professional organizations and resources
• Recent developments in sonography
• Research statistics and design

Fire Science, Associate of Applied Science

Curriculum Code #2072

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The fire science program offers career opportunities in forestry, insurance, state, county and local government and in the fire service. (For fire department employment, Civil Service requirements apply.) Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Students who are currently certified as a firefighter by the State of Ohio are advised to take the following sequence:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 111</td>
<td>INTRODUCTION TO FIRE SERVICE</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 127</td>
<td>FIREFIGHTER ORIENTATION</td>
<td>1</td>
</tr>
<tr>
<td>FIRE 132</td>
<td>FIREFIGHTING LEVEL II</td>
<td>1</td>
</tr>
<tr>
<td>FIRE 134</td>
<td>FIRE PROTECTION HYDRAULICS AND WATER SUPPLY</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 218</td>
<td>HAZARDOUS MATERIALS OPERATIONS</td>
<td>1</td>
</tr>
</tbody>
</table>

Prior learning credit will be applied to the following courses if student provides current certification documentation:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Required Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 111</td>
<td>INTRODUCTION TO FIRE SERVICE</td>
<td>FIREFIGHTER II</td>
</tr>
<tr>
<td>FIRE 120</td>
<td>FIRE INVESTIGATION I</td>
<td>FIRE INVESTIGATOR</td>
</tr>
<tr>
<td>FIRE 127</td>
<td>FIREFIGHTER ORIENTATION</td>
<td>FIREFIGHTER VOLUNTEER I OR II</td>
</tr>
<tr>
<td>FIRE 132</td>
<td>FIREFIGHTING LEVEL II</td>
<td>FIREFIGHTER II</td>
</tr>
<tr>
<td>FIRE 134</td>
<td>HYDRAULICS AND WATER SUPPLY</td>
<td>FIREFIGHTER II</td>
</tr>
<tr>
<td>FIRE 218</td>
<td>HAZARDOUS MATERIALS OPERATIONS</td>
<td>HAZMAT (OPERATIONS LEVEL) AND (FIREFIGHTER I OR II)</td>
</tr>
</tbody>
</table>

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 111</td>
<td>INTRODUCTION TO FIRE SERVICE</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 125</td>
<td>FIRE BEHAVIOR AND COMBUSTION</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS 1</td>
<td>3</td>
</tr>
<tr>
<td>PSSC 153</td>
<td>PHYSICAL SCIENCE</td>
<td>4</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
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</table>

Spring Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 112</td>
<td>BUILDING DESIGN AND CONSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Select one of the following:</strong></td>
<td><strong>1-3</strong></td>
</tr>
<tr>
<td>FIRE 127</td>
<td>FIREFIGHTER ORIENTATION</td>
<td></td>
</tr>
<tr>
<td>FIRE 132</td>
<td>FIREFIGHTING LEVEL II</td>
<td></td>
</tr>
<tr>
<td>FIRE 299</td>
<td>INDIVIDUALIZED STUDIES IN FIRE 1</td>
<td></td>
</tr>
<tr>
<td>FIRE 134</td>
<td>FIRE PROTECTION HYDRAULICS AND WATER SUPPLY</td>
<td></td>
</tr>
<tr>
<td>PEWL 151</td>
<td>STRESS MANAGEMENT</td>
<td>1</td>
</tr>
<tr>
<td>PSYH 151 or SOCY 151G</td>
<td>INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Hours</strong></td>
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Second Year

Fall Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 130</td>
<td>EMERGENCY SERVICES SAFETY AND SURVIVAL</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 136</td>
<td>STRATEGY AND TACTICS 1</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 210</td>
<td>HAZARDOUS MATERIALS CHEMISTRY</td>
<td>2</td>
</tr>
<tr>
<td>FIRE 229</td>
<td>FIRE PROTECTION SYSTEMS</td>
<td>2</td>
</tr>
<tr>
<td>PLSC 155</td>
<td>STATE AND LOCAL GOVERNMENT</td>
<td>3</td>
</tr>
</tbody>
</table>
Humanities Elective 3

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE 120</td>
<td>FIRE INVESTIGATION I 1</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 218</td>
<td>HAZARDOUS MATERIALS OPERATIONS</td>
<td>1</td>
</tr>
<tr>
<td>FIRE 224</td>
<td>LEGAL CONCEPTS FOR EMERGENCY SRVCS</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 227</td>
<td>FIRE PREVENTION</td>
<td>3</td>
</tr>
<tr>
<td>FIRE 228</td>
<td>FIRE AND EMERGENCY SERVICE ADMINISTRATION 1</td>
<td>2-3</td>
</tr>
<tr>
<td>or PBAD 151</td>
<td>FUNDAMENTAL PROCEDURES IN THE MEDICAL OFFICE</td>
<td></td>
</tr>
<tr>
<td>FIRE 240</td>
<td>EMERGENCY SERVICES OCCUPATIONAL HEALTH AND SAFETY</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Hours 61-64

1 Indicates that this course has a prerequisite.

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Dawn Sgro
440-366-7186
dsgro@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-safety/associate-of-applied-science-in-fire-science/)

**Fire Science Program**

The successful completion of the following program leads to the conferral of the associate of applied science degree. Fire science is available through the Health and Wellness Sciences division. In all associate of applied science and one-year technical certificate programs, students are REQUIRED to attend lecture, college laboratories and off-campus facilities. Transportation to and from off-campus facilities is the responsibility of students and is not provided by the College.

The fire science curriculum is offered in the evenings and online. The program is arranged for part-time students employed in the field and/or working in another field and retraining for fire science. All REQUIRED courses are rotated through the evening offerings.

**Program Learning Outcomes**

1. Exhibit an understanding of basic principles of firefighter life safety initiatives.
2. Identify, examine and apply current and emerging concepts and practices in Fire and Emergency Services
3. Understand the responsibilities of fire prevention, inspections and public relations.

4. Demonstrate an understanding of the administrative workings of a fire department including budget preparation, resource allocation, long-range planning, and fiscal projections.

**Medical Assisting Administrative Focus, Associate of Applied Science**

Curriculum Code #2143

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The medical assisting program provides its students with an orientation to the medical field as an assistant to the physician. Students are introduced to procedures in medical examination, use of laboratory equipment and office business procedures used in health care facilities.

Upon completion of the first two semesters of the accredited program, students are eligible to take the certification examination of the American Association of Medical Assistants. Those wishing to continue their education may complete all courses for the associate of applied science degree. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

**First Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALHN 110</td>
<td>MEDICAL TERMINOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 115</td>
<td>BODY STRUCTURE AND FUNCTION 1</td>
<td>3</td>
</tr>
<tr>
<td>MDAS 101</td>
<td>FUNDAMENTAL PROCEDURES IN THE MEDICAL OFFICE 1,2</td>
<td>3</td>
</tr>
<tr>
<td>MDAS 102</td>
<td>INSURANCE AND CODING IN THE MEDICAL OFFICE 1,2</td>
<td>3</td>
</tr>
<tr>
<td>MDAS 103</td>
<td>BASIC ADMINISTRATIVE MEDICAL ASSISTING FUNCTIONS 1,2</td>
<td>1</td>
</tr>
<tr>
<td>MDAS 104</td>
<td>BOOKKEEPING FUNCTIONS IN THE MEDICAL OFFICE 1,2</td>
<td>2</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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Total Hours 16

**Spring Semester**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>MDAS 105</td>
<td>DIAGNOSTIC TESTING IN THE MEDICAL OFFICE 1,2</td>
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<tr>
<td>MDAS 106</td>
<td>SPECIMEN COLLECTION IN THE MEDICAL OFFICE 1,2</td>
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<tr>
<td>MDAS 107</td>
<td>PATIENT CARE IN THE MEDICAL OFFICE 1,2</td>
<td>5</td>
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<tr>
<td>MDAS 108</td>
<td>MEDICAL ASSISTING PRACTICUM 1,2</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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Total Hours 19

**Second Year**

**Fall Semester**

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<tbody>
<tr>
<td>ALHN 118</td>
<td>PHARMACOLOGY FOR ALLIED HEALTH AND NURSING 2</td>
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<tr>
<td>ALHN 121</td>
<td>GENERAL PATHOLOGY 2</td>
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<tr>
<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS ADMINISTRATION</td>
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BADM 161 BUSINESS LAW I 3
BADM 251 PRINCIPLES OF MANAGEMENT 3

Spring Semester
BADM 165 LEGAL ENVIRONMENT OF BUSINESS 3
BADM 255 HUMAN RESOURCES MANAGEMENT 3
CMCC 151 ORAL COMMUNICATION 3
or CMMC 165 or INTERPERSONAL COMMUNICATION 3
MTHM 158 QUANTITATIVE REASONING 3

Hours 14
Total Hours 61

Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.

Indicates that this course requires a prerequisite.

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

High school graduation required for entry into program. Basic math skills required as evidenced by placement assessment.

A one-year technical certificate will be earned after successfully completing fall and spring semesters of the first year and will be eligible to take the American Association of Medical Assistants Certification Exam.

Credit will be awarded following division approval for the MDAS courses identified above to those individuals who have completed a medical assisting program, hold CMA certification through the American Association of Medical Assistants (AAMA), and are presently working in an area of medical assisting practice.

Program Contact(s):
Ana Parrilla
440-366-4189
aparrilla@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/medical-assisting/associate-of-applied-science-in-medical-assisting-administrative-focus/)

Admission Requirements for Medical Assisting
1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Program application form on file.

Learn more about Allied Health program requirements (p. 50)

Program Learning Outcomes
The Lorain County Community College medical assisting certificate program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. At the completion of the medical assisting program graduates will be able to:
1. Practice as competent entry-level medical assistants (Cognitive & Psychomotor)
2. Will perform within the legal and ethical boundaries or the medical assistant’s scope of practice (Cognitive & Affective)
3. Will value the needs of each patient and their family while recognizing and respecting cultural diversity, beliefs and dignity of humanity (Cognitive & Affective)
4. Will identify, respond, and respect issues of confidentiality and treat patients with compassion and empathy (Cognitive & Affective)
5. Will communicate effectively, professionally and be culturally sensitive with patients, providers and staff (Cognitive & Affective)
6. Will participate as a member of the health care team while in the office setting of their clinic/hospital (Cognitive)
7. Will maintain current within their field through certification and continuing education (Cognitive & Psychomotor)
8. Will commit to become lifelong learners (Cognitive & Affective)

Medical Assisting Clinical Focus, Associate of Applied Science
Curriculum Code #2142
Effective May 2020
Division of Health and Wellness Sciences (p. 161)
The medical assisting program provides its students with an orientation to the medical field as an assistant to the physician. Students are introduced to procedures in medical examination, use of laboratory equipment, and office business procedures used in health care facilities. Upon completion of the first two semesters of the accredited program, students are eligible to take the certification examination of the American Association of Medical Assistants. Those wishing to continue their education may complete all courses for the associate of applied science degree. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year
Fall Semester
ALHN 110 MEDICAL TERMINOLOGY 3
BIOG 115 BODY STRUCTURE AND FUNCTION 1 3
MDAS 101 FUNDAMENTAL PROCEDURES IN THE MEDICAL OFFICE 1,2 3
MDAS 102 INSURANCE AND CODING IN THE MEDICAL OFFICE 1,2 3
MDAS 103 BASIC ADMINISTRATIVE MEDICAL ASSISTING FUNCTIONS 1,2 1
MDAS 104 BOOKKEEPING FUNCTIONS IN THE MEDICAL OFFICE 1,2 2
SDEV 101 COLLEGE 101 3 1

Hours 16

Spring Semester
CISS 121 MICROCOMPUTER APPLICATIONS I 3
ENGL 161 COLLEGE COMPOSITION I 3

1 Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
2 Indicates that this course requires a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
Lorain County Community College

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MDAS 105</td>
<td>DIAGNOSTIC TESTING IN THE MEDICAL OFFICE</td>
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<td>MDAS 106</td>
<td>SPECIMEN COLLECTION IN THE MEDICAL OFFICE</td>
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<td>MDAS 107</td>
<td>PATIENT CARE IN THE MEDICAL OFFICE</td>
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<tr>
<td>MDAS 108</td>
<td>MEDICAL ASSISTING PRACTICUM</td>
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</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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**Second Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>ALHN 118</td>
<td>PHARMACOLOGY FOR ALLIED HEALTH AND NURSING</td>
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<td>GENERAL PATHOLOGY</td>
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<td>BADM 155</td>
<td>INTRODUCTION TO BUSINESS ADMINISTRATION</td>
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<tr>
<td>CLSC 111</td>
<td>INTRODUCTION TO CLINICAL LABORATORY SCIENCE TECHNOLOGY</td>
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<td>PHBT 112</td>
<td>BASIC LABORATORY TECHNIQUES</td>
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**Spring Semester**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BADM 251</td>
<td>PRINCIPLES OF MANAGEMENT</td>
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<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION or CMMC 165 INTERPERSONAL COMMUNICATION</td>
<td>3</td>
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<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
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<td>LIFETIME FITNESS</td>
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<tr>
<td>PHBT 121</td>
<td>PHLEBOTOMY CLINICAL PRACTICUM</td>
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**Total Hours**: 62

1. Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
2. Indicates that this course requires a prerequisite.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

High school graduation required for entry into program. Basic math skills required as evidenced by placement assessment.

A one-year technical certificate will be earned after successfully completing fall and spring semesters of the first year and will be eligible to take the American Association of Medical Assistants Certification Exam.

Credit will be awarded following division approval for the MDAS courses identified above to those individuals who have completed a medical assisting program, hold CMA certification through the American Association of Medical Assistants (AAMA), and are presently working in an area of medical assisting practice.

Program Contact(s):

**Ana Parrilla**

440-366-4189  
aparrilla@lorainccc.edu

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More program information can be found on our website. (https://www.lorainccc.edu/health/medical-assisting/associate-of-applied-science-in-medical-assisting-clinical-focus/)

**Admission Requirements for Medical Assisting**

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCC Records office.
2. Program application form on file.

Learn more about Allied Health program requirements (p. 50)

**Program Learning Outcomes**

The Lorain County Community College medical assisting certificate program is designed to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. At the completion of the medical assisting program graduates will be able to:

1. Practice as competent entry-level medical assistants (Cognitive & Psychomotor)
2. Will perform within the legal and ethical boundaries or the medical assistant's scope of practice (Cognitive & Affective)
3. Will value the needs of each patient and their family while recognizing and respecting cultural diversity, beliefs and dignity of humanity (Cognitive & Affective)
4. Will identify, respond, and respect issues of confidentiality and treat patients with compassion and empathy (Cognitive & Affective)
5. Will communicate effectively, professionally and be culturally sensitive with patients, providers and staff (Cognitive & Affective)
6. Will participate as a member of the health care team while in the office setting of their clinic/hospital (Cognitive)
7. Will maintain current within their field through certification and continuing education (Cognitive & Psychomotor)
8. Will commit to become lifelong learners (Cognitive & Affective)

**Occupational Therapy Assistant, Associate of Applied Science**

Curriculum Code #2420

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The EHOVE/LCCC occupational therapy assistant program is designed to train occupational therapy assistants for certification testing and licensure. OTAs work with people of all ages, from infants to geriatrics, in a variety of settings such as schools, hospitals, skilled rehabilitation and outpatient facilities to improve their functional levels in daily occupations and development. OCTA classes are held at EHOVE Career Center. Graduates of this program will receive an associate of applied science degree in occupational therapy assistant from Lorain County Community College. Grades in all OCTA classes and support, non-OCTA classes required for the program, including preadmission coursework must be C or better. Lorain County Community College has articulation agreements...
with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Preadmission Courses

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<thead>
<tr>
<th>Code</th>
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<tr>
<td>ALHN 120</td>
<td>CAREER EXPLORATIONS IN OCCUPATIONAL THERAPY</td>
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<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS 1</td>
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<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 2</td>
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Preadmission Courses Hours 15

First Year

Fall Semester

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<tbody>
<tr>
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<td>INTRO TO MEDICAL TERMINOLOGY</td>
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<tr>
<td>BIOG 122</td>
<td>ANATOMY AND PHYSIOLOGY II 1</td>
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<td>OCTA 102</td>
<td>ACTIVITY ANALYSIS 3,4</td>
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<td>OCTA 111</td>
<td>THERAPY CONCEPTS 3,4</td>
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<td>OCTA 113</td>
<td>OT DOCUMENTATION 3,4</td>
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<td>PSYH 251</td>
<td>HUMAN GROWTH AND DEVELOPMENT 1</td>
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First Year Hours 14

Spring Semester

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<tr>
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<td>PEDIATRIC LEVEL I FIELDWORK 3,4</td>
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<td>OCTA 120</td>
<td>NEUROMUSCULAR APPLICATIONS 3,4</td>
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<td>OCTA 125</td>
<td>PEDIATRIC OCCUPATIONAL THERAPY 3,4</td>
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<td>PSYH 257</td>
<td>ABNORMAL PSYCHOLOGY 1</td>
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Spring Semester Hours 12

Summer Semester

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<td>OCTA 110</td>
<td>PSYCHOSOCIAL LEVEL I FIELDWORK 3,4</td>
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<td>OCTA 115</td>
<td>MENTAL HEALTH OT 3,4</td>
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<td>OCTA 121</td>
<td>OT IN GERIATRICS 3,4</td>
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Summer Semester Hours 6

Second Year

Fall Semester

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<td>ALHN 121</td>
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<td>ASSISTIVE TECHNOLOGY 3,4</td>
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<td>PHYSICAL DYSFUNCTION LEVEL I FIELDWORK 3,4</td>
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<td>OCCUPATIONAL THERAPY ISSUES</td>
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<td>OCTA 210</td>
<td>PHYSICAL REHAB OT 3,4</td>
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Fall Semester Hours 12

Spring Semester

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<tbody>
<tr>
<td>OCTA 205</td>
<td>LEVEL II FIELDWORK 3,4</td>
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Spring Semester Hours 6

Total Associate Degree Semester Hours includes prerequisites 65

Code Title Total LCCC Semester Credit Hours

Courses Taken EHOVE Career Center 38

Admission Requirements for Occupational Therapy Assistant

1. Complete LCCC application.
2. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
3. Attend informational meeting at EHOVE Career Center.
4. Completion of ALHN 120 and all preadmission classes is required by the end of spring semester of the year the student is applying.
5. Program application submitted to EHOVE Career Center.
6. Submit background check (BCI).
7. Minimum GPA of 2.5 on all college-level coursework (includes transfer/transient work). Students must receive a ‘C’ or better in all courses required for the OTA program including OCTA and support courses.

Learn more about Allied Health program requirements (p. 50)

Program Learning Outcomes

1. Know the role of the OTA within the occupational therapy profession and as a member of a health care team.
2. Be able to recognize typical from atypical in the development and functioning of our clients/patients.
3. Be able to recognize difficulties with BADLs and IADLs throughout the lifespan.
4. To be able to use occupation to understand patients/clients and as a basis for intervention.
5. Be an active member of the OT community through continued professional growth and professional affiliations.
6. To provide high quality credentialed OT professionals to our community to promote health and well-being of individuals.
Physical Therapist Assisting, Associate of Applied Science

Curriculum Code #2411

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The physical therapist assistant program at LCCC prepares physical therapist assistants to perform selected physical therapy procedures professionally and competently, under the direction and supervision of the physical therapist and within their contemporary scope of practice. The program promotes academic excellence, lifelong learning, and encourages the personal and professional growth of students, graduates, faculty and community to meet the needs of stakeholders. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 121 ANATOMY AND PHYSIOLOGY I</td>
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<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
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<tr>
<td>PTHA 105 FOUNDATIONS OF PHYSICAL THERAPIST ASSISTING</td>
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<tr>
<td>PTHA 111 INTRODUCTION TO PHYSICAL THERAPIST ASSISTING</td>
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<tr>
<td>PTHA 121 PHYSICAL THERAPIST ASSISTING PROCEDURES I</td>
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<tr>
<td>SDEV 101 COLLEGE 101</td>
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<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 122 ANATOMY AND PHYSIOLOGY II</td>
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<td>MTHM 168 STATISTICS</td>
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<tr>
<td>PTHA 112 FUNCTIONAL ANATOMY AND KINESIOLOGY</td>
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<td>PTHA 122 PHYSICAL THERAPIST ASSISTING PROCEDURES II</td>
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<td><strong>Total Hours</strong></td>
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<th>Summer Semester</th>
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<tbody>
<tr>
<td>ALHN 121 GENERAL PATHOLOGY</td>
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<td>PSYH 151 INTRODUCTION TO PSYCHOLOGY</td>
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<tr>
<td>PTHA 241 CLINICAL PRACTICUM I</td>
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Second Year

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<tbody>
<tr>
<td>PSYH 251 HUMAN GROWTH AND DEVELOPMENT</td>
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<tr>
<td>PTHA 221 REHABILITATION PRINCIPLES I</td>
<td></td>
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<td>PTHA 242 CLINICAL PRACTICUM II</td>
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<td>SOCY 151G INTRODUCTION TO SOCIOLOGY</td>
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<tbody>
<tr>
<td>PTHA 222 REHABILITATION PRINCIPLES II</td>
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<tr>
<td>PTHA 243 CLINICAL PRACTICUM III</td>
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<td><strong>Total Hours</strong></td>
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</table>

1. Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
2. Indicates that this course has a prerequisite.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
4. Indicates that this course incorporates experiential learning components.

American Heart Association Healthcare Provider certification is required upon entrance into the program.

Program Contact(s):

John Myers
440-366-7881
jmyers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/physical-therapy/)

Admission Requirements for Physical Therapist Assisting

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Minimum high school GPA of 3.0 if 15 credit hours of college-level work have not been completed or a minimum GPA of 2.5 or higher if 15 credit hours of college-level program supporting coursework have been completed (includes transfer/transient work).
3. High school biology or college-level biology course (including lab) with a grade of C or better.
4. One year of high school or college-level algebra with a grade of C or better.
5. Program application form on file by November 15 in the fall semester in order to be considered for the next class. A student not offered admission into program for the fall semester must submit a new physical therapist assisting program application.

Please note: Selection for program entry is competitive and based on a combination of factors including grade point average, interview, completion of volunteer/observation hours, observation of professional behaviors, recommendations from the clinical site, a self-narrative and completion of program supporting non-technical courses. Only selected candidates (initially based on support coursework completed and GPA) will be asked to interview and submit a narrative form, along with volunteer-hour documentation. The physical therapist assisting program provides the forms after the initial selection process occurs.

Learn more about Allied Health program requirements (p. 50)
Program Learning Outcomes

Students/Graduates

1. Students/Graduates will competently provide high quality data collection and intervention skills based on the PT plan of care.

2. Students/Graduates will practice legally, ethically and safely within their scope of practice under the direction and supervision of the PT.

3. Students/Graduates will demonstrate professional behaviors consistent with the core value documents of the profession.

4. Students/Graduates will demonstrate evidence of participation in lifelong learning and activities that promote professional growth.

Program

1. The program will provide opportunities for personal and professional growth of students, faculty and the community.

2. The program will provide students with a quality education in contemporary physical therapy techniques, practicing in a competent and professional manner.

3. The program supports the college mission through a commitment to an affordable, quality, career-oriented education.

Radiologic Technology, Associate of Applied Science

Curriculum Code #2045

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

Students who graduate from the radiologic technology program at LCCC will be eligible to take a national registry examination administered by the ARRT. Graduates will have learned the skills necessary to be employed in a diagnostic radiology center. Graduates of this program are also prepared for continuing specialized education in other areas of diagnostic imaging. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership. American Heart Association Healthcare Provider certification is required upon entrance to the program.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ALHN 110</td>
<td>MEDICAL TERMINOLOGY ¹</td>
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<tr>
<td>ALHN 113</td>
<td>INTRODUCTION TO PATIENT CARE ¹,²</td>
<td>1</td>
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<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I ¹</td>
<td>4</td>
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<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING ¹</td>
<td>3</td>
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<tr>
<td>MTHM 168</td>
<td>STATISTICS ¹</td>
<td></td>
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<tr>
<td>RDTC 110</td>
<td>INTRODUCTION TO RADIOGRAPHY ¹,³</td>
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<tr>
<td>RDTC 114</td>
<td>RADIOGRAPHIC PROCEDURES I ¹,³,⁴</td>
<td>4</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 ⁵</td>
<td>1</td>
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<tr>
<td></td>
<td>Hours</td>
<td>19</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 122</td>
<td>ANATOMY AND PHYSIOLOGY II ¹,³</td>
<td>4</td>
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<tr>
<td>RDTC 115</td>
<td>RADIOGRAPHIC PHYSICS AND EQUIPMENT ¹,³</td>
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<td>RDTC 118</td>
<td>IMAGING TECHNIQUE ¹</td>
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Summer Semester

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<tr>
<td>RDTC 119</td>
<td>ADVANCED PROCEDURES AND MODALITIES ¹,³,⁴</td>
<td>4</td>
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<td></td>
<td>Hours</td>
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Second Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOG 123</td>
<td>CROSS-SECTIONAL ANATOMY ¹,³</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>RDTC 211</td>
<td>IMAGE CRITIQUE ¹</td>
<td>2</td>
</tr>
<tr>
<td>RDTC 212</td>
<td>RADIOLOGIC PATHOLOGY ¹,³</td>
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<tr>
<td>RDTC 213</td>
<td>RADIOLOGIC IMAGING SCIENCE ¹,³,⁴</td>
<td>5</td>
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<td></td>
<td>Hours</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II ³</td>
<td>3</td>
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<tr>
<td>RDTC 234</td>
<td>TRENDS IN RADIOLOGY ¹,³,⁴</td>
<td>5</td>
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<td>RDTC 236</td>
<td>RADIOBIOLOGY AND PROTECTION ¹,³</td>
<td>2</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Hours</td>
<td>13</td>
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</tbody>
</table>

Total Hours 65

1 Indicates that a grade of C (2.00) or better must be earned in order to continue in the program sequence.

2 Students who have STNA status are not required to take ALHN 113.

3 Indicates that this course requires a prerequisite.

4 Indicates this course contains experiential learning.

5 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Jeffrey Walmsley
440-366-7197
jwalmsle@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/radiology/)

Admission Requirements for Radiologic Technology

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.

2. Program application form on file.

3. Minimum GPA of 2.5 for all college-level coursework (includes transfer/transient courses).
4. 18 years of age on or before October 1 of their first year in the major coursework of the program.
5. High school algebra (LCCC placement assessment test), laboratory science (biology, chemistry or physics) or equivalent with a grade of C or better.
6. Attend program information session.

Please note: Selection for program entry is competitive and based on a combination of factors including grade point average, performance in selected math and science courses, interview, completion of program support courses and a writing sample. Only selected candidates (initially based on support coursework completed, GPA and Math and Science course performance) will be asked to interview and submit a writing sample.

Learn more about Allied Health program requirements (p. 50)

Program Learning Outcomes

Program Goals:

Goal 1: Students will be clinically competent.
   • Outcome: Students will successfully perform diagnostic imaging procedures.
   • Outcome: Students will apply radiation protection principals.

Goal 2: Students will communicate effectively with patients and clinical staff.
   • Outcome: Students will demonstrate excellent written communication skills in the clinical setting.
   • Outcome: Students will demonstrate excellent oral communication skills in the clinical setting.

Goal 3: Students will demonstrate critical thinking and problem solving skills.
   • Outcome: Students will modify routines and procedures to accommodate patient or exam needs.
   • Outcome: Students will identify resources and solutions when faced with problem situations.

Goal 4: Students will demonstrate professionalism.
   • Outcome: Students will demonstrate professional behaviors in the clinical environment.
   • Outcome: Students will follow the ARRT Code of Ethics and make ethical decisions.

Program Effectiveness Measures

Sports and Fitness Management, Associate of Applied Science
Curriculum Code #3002
Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The sports and fitness management program offers career opportunities in private and public fitness centers, and entry-level management positions in the health, fitness or rehabilitation centers, recreation facilities and retail sales. Graduates of the program may transfer to a four-year institution to continue their studies in sports and fitness management or other fitness-related fields.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
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<tr>
<td>HLED 151</td>
<td>PERSONAL HEALTH</td>
<td>2</td>
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<tr>
<td>HLED 152</td>
<td>COMMUNITY HEALTH</td>
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<tr>
<td>HLED 156</td>
<td>HEALTH AND WELLNESS</td>
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<tr>
<td>HPED 165</td>
<td>INTRODUCTION TO EXERCISE SCIENCE</td>
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<td>HPED 173</td>
<td>BIOMECHANICS OF RESISTANCE</td>
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<td>SDEV 101</td>
<td>COLLEGE 101</td>
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Spring Semester

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<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
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<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
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<tr>
<td>HPED 261</td>
<td>EXERCISE PHYSIOLOGY FOUNDATIONS</td>
<td>3</td>
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<tr>
<td>MTHM 168 or MTHM 158</td>
<td>STATISTICS or QUANTITATIVE REASONING</td>
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Second Year

Fall Semester

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HLED 153</td>
<td>FIRST AID AND SAFETY</td>
<td>2</td>
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<tr>
<td>HPED 152</td>
<td>APPLICATION OF ACTIVITIES ACROSS A LIFESPAN</td>
<td>3</td>
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<tr>
<td>HPED 272</td>
<td>EXERCISE PHYSIOLOGY II</td>
<td>3</td>
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<td>HPED 275</td>
<td>KINESIOLOGY</td>
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<tr>
<td>PEWL 151</td>
<td>STRESS MANAGEMENT</td>
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<td>PEFT/PEWL Elective</td>
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<tr>
<td>Humanities Elective</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOG 153</td>
<td>BASIC HUMAN NUTRITION</td>
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<td>HPED 172</td>
<td>EXERCISE MANAGEMENT FOR SPECIAL POPULATIONS</td>
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<td>HPED 285</td>
<td>PRACTICUM SEMINAR SPORTS AND FITNESS PROFESSION 2</td>
<td>2</td>
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<tr>
<td>PEFT 185</td>
<td>ROPES COURSE</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<td>PEFT/PEWL Elective</td>
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</table>

Total Hours: 63
A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course has a prerequisite.

Indicates that this course has a prerequisite or may be taken concurrently.

Elective selected from the general education (p. 52)/transfer module (p. 23).

It is recommended that students transferring to LCCC’s University Partnership - University of Akron bachelor of science program should take MTHM 168.

Program Contact(s):

Lisa Augustine  
440-366-7352  
laugusti@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/exercise-and-fitness/sports-and-fitness-management-one-year-certificate-2/)

1. High school diploma or GED on file in the LCCC Records office.

2. High school biology or equivalent.

In all associate of applied science and certificate programs, students are REQUIRED to attend lecture, college laboratories and off-campus facilities. Transportation to and from off-campus facilities is the responsibility of the students and is not provided by the College.

Program Learning Outcomes

1. Transfer to a four-year university, or enroll in the University Partnership four year degree with the University of Akron.

2. Acquire career opportunities in private and public fitness, recreation or wellness centers; entry-level management position in health, fitness and rehabilitation centers; and retail sales.

3. Be prepared to take a national, accredited certification exam for personal trainers.

4. Develop safe and effective exercise programs for all populations utilizing technology.

5. Value the importance of a continuing education to maintain current within profession.

6. Understand the scope of practice for all fitness professionals including both personal trainers and group exercise instructors.

7. Perform safe, ethical and legal practices in various career-related settings (e.g. cardiac rehabilitation, sports conditioning, corporate wellness, fitness and recreational centers)

Accelerated Pathway

The Accelerated Pathway for the Sports and Fitness Management, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
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<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>HLED 151</td>
<td>PERSONAL HEALTH</td>
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<td>HLED 152</td>
<td>COMMUNITY HEALTH</td>
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<td>HLED 156</td>
<td>HEALTH AND WELLNESS</td>
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<td>HPED 165</td>
<td>INTRODUCTION TO EXERCISE SCIENCE</td>
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<td>HPED 173</td>
<td>BIOMECHANICS OF RESISTANCE TRAINING</td>
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<td>PEFT 185</td>
<td>ROPES COURSE</td>
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<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 1</td>
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<tr>
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<td><strong>Hours</strong></td>
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<td>or MTHM 158</td>
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<td>PEFT/PEWL Elective</td>
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<td></td>
<td><strong>Hours</strong></td>
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<td><strong>Summer Semester</strong></td>
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<tr>
<td>BIOG 153</td>
<td>BASIC HUMAN NUTRITION</td>
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<td>HPED 152</td>
<td>EXERCISE MANAGEMENT FOR SPECIAL POPULATIONS</td>
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<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
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<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
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<tr>
<td></td>
<td><strong>Hours</strong></td>
<td><strong>11</strong></td>
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<tr>
<td><strong>Second Year</strong></td>
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<tr>
<td><strong>Fall Semester</strong></td>
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</tr>
<tr>
<td>HLED 153</td>
<td>FIRST AID AND SAFETY</td>
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<td>HPED 152</td>
<td>APPLICATION OF ACTIVITIES ACROSS A LIFESPAN</td>
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<td>HPED 275</td>
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<td></td>
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<tr>
<td></td>
<td><strong>63</strong></td>
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</tbody>
</table>

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course has a prerequisite.
Indicates that this course has a prerequisite or may be taken currently.

Elective selected from the general education/transfer module.

It is recommended that students transferring to LCCC’s University Partnership -University of Akron bachelor of science program should take MTHM 168.

Surgical Technology, Associate of Applied Science

Curriculum Code #2407

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The surgical technology program prepares its graduates with a thorough knowledge of the principles and practices of surgical procedures and functions in the operating room. Upon completion of the program, graduates are qualified to serve on a surgical team in any hospital operating room and are also eligible to take the Certification Examination of the Association of Surgical Technologists. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Preadmission Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALHN 108</td>
<td>CAREER EXPLORATION IN SURGICAL TECHNOLOGY</td>
<td>1</td>
</tr>
<tr>
<td>ALHN 112</td>
<td>INTRO TO MEDICAL TERMINOLOGY</td>
<td>1</td>
</tr>
<tr>
<td>ALHN 113</td>
<td>INTRODUCTION TO PATIENT CARE</td>
<td>1</td>
</tr>
<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY I,4</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I,4</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING,4</td>
<td>3</td>
</tr>
<tr>
<td>or MTHM 168</td>
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<tr>
<td>SDEV 101</td>
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Hours: 14

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SRGT 124</td>
<td>INTRODUCTION TO SURGICAL TECHNOLOGY,1,4</td>
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<td>BIOG 122</td>
<td>ANATOMY AND PHYSIOLOGY II,1,4</td>
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<tr>
<td>ALHN 121</td>
<td>GENERAL PATHOLOGY,4</td>
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Hours: 14

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>SRGT 114</td>
<td>SURGICAL TECHNOLOGY II - SURGICAL PROCEDURES,1,4,5</td>
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<tr>
<td>BIOG 251</td>
<td>GENERAL MICROBIOLOGY,1,4</td>
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Hours: 12

Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II,4</td>
<td>3</td>
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<tr>
<td>or CMMC 151</td>
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<tr>
<td>SRGT 215</td>
<td>SURGICAL TECHNOLOGY III SURGICAL PROCEDURES,1,4,5</td>
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</table>

Hours: 11

Second Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY,4</td>
<td>3</td>
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<td>or PSYH 151</td>
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<td>SRGT 226</td>
<td>SURGICAL TECHNOLOGY IV,1,4,5</td>
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</tbody>
</table>

Total Hours: 14

Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.

Students who have STNA status are not required to take ALHN 113.

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Indicates that this course has a prerequisite.

This course offers an opportunity for experiential learning.

American Heart Association Healthcare Provider certification is required upon entrance into the program.

Also accepting for Spring Cohort. Students starting in the Spring Semester will follow the curriculum guide in sequence with completion in the Spring of the Second Year

Program Contact(s):

Timothy Teets
440-366-7178
tteets@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team.

Admission Requirements for Surgical Technology

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.

2. Program application form on file by January 5 of each year for Fall selection and September 5 for Spring Selection, to be considered for the program.

3. Minimum GPA of 2.0 for college-level courses including transfer/transient work (excludes developmental education and more than two physical education courses).

4. Satisfactory completion with a grade of C or better of the pre-admission courses on the surgical technology curriculum guide which includes the following college or post-secondary education coursework:

- ALHN 108 CAREER EXPLORATION IN SURGICAL TECHNOLOGY
- ALHN 112 INTRO TO MEDICAL TERMINOLOGY
- ALHN 113 INTRODUCTION TO PATIENT CARE
- BIOG 121 ANATOMY AND PHYSIOLOGY I
- ENGL 161 COLLEGE COMPOSITION I
- MTHM 158 QUANTITATIVE REASONING,1,4
- OR MTHM 168 STATISTICS
- SDEV 101 COLLEGE 101

Admission Requirements for Surgical Technology
Allied health professionals: Applicants from a patient care related allied health/nursing background may transfer credit or receive credit through prior learning assessment for the following Surgical Technology preadmission courses:

- ALHN 112 INTRO TO MEDICAL TERMINOLOGY
- ALHN 113 INTRODUCTION TO PATIENT CARE

This will be handled on a case-by-case basis with the program director.

Learn more about Allied Health program requirements (p. 50)

Program Learning Outcomes

**Goal 1.** Students will be competent as surgical technologists in both the scrub and circulator roles.

- Outcome: Students will perform in independent practice aseptic and sterile technique to provide optimum surgical care
- Outcome: Students will perform in independent practice quality surgical patient care practices in all areas of perioperative services in the circulating role of the surgical technologist.
- Outcome: Students will perform in independent practice case preparation, creation, and maintenance of the sterile field within major and minor procedures in all surgical specialties as the scrub surgical technologist.

**Goal 2.** Students will demonstrate critical thinking and problem solving skills.

- Outcome: Students will collect and record data that reflects 1st scrub, 2nd scrub, and observational roles demonstrating application and analysis of surgical cases in independent practice.
- Outcome: Students will self-evaluate their progress in the surgical technologist role as ready and proficient to perform duties in independent practice.

**Goal 3.** Students will demonstrate professional behaviors consistent with the core values of the surgical technologist profession.

- Outcome: Students will abide by the code of ethics as defined by the Association of Surgical Technologist.
- Outcome: Students will be accountable for their actions for the care of the surgical patient and participation as members of the surgical team with the ability to demonstrate a surgical conscious at all times.

**Goal 4.** Students will communicate effectively with patients and staff as integral members of the surgical team.

- Outcome: Students will demonstrate excellent written and oral communication skills in the clinical setting
- Outcome: Students will support the operating room staff, demonstrating active listening skills to properly follow directions and participate within the scope of practice as a surgical technologist.

**Program Effectiveness Measures**

**Goal 5.** The program will meet criteria defined by the Accreditation Review Council for Surgical Technologists and Surgical Assistants (ARC/STSA) to support satisfactory student achievement as independently practicing surgical technologists.

1. Students will be eligible and sit for the national Certified Surgical Technologist (CST) examination and pass.

2. Students will complete the program within two years of sequential SRGT courses.
3. Graduating students will obtain career placement.
4. Graduating students will be satisfied with the surgical technologist program.
5. Employers will be satisfied with graduates of the program.

**Activities Director, One-Year General Certificate**

Curriculum Code #3009

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The Activities Director curriculum is designed to prepare the student for the National Certification Council for Activity Professionals (NCCAP) exam. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED 162</td>
<td>MODULAR EDUCATION PROGRAM FOR ACTIVITY PROFESSIONALS (MEPAP) I</td>
<td>8</td>
</tr>
<tr>
<td>HPED 152</td>
<td>APPLICATION OF ACTIVITIES ACROSS A LIFESPAN</td>
<td>3</td>
</tr>
<tr>
<td>HPED 173</td>
<td>BIOMECHANICS OF RESISTANCE TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>Hours</td>
<td>15</td>
<td></td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED 154</td>
<td>CARDIO-PULMONARY RESUSCITATION CPR</td>
</tr>
<tr>
<td>HLED 163</td>
<td>MODULAR EDUCATION PROGRAM FOR ACTIVITY PROFESSIONALS (MEPAP) II</td>
</tr>
<tr>
<td>HPED 120</td>
<td>SENIOR FITNESS ASSESSMENT</td>
</tr>
<tr>
<td>HPED 172</td>
<td>EXERCISE MANAGEMENT FOR SPECIAL POPULATIONS</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
</tr>
<tr>
<td>Hours</td>
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<table>
<thead>
<tr>
<th>Summer Semester</th>
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<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
</tr>
<tr>
<td>Hours</td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td>36</td>
</tr>
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</table>

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Jennifer Krupa
440-366-7536
jkrupa@lorainccc.edu
Emergency Medical Services - Paramedic, One-Year Technical Certificate

Curriculum Code #2116

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The Paramedic has an advanced level of knowledge and skills in the field of emergency medicine. The Paramedic performs advanced life support measures including cardiac monitoring, defibrillation, endotracheal intubation, and administering medications. The Paramedic program is accredited at the state and national level by the Ohio Division of Emergency Medical Services (OH 319).

The Lorain County Community College Paramedic Program (#600799) is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

The schedule below displays the timeline for the program if taken on a part-time basis. The part-time program has EMSP courses offered in the evening with courses beginning in the spring semester and continuing through summer and fall semester. This program also has a day based, accelerated, full-time format with courses held during the day. The full-time format begins in fall and completes in spring semester.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMSP 126</td>
<td>BODY SYSTEMS AND TERMINOLOGY FOR THE PARAMEDIC</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 127</td>
<td>PARAMEDIC PRACTICE - CONCEPTS I</td>
<td>1</td>
</tr>
<tr>
<td>EMSP 131</td>
<td>PARAMEDIC PRACTICE - FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 132</td>
<td>PARAMEDIC PRACTICE - PROCEDURES</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SEMESTER 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMSP 128</td>
<td>PARAMEDIC PRACTICE - CONCEPTS II</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 133</td>
<td>PARAMEDIC PRACTICE - CARDIAC EMERGENCIES</td>
<td>4</td>
</tr>
<tr>
<td>EMSP 134</td>
<td>PARAMEDIC PRACTICE - MEDICAL EMERGENCIES</td>
<td>3</td>
</tr>
<tr>
<td>SEMESTER 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMSP 135</td>
<td>PARAMEDIC PRACTICE - TRAUMA EMERGENCIES</td>
<td>4</td>
</tr>
<tr>
<td>EMSP 136</td>
<td>PARAMEDIC PRACTICE - SPECIALTY POPULATIONS</td>
<td>4</td>
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</tbody>
</table>

Students who are only interested in being eligible for the Paramedic National Registry, must take the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMSP 127</td>
<td>PARAMEDIC PRACTICE - CONCEPTS I</td>
<td>1</td>
</tr>
<tr>
<td>EMSP 128</td>
<td>PARAMEDIC PRACTICE - CONCEPTS II</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 131</td>
<td>PARAMEDIC PRACTICE - FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 132</td>
<td>PARAMEDIC PRACTICE - PROCEDURES</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 133</td>
<td>PARAMEDIC PRACTICE - CARDIAC EMERGENCIES</td>
<td>4</td>
</tr>
<tr>
<td>EMSP 134</td>
<td>PARAMEDIC PRACTICE - MEDICAL EMERGENCIES</td>
<td>3</td>
</tr>
<tr>
<td>EMSP 135</td>
<td>PARAMEDIC PRACTICE - TRAUMA EMERGENCIES</td>
<td>4</td>
</tr>
<tr>
<td>EMSP 136</td>
<td>PARAMEDIC PRACTICE - SPECIALTY POPULATIONS</td>
<td>4</td>
</tr>
</tbody>
</table>

A certificate of completion will be awarded to these students.

Program Contact(s):

Dawn Sgro
440-366-7186
dsgro@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Admission Requirements for Emergency Medical Technician-Paramedic

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Successful correction of all deficiencies shown during the placement assessment process with a grade of C or better.
3. Current certified EMT or certified AEMT in Ohio.
4. Valid State of Ohio driver’s license.
5. Program application form on file.
6. Minimum GPA of 2.0 for all college-level coursework completed at any higher education institution.

More program information can be found on our website. ([https://www.lorainccc.edu/health/emsparamedic/emergency-medical-services-paramedic-2/](https://www.lorainccc.edu/health/emsparamedic/emergency-medical-services-paramedic-2/))

Program Learning Outcomes

The goal of the LCCC Paramedic Program is to prepare competent entry-level paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

Upon successful completion of the Paramedic Program, the learner will:

1. comprehend, interpret and evaluate data collected from the thorough assessment of a patient and situation as expected from an entry level paramedic
2. recommend appropriate therapeutic procedures and make sound patient care judgements as expected from an entry level paramedic
3. demonstrate technical proficiency in procedures within the scope of an entry level paramedic
4. display professional behaviors consistent with employer and community expectations of an entry level paramedic.

Medical Assisting, One-Year Technical Certificate

Curriculum Code #2006

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The medical assisting certificate program provides its students with an orientation to the medical field as an assistant to the physician. Students are introduced to procedures in medical examination, use of laboratory equipment, office business procedures used in health care facilities and medical terminology. Upon completion of the accredited program, students are eligible to take the certification examination of the American Association of Medical Assistants. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ALHN 110</td>
<td>MEDICAL TERMINOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 115</td>
<td>BODY STRUCTURE AND FUNCTION</td>
<td>3</td>
</tr>
<tr>
<td>MDAS 101</td>
<td>FUNDAMENTAL PROCEDURES IN THE MEDICAL OFFICE</td>
<td>3</td>
</tr>
<tr>
<td>MDAS 102</td>
<td>INSURANCE AND CODING IN THE MEDICAL OFFICE</td>
<td>3</td>
</tr>
<tr>
<td>MDAS 103</td>
<td>BASIC ADMINISTRATIVE MEDICAL ASSISTING FUNCTIONS</td>
<td>1</td>
</tr>
<tr>
<td>MDAS 104</td>
<td>BOOKKEEPING FUNCTIONS IN THE MEDICAL OFFICE</td>
<td>2</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION</td>
<td>3</td>
</tr>
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</table>

PSYH 151 INTRODUCTION TO PSYCHOLOGY 3
MDAS 105 DIAGNOSTIC TESTING IN THE MEDICAL OFFICE 1,2 2
MDAS 106 SPECIMEN COLLECTION IN THE MEDICAL OFFICE 1,2 2
MDAS 107 PATIENT CARE IN THE MEDICAL OFFICE 1,2 5
MDAS 108 MEDICAL ASSISTING PRACTICUM 2 1

Total Hours 35

1 Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
2 Indicates that this course has a prerequisite.
3 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):
Ana Parrilla
440-366-4189
aparrilla@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team ([https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/](https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)).

Admission Requirements for Medical Assisting

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Program application form on file.

Learn more about Allied Health program requirements (p. 50)

More program information can be found on our website. ([https://www.lorainccc.edu/health/medical-assisting/medical-assisting-one-year-certificate/](https://www.lorainccc.edu/health/medical-assisting/medical-assisting-one-year-certificate/))

Personal Trainer, One-Year Technical Certificate

Curriculum Code #3003

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The personal trainer one-year technical certificate curriculum is designed to aid the student in preparing for national certification exams, starting their own business or working in health and fitness centers. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 121</td>
<td>ANATOMY AND PHYSIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOG 122</td>
<td>ANATOMY AND PHYSIOLOGY II</td>
<td>4</td>
</tr>
<tr>
<td>CMCC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
</tbody>
</table>
ENGL 161  COLLEGE COMPOSITION I  3
HLED 153  FIRST AID AND SAFETY  2
HPED 261  EXERCISE PHYSIOLOGY FOUNDATIONS  3
HPED 165  INTRODUCTION TO EXERCISE SCIENCE  3
HPED 272  EXERCISE PHYSIOLOGY II  3
HPED 172  EXERCISE MANAGEMENT FOR SPECIAL POPULATIONS  2
HPED 173  BIOMECHANICS OF RESISTANCE TRAINING  3
HPED 275  KINESIOLOGY  3
HPED 285  PRACTICUM SEMINAR SPORTS AND FITNESS PROFESSIONAL  2
HLED 181  NUTRITION AND WEIGHT MANAGEMENT STRATEGIES  2
PEFT 151  LIFETIME FITNESS  1
SDEV 101  COLLEGE 101  1

Total Hours  39

1  Indicates that this course has a prerequisite.
2  Indicates that this course has a prerequisite or may be taken concurrently.
3  A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Lisa Augustine
440-366-7352
laugusti@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/exercise-and-fitness/personal-trainer-one-year-certificate/)

1. High school diploma or GED on file in the LCCC Records office.
2. High school biology or equivalent.

In all associate of applied science and certificate programs, students are REQUIRED to attend lecture, college laboratories and off-campus facilities. Transportation to and from off-campus facilities is the responsibility of the students and is not provided by the College.

Practical Nursing, One-Year Technical Certificate

Curriculum Code #2091

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The practical nursing program prepares graduates to function as a licensed practical nurse. The licensed practical nurse provides, to individuals and groups, nursing care requiring the application of basic knowledge of the biological, physical, behavioral, social, technological and nursing sciences. Nursing care is provided at the direction of a licensed physician, dentist, podiatrist, optometrist or registered nurse. The graduate is eligible to take the NCLEX examination for licensure as a practical nurse. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOG 115</td>
<td>BODY STRUCTURE AND FUNCTION 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I 1</td>
<td>3</td>
</tr>
<tr>
<td>PRNS 110</td>
<td>INTRODUCTION TO MEDICATIONS 1,2</td>
<td>1</td>
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<tr>
<td>PRNS 111</td>
<td>FUNDAMENTALS OF MEDICAL/SURGICAL NURSING 1,2</td>
<td>10</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 3</td>
<td>1</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>18</td>
</tr>
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</table>

1  Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
2  Indicates that this course has a prerequisite.
3  A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

American Heart Association Healthcare Provider certification is required upon entrance into the program.

Program Contact(s):

Debbie Brown
440-366-7193
dbrown1@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/nursing/practical-nursing-lpn/)

Admission Requirements for Practical Nursing

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Proficiency in basic math (MTHM 041 ) or equivalent with a grade of C or better.
3. Recognized state tested nursing assistant (STNA) status, completion of nurse aide training program (ALHN 114) or division approval.
4. 2.0 GPA for all college coursework completed at any institution of higher education.
5. Successful completion of all deficiencies shown during the placement assessment process with a grade of C or better.
7. ATI TEAS Exam with the achievement of basic level of academic preparedness.

Learn more about Allied Health program requirements (p. 50)

### Sterile Processing, One-Year Technical Certificate

Curriculum Code #2105

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The Sterile Processing Technician one year technical certificate program will prepare the graduate to work within a health-care facility to ensure medical and surgical supplies, instruments, and equipment are properly cleaned, prepared, processed, stored, and distributed for patient care and surgical use. This program includes additional support courses to prepare students for advanced level positions and towards an associate's degree pathway that meets all prerequisite requirements to apply and matriculate into surgical technology. This program combines lecture, lab, and directed practice to meet The International Association of Healthcare Central Service Material Management (IAHCSMM) guidelines for gaining the Certified Registered Central Sterile Technician (CRCST) credential. Upon graduation and completion of 400 experience hours the student will be prepared and take CRCST examination.

#### First Year

**Fall Semester**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>STRP 101</td>
<td>STERILE PROCESSING FUNDAMENTALS</td>
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<tr>
<td>STRP 110</td>
<td>STERILE PROCESSING DIRECTED PRACTICE I</td>
<td>3</td>
</tr>
<tr>
<td>ALHN 112</td>
<td>INTRODUCTION TO MEDICAL TERMINOLOGY</td>
<td>1</td>
</tr>
<tr>
<td>ALHN 113</td>
<td>INTRODUCTION TO PATIENT CARE</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158 or MTHM 168</td>
<td>QUANTITATIVE REASONING or STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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**Total Hours**: 17

**Spring Semester**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tbody>
<tr>
<td>STRP 120</td>
<td>STERILE PROCESSING ADVANCED PROFESSIONAL PRACTICES</td>
<td>5</td>
</tr>
<tr>
<td>STRP 111 or STRP 112</td>
<td>STERILE PROCESSING DIRECTED PRACTICE II or STERILE PROCESSING INTERNSHIP</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 115 or BIOG 121</td>
<td>BODY STRUCTURE AND FUNCTION or ANATOMY AND PHYSIOLOGY I</td>
<td>3-4</td>
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</tbody>
</table>

#### Admission Requirements for Sterile Processing

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Program application form on file.
3. Minimum GPA of 2.0 for college-level courses including transfer/transient work (excludes developmental education and more than two physical education courses).
4. Attend informational session on Sterile Processing career field. Contact the advising team for specific dates, times, and location.

**Allied health professionals**: Applicants from a patient care related allied health/nursing background may transfer credit or receive credit through prior learning assessment for the following sterile processing courses:

- ALHN 112 INTRODUCTION TO MEDICAL TERMINOLOGY
- ALHN 113 INTRODUCTION TO PATIENT CARE

This will be handled on a case-by-case basis with the program director.

Learn more about Allied Health program requirements (p. 50)

#### Program Learning Outcomes

1. Adhere to professional behaviors of caring, accountability, responsibility, and respect for the quality of patient care.
2. Utilize critical thinking with sterile technique and sterile processing concepts for clinical judgment, anticipatory decision making, and managing tasks related to the sterile processing technician role.
3. Perform technical skills in managing the process for surgical instrumentation sterilization, inventory control and supply chain management, and information technology as it relates to the sterile processing environment.
Emergency Medical Services, Short-Term Technical Certificate

Curriculum Code #2114

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

There are four recognized certification levels for Emergency Medical Services. Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), advanced EMT (AEMT) and Paramedic. Included in this certificate is the course that leads to EMT certification. The EMT performs assessments of medical and trauma patients and appropriately cares for the patient based on the assessment. The care provided includes managing cardiac arrest, assisting ventilations, splinting, and administering medications. The EMT program is accredited by the Ohio Division of Emergency Medical Services (OH 319). Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>EMSB 101</td>
<td>EMERGENCY MEDICAL TECHNICIAN</td>
<td>8</td>
</tr>
</tbody>
</table>

Total Hours 8

Students who are only interested in being eligible for the EMT National Registry must complete EMSB 101. A certificate of completion will be awarded to these students.

Program Contact(s):

Dawn Sgro
440-366-7186
dsgro@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Learn more about Allied Health program requirements (p. 50)

More program information can be found on our website. (https://www.lorainccc.edu/health/emergency-medical-services-short-term-certificate/)

Group Exercise Instructor, Short-Term Technical Certificate

Curriculum Code #3004

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

This certificate program will prepare students to successfully complete national certification exams in a wide venue of exercise instructor exams. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 115</td>
<td>BODY STRUCTURE AND FUNCTION</td>
<td>3</td>
</tr>
<tr>
<td>HLED 153</td>
<td>FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>HLED 181</td>
<td>NUTRITION AND WEIGHT MANAGEMENT STRATEGIES</td>
<td>2</td>
</tr>
<tr>
<td>HPED 173</td>
<td>BIOMECHANICS OF RESISTANCE TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>HPED 172</td>
<td>EXERCISE MANAGEMENT FOR SPECIAL POPULATIONS</td>
<td>2</td>
</tr>
<tr>
<td>HPED 166</td>
<td>GROUP EXERCISE INSTRUCTOR PREP</td>
<td>3</td>
</tr>
<tr>
<td>HPED 285</td>
<td>PRACTICUM SEMINAR SPORTS AND FITNESS PROFESSION</td>
<td>2</td>
</tr>
<tr>
<td>PEFT 151</td>
<td>LIFETIME FITNESS</td>
<td>1</td>
</tr>
<tr>
<td>PEFT 131</td>
<td>AEROBIC SPINNING</td>
<td>1</td>
</tr>
</tbody>
</table>

Select four of the following:

PEFT 132 | ZUMBA                                            |        |
PEFT 133 | T-BOW FITNESS                                    |        |
PEFT 161 | BODY TONING                                      |        |
PEFT 163 | STEP AEROBICS                                     |        |
PEFT 165 | CARDIO-KICKBOXING                                 |        |
PEFT 166 |                                                 |        |
PEFT 167 | PILATES                                          |        |
PEFT 168 | ABDOMINAL WORKOUT                                |        |
SDEV 101 | COLLEGE 101                                       | 3     |

Total Hours 24

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Lisa Augustine
440-366-7352
laugusti@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/health/exercise-and-fitness/group-exercise-instructor-short-term-certificate/)

1. High school diploma or GED on file in the LCCC Records office.
2. High school biology or equivalent.

In all associate of applied science and certificate programs, students are REQUIRED to attend lecture, college laboratories and off-campus facilities. Transportation to and from off-campus facilities is the responsibility of the students and is not provided by the College.
# Health & Wellness Coaching & Promotion, Short-Term Technical Certificate

Curriculum Code #3030

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The short-term certificate in health & wellness coaching is designed to prepare an individual for a career in health and wellness coaching/promotion. The short-term certificate in health & wellness coaching program will prepare individuals for employment in corporations, fitness or recreation centers, hospitals wellness programs, insurance companies and self-employment. In addition the coursework will prepare an individual for health & wellness coaching certificate programs. The program is intended to enable individuals to utilize the acquired knowledge and skills to enhance existing professional responsibilities. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

### First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 115 BODY STRUCTURE AND FUNCTION 4</td>
<td>3-4</td>
</tr>
<tr>
<td>or BIOG 121 ANATOMY AND PHYSIOLOGY I</td>
<td></td>
</tr>
<tr>
<td>HLED 156 HEALTH AND WELLNESS</td>
<td>2</td>
</tr>
<tr>
<td>Select two of the following HLED courses:</td>
<td>4-5</td>
</tr>
<tr>
<td>HLED 151 PERSONAL HEALTH</td>
<td></td>
</tr>
<tr>
<td>HLED 152 COMMUNITY HEALTH</td>
<td></td>
</tr>
<tr>
<td>HLED 157 WOMEN'S HEALTH</td>
<td></td>
</tr>
<tr>
<td>HLED 125 INTRODUCTION TO HEALTH AND WELLNESS COACHING 2</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101 3</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 111 SUCCESS COACHING AND MENTORING I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>14-16</td>
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<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED 181 NUTRITION AND WEIGHT MANAGEMENT STRATEGIES</td>
<td>2</td>
</tr>
<tr>
<td>HLED 221 HEALTH PROMOTION AND BEHAVIOR CHANGE 1</td>
<td>3</td>
</tr>
<tr>
<td>HLED 225 HEALTH AND WELLNESS COACHING/PROMOTION PRACTICUM 1</td>
<td>1</td>
</tr>
<tr>
<td>HPED 173 BIOMECHANICS OF RESISTANCE TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 112 SUCCESS COACHING AND MENTORING II 1</td>
<td>3</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td>12</td>
</tr>
</tbody>
</table>

### Phlebotomy, Short-Term Technical Certificate

Curriculum Code #2241

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The phlebotomist performs venipuncture and micro skin punctures, obtaining blood specimens from patients for the purpose of testing and analysis. The graduate of the program is prepared for employment in hospitals, clinics, private laboratories and physician office laboratories. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED 153 FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>BIOG 115 BODY STRUCTURE AND FUNCTION 1</td>
<td>3</td>
</tr>
<tr>
<td>PHBT 112 BASIC LABORATORY TECHNIQUES 1</td>
<td>4</td>
</tr>
</tbody>
</table>

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1. Indicates that this course requires a college level prerequisite.
2. Indicates this course requires a prerequisite or may be taken concurrently.
3. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
4. If a student is considering the LCCC associate degree or transferring to the University Partnership consider BIOG 121 & BIOG 122 sequence.

Program Contact(s):

Lisa Augustine
440-366-7352
laugusti@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

1. Apply the health coaching structure while working with individuals or groups as it relates to the following competencies: preparation prior to first session; routine follow-up sessions & coaching program termination.
2. Facilitate the coaching process, coaching relationships/communication techniques as it relates to the following competencies: client-centered relationship; active listening and presence; trust & rapport; focus and refocus the conversation; assist client to evaluate and integrate health information; goals and implementing action; client awareness; intrinsic motivation; client self-efficacy; improve support; client self-discovery; and increase positive psychological resources.
3. Identifies evidence-based health promotion, disease prevention and lifestyle medicine recommendations provided by public health groups such as the Centers for Disease Control (CDC) and National Institutes of Health (NIH) as it relates to the following competencies: health promotion and disease prevention; chronic disease; health behaviors; social and behavioral risk factors.
4. Demonstrate ethical treatment and legal professionalism as it relates to the following competencies: professional conduct: currency in the discipline; International Consortium Health Wellness Coaches (ICHWC) Code of Ethics & ICHWC Health & Wellness Coach Scope of Practice; legal: client records are protected & abide by HIPPA.
### Sterile Processing, Short-Term Technical Certificate

Curriculum Code #2103

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The Sterile Processing Technician short term technical certificate program will prepare the graduate to work within a health-care facility to ensure medical and surgical supplies, instruments, and equipment are properly cleaned, prepared, processed, stored, and distributed for patient care and surgical use. This program combines lecture, lab, and directed practice to meet The International Association of Healthcare Central Service Material Management (IAHCSMM) guidelines for gaining the Certified Registered Central Sterile Technician (CRCST) credential. Upon graduation and completion of 400 experience hours the student will be prepared and take CRCST examination.

### Admission Requirements for Sterile Processing

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.
2. Program application form on file.
3. Minimum GPA of 2.0 for college-level courses including transfer/transient work (excludes developmental education and more than two physical education courses).
4. Attend informational session on the Sterile Processing career field. Contact the advising team for specific dates, times, and location.

Learn more about Allied Health program requirements (p. 50)

### Program Learning Outcomes

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRP 101</td>
<td>STERILE PROCESSING FUNDAMENTALS</td>
<td>5</td>
</tr>
<tr>
<td>STRP 110</td>
<td>STERILE PROCESSING DIRECTED PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>STRP 111 or STRP 112</td>
<td>STERILE PROCESSING DIRECTED PRACTICE II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or STERILE PROCESSING INTERNSHIP</td>
<td></td>
</tr>
</tbody>
</table>

### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRP 101</td>
<td>STERILE PROCESSING FUNDAMENTALS</td>
<td>5</td>
</tr>
<tr>
<td>STRP 110</td>
<td>STERILE PROCESSING DIRECTED PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>STRP 111 or STRP 112</td>
<td>STERILE PROCESSING DIRECTED PRACTICE II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or STERILE PROCESSING INTERNSHIP</td>
<td></td>
</tr>
</tbody>
</table>

### Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRP 101</td>
<td>STERILE PROCESSING FUNDAMENTALS</td>
<td>5</td>
</tr>
<tr>
<td>STRP 110</td>
<td>STERILE PROCESSING DIRECTED PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>STRP 111 or STRP 112</td>
<td>STERILE PROCESSING DIRECTED PRACTICE II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or STERILE PROCESSING INTERNSHIP</td>
<td></td>
</tr>
</tbody>
</table>

1. Indicates that a grade of C (2.0) or better must be earned in order to continue in the sequence.
2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3. Indicates that this course has a prerequisite.
4. Indicates that this course offers an opportunity for experiential learning.
1. Adhere to professional behaviors of caring, accountability, responsibility, and respect for the quality of patient care.
2. Utilize critical thinking with sterile technique and sterile processing concepts for clinical judgment, anticipatory decision making, and managing tasks related to the sterile processing technician role.
3. Perform technical skills in managing the process for surgical instrumentation sterilization, inventory control and supply chain management, and information technology as it relates to the sterile processing environment.

Wellness, Short-Term General Certificate

Curriculum Code #3005

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The wellness short-term general certificate curriculum is designed to enhance marketability within a variety of future worksite wellness initiatives. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED 150 or HLED 157</td>
<td>DRUGS ALCOHOL AND TOBACCO</td>
<td>3</td>
</tr>
<tr>
<td>HLED 151 or HLED 156</td>
<td>PERSONAL HEALTH</td>
<td>2</td>
</tr>
<tr>
<td>HLED 153</td>
<td>HEALTH AND WELLNESS</td>
<td>2</td>
</tr>
<tr>
<td>HLED 181</td>
<td>NUTRITION AND WEIGHT MANAGEMENT STRATEGIES</td>
<td>2</td>
</tr>
<tr>
<td>HLED 221</td>
<td>HEALTH PROMOTION AND BEHAVIOR CHANGE</td>
<td>3</td>
</tr>
<tr>
<td>HPED 173</td>
<td>BIOMECHANICS OF RESISTANCE TRAINING</td>
<td>3</td>
</tr>
<tr>
<td>PEFT 151</td>
<td>LIFETIME FITNESS</td>
<td>1</td>
</tr>
<tr>
<td>PEWL 151</td>
<td>STRESS MANAGEMENT</td>
<td>1</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Hours 18

1 Indicates that this course requires a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Lisa Augustine
440-366-7352
laugusti@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website.
(https://www.lorainccc.edu/health/exercise-and-fitness/wellness-short-term-certificate/)

1. High school diploma or GED on file in the LCCC Records office.

2. High school biology or equivalent.

In all associate of applied science and certificate programs, students are REQUIRED to attend lecture, college laboratories and off-campus facilities. Transportation to and from off-campus facilities is the responsibility of the students and is not provided by the College.

State Tested Nurse Aide (STNA), Certificate of Completion

Curriculum Code #C201

Effective May 2020

Division of Health and Wellness Sciences (p. 161)

The nurse aide or nursing assistant performs basic nursing related services to patients and residents in a long-term facility. The graduate of the program is eligible to sit for the state certification test in Ohio and may work as a nursing assistant in several health care settings such as nursing homes, hospitals and home care agencies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>STNA 114</td>
<td>NURSE AIDE TRAINING</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Hours 6

1 Indicates that this course can be taken concurrently with SDEV 101.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Linda Sulkowski
440-366-4508
lsulkows@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website.
(https://www.lorainccc.edu/health/nursing/state-tested-nurse-assisting-stna/)

Admission Requirements for Nurse Aide Training Competency Evaluation Program (TCEP)

1. Official high school or GED and college/program transcripts (if applicable) on file in the LCCC Records office.

2. Must be 17 year of age on program application.
3. Health physical admission packet turned in at the Health and Wellness Sciences division, HS 223 and criminal background clearance.
4. American Heart Association Healthcare Provider course is strongly recommended.
5. Demonstrated written and verbal communication skills.

Learn more about Allied Health program requirements (p. 50)

Division of Science and Mathematics
Division Offices: PS 210
Division Telephone: 440-366-4022

Associate of Science (p. 28)
Associate of Applied Science Program
- Sustainable Agriculture #7200 (p. 189)

One-Year Technical Certificate
- Sustainable Agriculture #7195 (p. 190)

Short-Term Technical Certificate
- Environmental Technology #7153 (p. 191)
- Specialty Crop Growers #7191 (p. 191)

Sustainable Agriculture, Associate of Applied Science
Curriculum Code #7200
Effective May 2020

Division of Science and Mathematics (p. 189)
The associate of applied science in sustainable agriculture allows LCCC students to explore careers in agriculture and food systems. Students learn key sustainability and land stewardship skills as they study the interactions between food, human health and ecosystem services. Students contribute to the production, distribution and marketing of locally grown produce through hands-on experiences with local farmers and growers. Students completing this program acquire the fundamental skills to start their own agricultural enterprise or transfer into a four-year sustainability-related program. Some courses require travel to off-campus sites. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

First Year
Fall Semester Hours
SDEV 101 COLLEGE 101 2 1
ENGL 161 COLLEGE COMPOSITION I 3
MTHM 168 STATISTICS 3 3
SAGR 114 INTRODUCTION TO SUSTAINABLE AGRICULTURE 1 3
SAGR 105 INTRODUCTION TO LIVING LANDSCAPES 1 3

Spring Semester
BIOL 165 INTRODUCTION TO ECOLOGY 1 3
SAGR 102 SPRING CROP PRODUCTION 1 3
SAGR 106 SOIL MANAGEMENT AND CONSERVATION 1 3
SAGR 109 WILD EDIBLES 1 1
SAGR 113 PLANT PROPAGATION 1 2

Summer Semester
SAGR 103 SUMMER CROP PRODUCTION 1 3
SAGR 110 PERMACULTURE: PRINCIPLES AND APPLICATIONS 4
SAGR 111 PERMACULTURE DESIGN FOR COMMUNITY 1 2

Second Year
Fall Semester
BIOL 161 EXPLORATIONS IN FIELD SCIENCE 1 3
ENTR 200 ENTREPRENEURSHIP 3
SAGR 101 FALL CROP PRODUCTION 1 3
SAGR 107G WORLDVIEWS TO SUPPORT SUSTAINABLE AGRICULTURE 1 1
SAGR 112 BUSINESS PRINCIPLES OF SUSTAINABLE AGRICULTURE 1 3

Spring Semester
BIOL 151 GENERAL BIOLOGY 4
SOCY 151G INTRODUCTION TO SOCIOLOGY 3
CHMY 155G CHEMISTRY AND SOCIETY 3
SAGR 115G FOOD SYSTEMS, SOCIETY AND GLOBAL HEALTH 1 3

Total Hours 60

1 This course offers an opportunity for experiential learning.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 more credit hours.
3 Students transferring to Central State or OSU for a Bachelor’s in Sustainable Agriculture should take MTHM 172.
4 Students transferring to Central State or OSU for a Bachelor’s in Sustainable Agriculture should take BIOG 161.
5 Students transferring to Central State or OSU for a Bachelor’s in Sustainable Agriculture should take CHMY 171.

NON-REQUIRED ELECTIVE FOR STUDENTS INTERESTED IN LIVESTOCK

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SAGR 108</td>
<td>INTRODUCTION TO SUSTAINABLE ANIMAL FARMING 1</td>
<td>4</td>
</tr>
</tbody>
</table>

1 Students interested in livestock may be interested in SAGR 108 Introduction to Sustainable Animal Farming. This non-required elective is offered on an as needed basis.
Sustainable Agriculture, One-Year Technical Certificate

Curriculum Code #7195

Effective May 2020

Division of Science and Mathematics (p. 189)

The one-year technical certificate in sustainable agriculture will allow LCCC students to explore careers in agriculture and food systems. Students will learn key sustainability and land stewardship skills as they study the interactions between food, human health, and ecosystem services. Students will contribute to the production, distribution and marketing of locally grown produce through hands-on experiences with local farmers and growers. Students completing this program will acquire the fundamental skills to start their own agricultural enterprise or continue on for the AAS degree. Some courses require travel to off-campus sites. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

Program Contact(s):
Ruby Beil
440-366-7222
rbeil@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/sciences/sustainable-agriculture/associate-of-science-in-sustainable-agriculture/)

1. Demonstrate knowledge of techniques, tools and technical skills needed in farm production and farm management.
2. Gain key sustainability and land stewardship skills through the study of interactions between food, human health, and ecosystem services.
3. Recognize the global diversity of cultural connections between food, health, and nutrition.
4. Describe the impact that various food systems have upon the global environment.
5. Contribute to the production, distribution and marketing of locally grown produce.
6. Work productively as an individual and as a member of a problem solving team in an agricultural environment.
7. Communicate effectively with co-workers and customers, and work collaboratively with others.
8. Apply entrepreneurial knowledge and skills to develop agricultural enterprises and market new products and services within the local food economy.
9. Demonstrate a high standard of professional ethics, attitudes, and values.
10. Develop a social network within the farming community.
11. Recognize the importance of agriculture practices for improving the global environment and human health.

Sustainable Agriculture, One-Year Technical Certificate

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
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</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 101</td>
<td>FALL CROP PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 114</td>
<td>INTRODUCTION TO SUSTAINABLE AGRICULTURE</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 112</td>
<td>BUSINESS PRINCIPLES OF SUSTAINABLE AGRICULTURE</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td>16</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENTR 200</td>
<td>ENTREPRENEURSHIP</td>
<td>3</td>
</tr>
<tr>
<td>BIOG 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 102</td>
<td>SPRING CROP PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 105</td>
<td>INTRODUCTION TO LIVING LANDSCAPES</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 106</td>
<td>SOIL MANAGEMENT AND CONSERVATION</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 113</td>
<td>PLANT PROPAGATION</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>33</td>
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</tbody>
</table>

1 This course offers an opportunity for experiential learning.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 more credit hours.
3 Students transferring to Central State or OSU for a Bachelor’s in Sustainable Agriculture should take MTHM 172.

Program Contact(s):
Ruby Beil
440-366-7222
rbeil@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/sciences/sustainable-agriculture/associate-of-science-in-sustainable-agriculture/)

1. Demonstrate knowledge of techniques, tools and technical skills needed in farm production
2. Gain key sustainability and land stewardship skills through the study of interactions between food, human health, and ecosystem services.
3. Contribute to the production, distribution and marketing of locally grown produce.
4. Work productively as an individual and as a member of a problem solving team in an agricultural environment
5. Apply entrepreneurial knowledge and skills to develop agricultural enterprises and market new products and services within the local food economy
6. Develop a social network within the farming community
7. Recognize the importance of agriculture practices for improving the global environment and human health
Environmental Technology, Short-Term Technical Certificate

Curriculum Code #7153

Effective May 2020

Division of Science and Mathematics (p. 189)

Environmental technicians are employed in research, testing and quality control of a wide range of products, including petroleum, plastics, pharmaceuticals and semi-conductors. This short-term certificate program prepares students to function as technicians in either public or private laboratories, where they perform tasks such as environmental sample collection and monitoring, instrument calibration, report writing and data management. Students will learn a strong set of technical skills where they analyze various materials using standard procedures and instrumental procedures. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHMY 171</td>
<td>GENERAL CHEMISTRY I ¹ ²</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>URBS 151G</td>
<td>INTRODUCTION TO URBAN STUDIES</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOG 165</td>
<td>INTRODUCTION TO ECOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>CHMY 172</td>
<td>GENERAL CHEMISTRY II ¹ ²</td>
<td>5</td>
</tr>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 26

¹ Indicates that this course has a prerequisite.
² Recitation hour included.
³ A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 more credit hours.

Program Contact(s):

Aaron Weiss 440-366-4866 aweiss@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/sciences/environmental-technology/)

Speciality Crop Growers, Short-Term Technical Certificate

Curriculum Code #7191

Effective May 2020

Division of Science and Mathematics (p. 189)

The specialty crop growers short-term technical certificate provides the basic training needed to diversify and expand farm production, boost local economies, increase access to fresh food, and decrease the need for extensive transportation of foods. Students contribute directly to the production of locally grown produce through hands-on experiences with local farmers and growers. Training in specialty crop production allows students to explore career pathways in agriculture, cooperative systems, and marketing. Some courses require travel to mentor farms and off-campus learning sites. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAGR 101</td>
<td>FALL CROP PRODUCTION ¹</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 112</td>
<td>BUSINESS PRINCIPLES OF SUSTAINABLE AGRICULTURE ¹</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 114</td>
<td>INTRODUCTION TO SUSTAINABLE AGRICULTURE ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAGR 102</td>
<td>SPRING CROP PRODUCTION ¹</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 106</td>
<td>SOIL MANAGEMENT AND CONSERVATION ¹</td>
<td>3</td>
</tr>
<tr>
<td>SAGR 113</td>
<td>PLANT PROPAGATION ¹</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Hours: 17

¹ This course offers an opportunity for experiential learning.

Program Contact(s):

Ruby Beil 440-366-7222 rbeil@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/sciences/sustainable-agriculture/specialty-crop-growers-short-term-certificate/)

Division of Social Sciences and Human Services

Division Offices: IL 111  Division Telephone: 440-366-4021
**Associate of Arts in Teacher Education**
- Teacher Education – Transfer Program #5261 (p. 192)

**Associate of Applied Science Programs**
- Early Childhood Education #5159 (p. 193)
- Human Services #5701 (p. 195)
- Justice Systems – Corrections #5073 (p. 196)
- Justice Systems – Police Science #5071 (p. 197)
- Public Administration #5180 (p. 198)

**One-Year Technical and General Certificates**
- Justice Systems - Police Science Basic Police Academy #5076 (p. 200)
- Police Science #5094 (p. 200)
- Public Administration #5080 (p. 201)
- Women’s, Gender, and Sexuality Studies #5120 (p. 201)

**Short-Term Technical and General Certificates**
- Addiction Counselor Certificate #5063 (p. 202)
- Early Childhood Education #5003 (p. 202)
- Early Childhood Education – Infant and Toddler #5158 (p. 203)

**Teacher Education - Transfer Program, Associate of Arts in Teacher Education**

Curriculum Code #5261

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

The associate of arts in teacher education will be awarded to a student who successfully completes one of the following three programs: early childhood education licensure, paraprofessional licensure or transfer for K-12 licensure. Conferral of the associate of arts degree in teacher education in the transfer area of concentration with a 2.5 minimum GPA in all education cluster courses (ECED, EDCT and PSYH) will permit transfer with junior-year standing to a four-year college or university with an approved program in teacher education. Subsequent satisfactory completion of the transfer school requirements will lead to a bachelor’s degree and to contingent recommendation from that school for one of the State of Ohio Department of Education provisional licenses to teach in the K-12 system. Since all transfer schools have different approaches/requirements to licensure, the student should consult carefully with the college counseling department about selecting appropriate course selections for varying licensure concentrations to assure maximum transferability. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>EDCT 181</td>
<td>INTRODUCTION TO THE EDUCATION PROFESSION</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
</tr>
<tr>
<td>Arts and Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>EDCT 264</td>
<td>EDUCATIONAL TECHNOLOGY</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
</tr>
<tr>
<td>PSYH 253</td>
<td>CHILD DEVELOPMENT</td>
</tr>
<tr>
<td>or PSYH 254</td>
<td>or ADOLESCENT DEVELOPMENT</td>
</tr>
<tr>
<td>Electives (Concentration)</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>EDCT 252</td>
<td>PRINCIPLES OF TEACHING &amp; LEARNING</td>
</tr>
<tr>
<td>HSTR 151G</td>
<td>CIVILIZATION I</td>
</tr>
<tr>
<td>Electives (Concentration)</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>EDCT 254</td>
<td>INDIVIDUALS WITH EXCEPTIONALITIES</td>
</tr>
<tr>
<td>EDCT 275</td>
<td>SOCIAL ISSUES IN EDUCATION</td>
</tr>
<tr>
<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td>4</td>
</tr>
<tr>
<td>Arts and Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>62</td>
</tr>
</tbody>
</table>

1 Indicates that this course can be taken concurrently with PSYH 151.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Choose arts and humanities, mathematics and science electives from state transfer module. One lab science elective must be chosen (indicated with an L from the state transfer module). Any student pursuing math/science licensure must take a math/science course wherever elective courses are listed and seek the advice of an advisor.
4 Indicates course has a prerequisite.
5 A student may make a division-approved substitution for this course as appropriate to the transfer institution requirement and/or major.

Program Contact(s):

**Aldena Harris**

440-366-7076
aharris1@lorainccc.edu
More program information can be found on our website. (https://www.lorainccc.edu/education/teacher-education/associate-of-arts-in-teacher-education-transfer-program/)

The following documentation is required:
1. Tuberculosis (TB) testing
2. Three letters of reference
3. Completed BCI/FBI background checks
4. Signed confidentiality and liability statement

The associate of arts in teacher education degree is awarded to students successfully completing the following program:

- Transfer for K-12 licensure.

Conferral of the associate of arts degree in teacher education with a 2.5 minimum grade point average in all education cluster courses (ECED, EDCT and PSYH) and meeting the attendant requirements of the State of Ohio and Lorain County Community College to establish good moral character will result in qualification for state licensure.

1. Provide LCCC students with a well-rounded, liberal arts education that focuses on the education profession, principles of instruction and child development.
2. Explore the purposes and learning outcomes associated with the education profession through Experiential/Service Learning opportunities and requirements in coursework.
3. Integrate principles of Educational Technology into coursework for the purpose of determining diverse and developmentally appropriate uses of technological tools in the classroom.
4. Prepare LCCC students to transfer to a four-year school for earning the bachelor's degree required for a state of Ohio teacher's license.

### Early Childhood Education, Associate of Applied Science

Curriculum Code #5159

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

An early childhood education graduate could expect to find career opportunities in the following environments: pre-kindergarten program, Head Start, parent cooperative, public or private nursery school, exceptional child programs, in-home child care aide, and service agencies/referral program. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

#### First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>ECED 111</th>
<th>INTRODUCTION TO EARLY CHILDHOOD EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours</strong></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

#### Spring Semester

<table>
<thead>
<tr>
<th>ECED 164</th>
<th>CHILD GUIDANCE AND CLASSROOM MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECED 171</th>
<th>HEALTH, SAFETY AND NUTRITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours</strong></td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENGL 161</th>
<th>COLLEGE COMPOSITION I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PSYH 151</th>
<th>INTRODUCTION TO PSYCHOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SDEV 101</th>
<th>COLLEGE 101</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hours</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

| **Total Hours** | 15 | 16 | 14 | 61 |

1 Indicates that this course has a prerequisite or may be taken concurrently.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course has a prerequisite.
4 Arts and humanities: choose from any arts and humanities course form the state transfer module.

Program Contact(s):

**Kathleen Head**

440-366-7167

khead@lorainccc.edu
For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/education/early-childhood-education/associate-of-applied-science-in-early-childhood-education/)

Placement assessment, current physical and background check required. A grade of B or higher is required in ECED Student Teaching Seminar I and II. ECED 283 Student Teaching I and ECED Student Teaching II can only be repeated one time. To be able to take ECED 284 Student Teaching II student must have completed Student Teaching I with a grade of 'B' or higher.

Requirement for ODE pre-kindergarten associate certificate includes completion of all required ECED, EDCT, and ENGL courses with at least a C in each course and an overall GPA of 2.5 in these courses and a grade of B or higher is required in ECED Student Teaching Seminar I and II.

Upon the completion of all LCCC AAS degree requirements for graduation and the satisfactory completion of all ECED pre-kindergarten associate certificate program requirements, the social sciences and human services division ECED coordinator may recommend to the ODE, Division of Teacher Education and Certification for the pre-kindergarten associate certificate.

Program Prerequisites for Early Childhood Education
Prior to entering the program, a student must have a physical completed on the current ODJFS form, signed confidentiality and liability statement, and a letter of reference, form documenting residency in the state of Ohio the past five years. (e.g. utility bill, tax form)

Students will be REQUIRED to sign a liability waiver statement and a confidentiality statement. In addition, in accordance with state law, students are REQUIRED to be fingerprinted (background check). Students previously convicted of a felony must schedule an appointment with the division dean or program coordinator prior to enrollment in the program.

After admission into the ECE program, students are REQUIRED to prepare career goals statement. This statement is an assignment in the ECED 111 course. Initial admission into the program is conditional. (Full admission requires the completion of 12 semester hours of coursework, exclusive of college preparatory, with a GPA of 2.0 or higher, including completion of ECED 111 and one ECED course with a grade of C or higher). 

Pre-Kindergarten Certification (Licensure)
Graduates of the associate of applied science in teacher education (AAS) degree program may be recommended for the Ohio Department of Education (ODE) pre-kindergarten associate certificate subject to the following:

1. Completion of all requirements of the AAS degree in early childhood education.
2. Completion of all required EDCT, ECED and ENGL courses with at least a C in each course and an overall grade point average of 2.5 in these courses.
3. A grade of B or higher is REQUIRED in ECED 283, Student Teaching Seminar I and ECED 285, Student Teaching Seminar II.


Effective August 2010, all students entering the early childhood education program will have one year after graduation to apply for teacher licensure. Failure to apply within one year results in the student having to take a minimum of three credits in ECED coursework.

Upon completion of all associate of applied science in teacher education degree requirements for graduation and the satisfactory completion of all early childhood education pre-K associate certificate program requirements, the early childhood education coordinator may recommend to the ODE, Division of Teacher Education and Certification, for pre-kindergarten associate certification.

The associate degree program for those completing the transfer area of concentration will permit transfer with junior-year standing to a four-year college or university with an approved program in teacher education. Subsequent satisfactory completion of the transfer school’s requirements will lead to a bachelor’s degree and to contingent recommendation from that school for one of the State of Ohio Department of Education provisional licenses to teach in the K-12 system. Students pursuing mathematics/science licensure must take a mathematics/science course wherever elective courses are listed and seek the advice of an advisor.

Program Learning Outcomes
1. Observe a child-centered environment that focuses on intentional teaching and reflects on the whole child. (N.A.E.Y.C. 1)
2. Recognize historical perspectives and implement developmental theories of education that impact a child’s development. (N.A.E.Y.C. 1)
3. Design curriculum and assessments that are developmentally responsive to the diverse needs of children. (N.A.E.Y.C. 1, 3, 4, 5)
4. Engage with children, families, colleagues and the community ethically and professionally in learning environments and meaningful activities. (N.A.E.Y.C. 2, 6)

Accelerated Pathway
The Accelerated Pathway for the Early Childhood Education, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 111</td>
<td>INTRODUCTION TO EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ECED 164</td>
<td>CHILD GUIDANCE AND CLASSROOM MANAGEMENT 1</td>
<td>3</td>
</tr>
<tr>
<td>ECED 253</td>
<td>INTRODUCTION TO CHILD DEVELOPMENT 3,4</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I 4</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 2,4</td>
<td>1</td>
</tr>
</tbody>
</table>

Cengage test.

Effective August 2010, all students entering the early childhood education program will have one year after graduation to apply for teacher licensure. Failure to apply within one year results in the student having to take a minimum of three credits in ECED coursework.

Upon completion of all associate of applied science in teacher education degree requirements for graduation and the satisfactory completion of all early childhood education pre-K associate certificate program requirements, the early childhood education coordinator may recommend to the ODE, Division of Teacher Education and Certification, for pre-kindergarten associate certification.

The associate degree program for those completing the transfer area of concentration will permit transfer with junior-year standing to a four-year college or university with an approved program in teacher education. Subsequent satisfactory completion of the transfer school’s requirements will lead to a bachelor’s degree and to contingent recommendation from that school for one of the State of Ohio Department of Education provisional licenses to teach in the K-12 system. Students pursuing mathematics/science licensure must take a mathematics/science course wherever elective courses are listed and seek the advice of an advisor.

Program Learning Outcomes
1. Observe a child-centered environment that focuses on intentional teaching and reflects on the whole child. (N.A.E.Y.C. 1)
2. Recognize historical perspectives and implement developmental theories of education that impact a child’s development. (N.A.E.Y.C. 1)
3. Design curriculum and assessments that are developmentally responsive to the diverse needs of children. (N.A.E.Y.C. 1, 3, 4, 5)
4. Engage with children, families, colleagues and the community ethically and professionally in learning environments and meaningful activities. (N.A.E.Y.C. 2, 6)

Accelerated Pathway
The Accelerated Pathway for the Early Childhood Education, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 111</td>
<td>INTRODUCTION TO EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ECED 164</td>
<td>CHILD GUIDANCE AND CLASSROOM MANAGEMENT 1</td>
<td>3</td>
</tr>
<tr>
<td>ECED 253</td>
<td>INTRODUCTION TO CHILD DEVELOPMENT 3,4</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I 4</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101 2,4</td>
<td>1</td>
</tr>
</tbody>
</table>
The human services degree prepares students for entry-level social service positions. Within the curriculum, students may select a human services generalist major or a major in gerontology assisting. The associate of applied science degree in human services prepares students for employment as case managers, child care workers, program aides, mental health technicians, job coaches, outreach workers and social service aides. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>3</td>
<td>First Year</td>
</tr>
<tr>
<td>HMLS 111</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PSYH 151</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SDEV 101</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SOCY 151G or SOCY 256</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOCY 255G or SOCY 256</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Technical Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>

1 Indicates that this course has a prerequisite or may be taken concurrently.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 Indicates that this course requires a prerequisite.
4 This course is offered online.

**Human Services, Associate of Applied Science**

Curriculum Code #5701

Effective May 2020

Division of Social Sciences and Human Services (p. 191)
GED or high school diploma required for program admission. Basic math skills required as documented by placement assessment.

**Cultural Diversity Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTR 267G</td>
<td>AFRICAN AMERICAN HERITAGE</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 161G</td>
<td>INTRODUCTION TO CULTURAL ANTHROPOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
<td>3</td>
</tr>
</tbody>
</table>

**Technical Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMSR 141</td>
<td>INTRODUCTION TO CHEMICAL DEPENDENCY</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 161</td>
<td>FAMILY AND INTIMATE VIOLENCE</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

Jennifer Kukis  
440-366-7419  
jkukis@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/associate-applied-science-human-services/)

1. Exhibit a thorough understanding of the role of the human service worker by demonstrating effective use of skills and knowledge to fulfill this role.
2. Apply knowledge of diversity and use multicultural approaches in service delivery.
3. Apply principles of ethical decision making in the human services field and practice ethical behavior in relation to self and others within the helping relationship by adhering to the NASW Code of Ethics.

**Justice Systems - Corrections Major, Associate of Applied Science**

Curriculum Code #5073  
Effective May 2020  
Division of Social Sciences and Human Services (p. 191)

The justice systems-correction program leads to employment or advancement in local, state and federal public and privately-managed corrections facilities and community-based corrections programs. Corrections graduates also find employment in the expanding areas of crisis intervention, post-incarceration care, personal and group counseling services, in substance abuse response, and with local, juvenile justice systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

**First Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 111</td>
<td>INTRODUCTION TO CORRECTIONS</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 117</td>
<td>CRIMINAL LAW</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
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</tbody>
</table>

**Hours**  
16

**Spring Semester**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CRMJ 110</td>
<td>INTRODUCTION TO CRIMINAL JUSTICE</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 135</td>
<td>COMMUNITY RELATIONS IN CRIMINAL JUSTICE</td>
<td>2</td>
</tr>
<tr>
<td>CRMJ 147</td>
<td>PROBATION AND PAROLE</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
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<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
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</table>

**Hours**  
16

**Second Year**

**Fall Semester**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>CMMC 151</td>
<td>ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 119</td>
<td>LEGAL ISSUES IN CORRECTIONS</td>
<td>2</td>
</tr>
<tr>
<td>CRMJ 226</td>
<td>JUVENILE DELINQUENCY</td>
<td>2</td>
</tr>
<tr>
<td>CRMJ 285</td>
<td>CRIMINAL JUSTICE INTERNSHIP I</td>
<td>2</td>
</tr>
<tr>
<td>HLED 153</td>
<td>FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>Science Elective</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Physical Education Elective</td>
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</table>

**Hours**  
16-17

**Spring Semester**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 219</td>
<td>MENTAL HEALTH ISSUES IN CORRECTIONS</td>
<td>2</td>
</tr>
<tr>
<td>CRMJ 286</td>
<td>CRIMINAL JUSTICE INTERNSHIP II</td>
<td>2</td>
</tr>
<tr>
<td>HMSR 111</td>
<td>PRINCIPLES OF INTERVIEW/COUNSELING</td>
<td>3</td>
</tr>
<tr>
<td>Arts and Humanities Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Technical Elective(s)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Hours**  
14

**Total Hours**  
62-63

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course has a prerequisite.

**Arts and Humanities Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 252</td>
<td>AMERICAN LITERATURE II</td>
<td>3</td>
</tr>
<tr>
<td>RELG 181G</td>
<td>INTRODUCTION TO WORLD RELIGIONS</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 151G</td>
<td>INTRODUCTION TO HUMANITIES</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 151G</td>
<td>INTRODUCTION TO PHILOSOPHY</td>
<td>3</td>
</tr>
<tr>
<td>PHLY 161</td>
<td>INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
</tbody>
</table>
Technical Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 112</td>
<td>INTRODUCTION TO CRIMINAL COURTS</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 131</td>
<td>DIVERSE POPULATIONS/HUMAN SERVICES</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 141</td>
<td>INTRODUCTION TO CHEMICAL DEPENDENCY</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 161</td>
<td>FAMILY AND INTIMATE VIOLENCE</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 211</td>
<td>CRISIS INTERVENTION</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 212</td>
<td>CASE MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 255G</td>
<td>THE FAMILY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 256</td>
<td>SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
<td>3</td>
</tr>
<tr>
<td>URBS 151G</td>
<td>INTRODUCTION TO URBAN STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>URBS 152G</td>
<td>CONTEMPORARY URBAN ISSUES</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

James McManus
440-366-7164
jmcmanus@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-safety/associate-of-applied-science-in-corrections/)

Program Learning Outcomes

1. The role of corrections in the criminal justice system
2. Practice communication verbally, through written documentation, and nonverbally with co-workers, inmates/clients, and others through the use of effective appropriate interview and counseling techniques, listening skills, appropriate interpersonal conversation skills and written reports
3. Apply appropriate counseling therapies and/or recognized treatments in assisting clients in various correctional settings including but not limited to long and short-term correctional facilities, diversion, and post-incarceration aftercare programs
4. Demonstrate professional and ethical behavior in the performance of any duty or assignment
5. Demonstrate cultural diversity and community awareness skills including, but not limited to, conflict resolution, media relations, crime prevention, referrals to and collaboration with both criminal and non-criminal justice agencies

Justice Systems - Police Science Major, Associate of Applied Science

Curriculum Code #5071

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

A police science graduate could expect to seek and gain employment in either public or private agencies and organizations requiring employment of those with law enforcement, investigative and related backgrounds. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>CRMJ 110 INTRODUCTION TO CRIMINAL JUSTICE</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 117 CRIMINAL LAW</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161 COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158 QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>or MTHM 168 STATISTICS</td>
<td></td>
</tr>
<tr>
<td>PLSC 156 AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101</td>
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</table>

Technical Elective

<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>15</td>
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</tbody>
</table>

Spring Semester

| CRMJ 135 COMMUNITY RELATIONS IN CRIMINAL JUSTICE | 2     |
| CRMJ 146 CRIMINAL JUSTICE INVESTIGATION          | 3     |
| ENGL 162 COLLEGE COMPOSITION II                  | 3     |
| PDEF 152 PERSONAL SELF-DEFENSE                    | 1     |
| PSYH 151 INTRODUCTION TO PSYCHOLOGY               | 3     |
| or SOCY 151G INTRODUCTION TO SOCIOLOGY            |       |
| Technical Elective                                | 3     |

<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>15</td>
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Second Year

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMC 151 ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 121 CRIMINALISTICS</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 226 JUVENILE DELINQUENCY</td>
<td>3</td>
</tr>
<tr>
<td>HLED 153 FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>Science Elective (with Lab)</td>
<td>3-4</td>
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</table>

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-15</td>
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</table>

Spring Semester

| CRMJ 231 INTRODUCTION TO POLICE OPERATIONS       | 3     |
| CRMJ 232 POLICE SUPERVISION                      | 3     |
| CRMJ 225 TRAFFIC ACCIDENT INVESTIGATION          | 3     |
| PEFT 175 WALK, JOG OR RUN                        | 1     |
| Science Elective                                 | 3     |
| Technical Elective                               | 3     |

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

Total Hours

| 61-62 |

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

2 Indicates that this course has a prerequisite.

3 Select courses from the general education (p. 52)/transfer module (p. 23).

Students who have completed PACD 101, PACD 103 and PACD 104 are not required to take PDEF 152, HLED 153, and PEFT 175. Students who have completed PACD 101 are not required to take CRMJ 110 or
CRMJ 117. Students who have completed PACD 102 are not required to take CRMJ 146. Students who have completed PACD 103 are not required to take CRMJ 135 or CRMJ 231. Students who have completed PACD 104 are not required to take CRMJ 225.

### Technical Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 147</td>
<td>PROBATION AND PAROLE</td>
<td>2</td>
</tr>
<tr>
<td>HMSR 141</td>
<td>INTRODUCTION TO CHEMICAL DEPENDENCY</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 161</td>
<td>FAMILY AND INTIMATE VIOLENCE</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 211</td>
<td>CRISIS INTERVENTION</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 212</td>
<td>CASE MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 151</td>
<td>INTRODUCTION TO PUBLIC ADMIN</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 151G</td>
<td>COMPARATIVE POLITICS</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 155</td>
<td>STATE AND LOCAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 255G</td>
<td>THE FAMILY</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 256</td>
<td>SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 276G</td>
<td>RACE AND ETHNICITY</td>
<td>3</td>
</tr>
<tr>
<td>URBS 151G</td>
<td>INTRODUCTION TO URBAN STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>URBS 152G</td>
<td>CONTEMPORARY URBAN ISSUES</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Contact(s):

**James McManus**  
440-366-7164  
jmcm anus@lorainccc.edu

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More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-safety/associate-of-applied-science-in-police-science/)

Program Learning Outcomes

1. The purpose, function, and continuing evolution of the U.S. Criminal Justice System in terms of the three major components: law enforcement, courts, and corrections
2. Apply communication skills verbally, through written documentation, and nonverbally with coworkers, supervisors, victims, witnesses, prosecutors, and others through the use of effective appropriate interview and interrogation techniques, listening skills, appropriate interpersonal conversation skills, written reports, and testifying in court
3. Use discretion in the application of criminal law effectively, efficiently, correctly, and in a timely manner
4. Demonstrate appropriate evidence collection, preservation, and analysis techniques used during traffic accident and criminal investigations.
5. Demonstrate professional and ethical behavior in the performance of duty or assignment on behalf of or while employed by or associated with any criminal justice agency or its designee
6. Demonstrate cultural diversity and community awareness skills including, but not limited to, conflict resolution, media relations, crime prevention, referrals to and collaboration with both criminal and non-criminal justice agencies.

## Public Administration, Associate of Applied Science

**Curriculum Code #5180**

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

The public administration degree prepares students for career opportunities in social service organizations, community agencies and in public sector positions. Graduates of the program may find employment in city planning, non-profit organizations, community action agencies, human services, criminal justice, health services and other public sector settings, and in other entry-level or mid-manager level positions, as well as to conduct research. Students will conduct research using the Internet and basic word processing/computer skills. The degree is designed to provide courses that will be useful in the workplace. It will also provide persons in the public sector or employed in community organizations the opportunity to build on their work experiences and to sharpen their skills.

Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC’s University Partnership.

### First Year

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 151</td>
<td>INTRODUCTION TO PUBLIC ADMIN</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 152</td>
<td>PROGRAM/SERVICE PLANNING &amp; EVAL</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 158</td>
<td>HUMAN RESOURCE/VOLUNTEER MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
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<tr>
<td>Science Elective with lab (choose from PSSC, BIOG, CHMY)</td>
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<td><strong>Total</strong></td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ECNM 152</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>COLLEGE COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 155</td>
<td>STATE AND LOCAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>URBS 151G</td>
<td>INTRODUCTION TO URBAN STUDIES</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>15</td>
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</table>

### Second Year

#### Fall Semester

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHM 151</td>
<td>COLLEGE MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 158</td>
<td>QUANTITATIVE REASONING</td>
<td>3</td>
</tr>
<tr>
<td>MTHM 168</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 155</td>
<td>BUDGET/FINANCE/COMM. ORGANIZATIONS</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>URBS 152G</td>
<td>CONTEMPORARY URBAN ISSUES</td>
<td>3</td>
</tr>
<tr>
<td>URBS 250</td>
<td>URBAN SPATIAL SYSTEMS 2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
The University Partnership offers a bachelor’s degree in urban studies at the Maxine Goodman Levin College of Urban Affairs at Cleveland State University or other institutions of higher education. Contact the University Partnership office at (440) 366-4949.

Program Contact(s):

Chase Ritenauer
440-366-4021
critenauer@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-administration/associate-of-applied-science-in-public-administration/)

Program Learning Outcomes

1. Plan, implement, manage and evaluate programs and/or services
2. Perform organizational leadership functions
3. Study and extract policy-related issues affecting programs/services
4. Conduct fund raising activities (grant proposals, special events, campaigns)
5. Manage funds/budgets
6. Identify and manage legal issues - Manage human resource programs

Accelerated Pathway

The Accelerated Pathway for the Public Administration, Associate of Applied Science is a helpful guide for students who desire the convenience of an extensive selection of online courses offerings and who seek to complete their degree within in as little as 15 months. Students are encouraged to enroll in 8 or 10 week sessions to maximize accelerated options. Please meet with an advisor to ensure the courses in this pathway align with your educational goals.
Justice Systems - Police Science Basic Police Academy, One-Year Technical Certificate

Curriculum Code #5076

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

The Police Academy one-year technical certificate recognizes the student who has completed a core group of police science major courses. This collection of courses will provide the student with specialized knowledge and skills to be prepared for entry-level employment in a variety of law enforcement positions. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PACD 101</td>
<td>BASIC POLICE ACADEMY 1 1</td>
<td>9</td>
</tr>
<tr>
<td>PACD 102</td>
<td>BASIC POLICE ACADEMY 2 2</td>
<td>9</td>
</tr>
<tr>
<td>PACD 103</td>
<td>BASIC POLICE ACADEMY 3 3</td>
<td>9</td>
</tr>
<tr>
<td>PACD 104</td>
<td>BASIC POLICE ACADEMY 4 4</td>
<td>9</td>
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<tr>
<td>Total Hours</td>
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<td>36</td>
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</tbody>
</table>

1 Indicates that this course has a prerequisite.

PACD courses are available only to students who have been admitted to the LCCC Police Academy.

Program Contact(s):

Richard Thomas
440-366-7468
rthomas@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-safety/lccc-police-academy/)

Police Science, One-Year Technical Certificate

Curriculum Code #5094

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

The objective of the certificate program is to supply current information and knowledge to the police science fields to individuals already employed as criminal justice officers or persons who are preparing themselves for full- or part-time employment in a local police agency. The program is structured that the general needs of the student are met as far as practicable in a certificate program. All coursework listed below can be used to satisfy the requirements of the associate degree in police science. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121 MICROCOMPUTER APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 110 INTRODUCTION TO CRIMINAL JUSTICE</td>
<td>3</td>
</tr>
<tr>
<td>CRMJ 117 CRIMINAL LAW</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 156 AMERICAN NATIONAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>Science Elective 1</td>
<td>2-4</td>
</tr>
<tr>
<td>SDEV 101 COLLEGE 101 2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRMJ 121 CRIMINALISTICS</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CRMJ 146 CRIMINAL JUSTICE INVESTIGATION</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HLED 153 FIRST AID AND SAFETY</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PSYH 151 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOCY 151G INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Technical Elective 3</td>
<td>2-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-17</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>31-34</td>
<td></td>
</tr>
</tbody>
</table>

1 Science elective: courses selected from the general education (p. 52)/transfer module (p. 23).

2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3 Technical elective: any non-required CRMJ course.

Program Contact(s):

James McManus
440-366-7164
jmcmanus@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-safety/police-science-one-year-certificate/)
Public Administration, One-Year General Certificate
Curriculum Code #5080
Effective May 2020
Division of Social Sciences and Human Services (p. 191)

This certificate is designed to provide current information about the field of public administration. The purpose is to offer opportunities for individuals to learn how to be effective and efficient in work settings and roles in the public sector or in the non-profit organization. Students who are already employed in those settings can sharpen their skills, acquire new skills and knowledge and participate in practical experiences that will be useful on the job. Students who want to enter those fields will be able to acquire knowledge, develop skills to prepare to work in organizations and institutions or to serve in the public sector. The certificate is designed as a stand-alone certificate. However, students may apply credit earned in this certificate toward credits required to earn the associate of applied science degree in public administration.

Lorain County Community College has articulation agreements with colleges and universities including programs offered at LCCC's University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 151</td>
<td>INTRODUCTION TO PUBLIC ADMIN</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 152</td>
<td>PROGRAM/SERVICE PLANNING &amp; EVAL</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 155</td>
<td>STATE AND LOCAL GOVERNMENT</td>
<td>3</td>
</tr>
<tr>
<td>or PLSC 156</td>
<td>AMERICAN NATIONAL GOVERNMENT</td>
<td></td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>URBS 151G</td>
<td>INTRODUCTION TO URBAN STUDIES</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 16

Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBAD 155</td>
<td>BUDGET/FINANCE/COMM. ORGANIZATIONS</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 158</td>
<td>HUMAN RESOURCE/VOLUNTEER MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 161</td>
<td>FUNDRAISING AND GRANTSMANSHIP</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 251</td>
<td>ORGANIZATIONAL LEADERSHIP</td>
<td>3</td>
</tr>
<tr>
<td>PBAD 252</td>
<td>SURVEY OF LEGAL CONCEPTS</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 18

Total Hours 34

1 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Chase Ritenauer
440-366-4021
critenauer@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/public-administration/public-administration-one-year-certificate/)

Women’s, Gender, and Sexuality Studies, One-Year General Certificate
Curriculum Code #5120
Effective May 2020
Division of Social Sciences and Human Services (p. 191)

This certificate provides students a unique background on women, sex and gender. The interdisciplinary curriculum provides students the opportunity to study women and gender in such areas as Psychology, Sociology, Literature, and History. The study of women, gender, and sexuality studies develops a student’s critical thinking, research, and analysis by exploring divergent viewpoints. Students also develop oral/written communication, presentation and problem solving skills and learn to appreciate a pluralistic world. By learning about the biases often found in society’s most powerful institutions, women’s and gender studies prepares students to work in advocacy or social services-related positions, community development, business, and government. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

First Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HSTR 252G</td>
<td>WOMEN IN WORLD HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>WMST 210</td>
<td>INTRODUCTION TO WOMEN’S STUDIES</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 16

Second Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 264</td>
<td>WOMEN’S LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td>HLED 157</td>
<td>WOMEN’S HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 259</td>
<td>HUMAN SEXUALITY</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 275</td>
<td>PSYCHOLOGY OF GENDER</td>
<td>3</td>
</tr>
<tr>
<td>SOCY 278</td>
<td>SOCIOLOGY OF SEX &amp; GENDER</td>
<td>3</td>
</tr>
<tr>
<td>WMST 251</td>
<td>FEMINIST THEORY</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 18

Total Hours 34

1 Indicates that this course requires a college level prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

Program Contact(s):

Aimee Dickinson
440-366-7876
Addiction Counselor Certificate, Short-Term Technical Certificate

Curriculum Code #5063
Effective May 2020

Division of Social Sciences and Human Services (p. 191)

The addiction counselor short-term technical certificate has been designed to meet the needs of those persons who wish to help prevent substance abuse, counsel individuals and families with drug and alcohol problems, and perform intervention and therapeutic services for person suffering from addiction. The courses include instruction in individual and group counseling skills, psychology of addiction, sociology, substance abuse identification methodologies, substance abuse treatment modalities, substance abuse prevention and treatment resources, pharmacology and behavioral aspects of abused substances, treatment evaluation, group dynamics, professional standards and ethics, and applicable law and regulations. A specialized practicum experience in the field of substance abuse is a part of this program. The courses in this program meet the education requirements of the state of Ohio for certification as a chemical dependency counselor assistant and may also be applied towards the associate of applied science in human services degree. Lorain County Community College has articulation agreements with colleges and universities including programs offered at LCCC’s University Partnership.

Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 111</td>
<td>PRINCIPLES OF INTERVIEW/COUNSELING</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 132</td>
<td>ADDICTION COUNSELING I</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>13</td>
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</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMSR 213</td>
<td>GROUP WORK IN HUMAN SERVICES</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 232</td>
<td>ADDICTION COUNSELING II</td>
<td>3</td>
</tr>
<tr>
<td>HMSR 233</td>
<td>ADDICTION COUNSELING PRACTICUM</td>
<td>4</td>
</tr>
<tr>
<td>SOCY 151G</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>13</td>
</tr>
</tbody>
</table>

Total Hours: 26

1. Indicates that this course requires a prerequisite or may be taken concurrently

2. A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3. Indicates that this course requires a prerequisite.

4. Student must successfully complete the interview and application process, criminal background check and all prerequisites with a grade of C or better. Student must have human services coordinator signature before registering for this course.

All courses in this certificate require a grade of C or better.

Program Contact(s):

Jennifer Kukis
440-366-7419
jkukis@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your Advising and Counseling Team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.lorainccc.edu/human-social-services/women-gender-sexuality-studies-one-year-general-certificate/)

Early Childhood Education, Short-Term Technical Certificate

Curriculum Code #5003
Effective May 2020

Division of Social Sciences and Human Services (p. 191)

An early childhood education short-term technical certificate has been designed for those students who wish to be employed as a teacher or teachers aid in a preschool/daycare, or in-home setting. These courses meet the Ohio Department of Human Service requirements to be an early childhood education teacher. Therefore, the courses may be applied towards an associate degree in early childhood education. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 111</td>
<td>INTRODUCTION TO EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ECED 164</td>
<td>CHILD GUIDANCE AND CLASSROOM MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Elective</strong></td>
<td>3</td>
</tr>
<tr>
<td>SDEV 101</td>
<td>COLLEGE 101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>TECHNICAL ELECTIVE COURSES</strong></td>
<td>8-11</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of three courses from the following</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMERGING LITERACY AND LANGUAGE DEVELOPMENT</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CREATIVE DEVELOPMENT FOR THE YOUNG CHILD</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>COGNITIVE DEVELOPMENT</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>INFANT AND TODDLER DEVELOPMENT</td>
<td>4</td>
</tr>
</tbody>
</table>
Early Childhood Education - Infant and Toddler, Short-Term Technical Certificate

Curriculum Code #5158

Effective May 2020

Division of Social Sciences and Human Services (p. 191)

The infant and toddler short-term technical certificate has been designed to meet the needs of those persons who are interested in working with children ages six weeks to three. These courses were designed to provide basic information relative to developmental characteristics, curriculum organization, classroom programming, observation and record keeping. These courses can be applied towards the associate degree in early childhood education. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 111</td>
<td>3</td>
</tr>
<tr>
<td>ECED 171</td>
<td>2</td>
</tr>
<tr>
<td>ECED 278</td>
<td>3</td>
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<tr>
<td>SDEV 101</td>
<td>1</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td><strong>9</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 274</td>
<td>3</td>
</tr>
<tr>
<td>EDCT 254</td>
<td>3</td>
</tr>
<tr>
<td>HLED 153</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

Students must maintain an overall GPA of 2.5 in ECED courses to be eligible for the ECE short-term technical certificate.

Program Prerequisites for Early Childhood Education

Prior to entering the program, students must provide evidence of a current physical, TB test and must make all immunizations current.

A signed non-conviction statement is required. Students will be REQUIRED to sign a liability waiver statement and a confidentiality statement. In addition, in accordance with state law, students are REQUIRED to be fingerprinted. Students previously convicted of a felony must schedule an appointment with the division dean or program coordinator prior to enrollment in the program.

After admission into the ECE program, students are REQUIRED to prepare career goals statement. This statement is an assignment in the ECED 111 course. Initial admission into the program is conditional. (Full admission requires the completion of 12 semester hours of coursework, exclusive of college preparatory, with a GPA of 2.0 or higher, including completion of ECED 111 and one ECED course with a grade of C or higher).
The following paperwork is required:
1. Completed physical with TB test.
2. Completed BCI/FBI.
3. Signed confidentiality and liability statement.

Fifty percent of coursework must be completed at LCCC to receive this certificate.

Program Prerequisites for Early Childhood Education
Prior to entering the program, students must provide evidence of a current physical, TB test and must make all immunizations current.

A signed non-conviction statement is required. Students will be REQUIRED to sign a liability waiver statement and a confidentiality statement. In addition, in accordance with state law, students are REQUIRED to be fingerprinted. Students previously convicted of a felony must schedule an appointment with the division dean or program coordinator prior to enrollment in the program.

After admission into the ECE program, students are REQUIRED to prepare career goals statement. This statement is an assignment in the ECED 111 course. Initial admission into the program is conditional. (Full admission requires the completion of 12 semester hours of coursework, exclusive of college preparatory, with a GPA of 2.0 or higher, including completion of ECED 111 and one ECED course with a grade of C or higher).

Multidisciplinary Degree Curriculum Guides

Division Offices: LC 211
Division Telephone: 440-366-4026

Associate of Applied Science Programs
• Computer Games and Simulation Design #8300 (p. 204)

Computer Games and Simulation Design, Associate of Applied Science

Curriculum Code #8300
Effective May 2020

Library and eLearning Division

This program is designed to prepare individuals for transfer or employment in a variety of positions including game/simulation designer, programmer or developer. The focus of the program is development of multidisciplinary skills necessary for a career in game and simulation design with emphasis on creation of real games.

First Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSD 120</td>
<td>INTRODUCTION TO COMPUTER GAMES &amp; SIMULATIONS</td>
<td>3</td>
</tr>
<tr>
<td>CGSD 271</td>
<td>DIGITAL IMAGING</td>
<td>3</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C# 1 or CMPR 166</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>or INTRODUCTION TO COMPUTER SCIENCE</td>
<td></td>
</tr>
<tr>
<td>ENGL 161</td>
<td>COLLEGE COMPOSITION I</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSD 121</td>
<td>2D GAME PROGRAMMING 1</td>
<td>3</td>
</tr>
<tr>
<td>CGSD 130</td>
<td>GAME APPLICATIONS FOR EMERGENT PLATFORMS</td>
<td>3</td>
</tr>
<tr>
<td>CGSD 272</td>
<td>DIGITAL ILLUSTRATION</td>
<td>3</td>
</tr>
<tr>
<td>PSYH 151</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or SOCY 151G or INTRODUCTION TO SOCIOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

Science Elective (with lab) 4 Hours

Second Year

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGSD 221</td>
<td>3D GAME PROGRAMMING 1</td>
<td>3</td>
</tr>
<tr>
<td>CGSD 276</td>
<td>3-D MODELING AND ANIMATIONS 1</td>
<td>3</td>
</tr>
<tr>
<td>CMPR 168</td>
<td>OBJECT-ORIENTED PROGRAMMING 1</td>
<td>4</td>
</tr>
<tr>
<td>ENTR 200</td>
<td>ENTREPRENEURSHIP</td>
<td>3</td>
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</tbody>
</table>

General Elective 2 Hours

Total Hours 60-61

1 Indicates that this course has a prerequisite.
2 A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.
3 This course offers an opportunity for experiential learning.

Arts and Humanities Electives
To be selected from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 243G</td>
<td>ART HISTORY I</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 244G</td>
<td>ART HISTORY II</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 245G</td>
<td>WORLD ART</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 246</td>
<td>HISTORY OF PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 271G</td>
<td>INTRODUCTION TO MYTHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 274</td>
<td>FILM APPRECIATION</td>
<td>3</td>
</tr>
<tr>
<td>HUMS 281</td>
<td>INTRODUCTION TO AMERICAN CINEMA</td>
<td>3</td>
</tr>
<tr>
<td>THTR 151G</td>
<td>INTRODUCTION TO THEATER</td>
<td>3</td>
</tr>
<tr>
<td>THTR 185G</td>
<td>THEATER HISTORY</td>
<td>3</td>
</tr>
</tbody>
</table>

Division approval for another elective
Students intending to transfer should consult with the intended transfer institution or with an LCCC advisor for transfer information. See general education (p. 52)/transfer module (p. 23) for information about transfer module courses.

Science Electives (with lab)
Science elective selected from the general education (p. 52)/transfer module (p. 23). At least one science elective must include a laboratory. To be selected from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTY 151</td>
<td>STARS, GALAXIES AND COSMOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOG 151</td>
<td>GENERAL BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOG 152</td>
<td>HUMAN BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOG 159</td>
<td>AQUATIC LIFE</td>
<td>3</td>
</tr>
<tr>
<td>CHMY 161</td>
<td>GENERAL, ORGANIC AND BIOCHEMISTRY I</td>
<td>4</td>
</tr>
<tr>
<td>PSSC 156</td>
<td>PHYSICAL GEOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>PSSC 157</td>
<td>HISTORICAL GEOLOGY</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Contact(s):

Florin Muscutar  
440-366-7270  
fmuscuta@lorainccc.edu

Michael Substelny  
440-366-7084  
msubstel@lorainccc.edu

Michael Zellers  
440-366-4796  
mzellers@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/).

Program Learning Outcomes

1. Students will demonstrate industry professional standards within their attitudes, conduct, ethics, and work. (including attendance, deadlines, copyright issues, and group interactions).
2. Students will demonstrate entry-level workplace competencies using game design and production software.
3. Students will access industry related resources for learning and current events and trends.
4. Students will demonstrate entry-level modeling, rendering, and animation using standard production software.
5. Students will demonstrate knowledge of basic principles of engaging human attention for entertainment and learning.
6. Students will critically analyze published games, games they produce, and games produced by their peers using professional concepts.
7. Students will demonstrate knowledge of skills and responsibilities in various industry roles and career paths, including that of independent game developer.
8. Students will produce both entertainment games and serious games for their a professional portfolios.
9. Students will demonstrate the ability to accept criticism and improve their work based on the critiques of their peers.

Certificates of Completion

Note: These certificates of completion are Non-Pell Eligible. Students may not use Pell funding for this certificate. Grants may be available. See your advisor.

Business

- Accounting Clerk with Quickbooks #C006 (p. 205)
- Guest Services in Hospitality #C008 (p. 208)
- Pre-License Real Estate Sales Agent #C005 (p. 208)

Healthcare

- Emergency Medical Technician #2114 (p. 185)
- Medical Coding #C204 (p. 208)

Information Technology

- Computer Diagnostics & CompTia A+ Certification Preparation #C602 (p. 206)
- Computer Information Systems - Software Development Introduction #C605 (p. 206)
- Computer Networking & CompTia Network+ Certification Preparation #C603 (p. 206)
- Digital Forensics and CompTia +Security Certification Preparation #C604 (p. 207)

Manufacturing

- Electronic Engineering Technology - Electronics Fabrication #C608 (p. 207)
- Entry Level Industrial Safety Technology/Technician #C609 (p. 207)
- Entry Level Machining Technician #C607 (p. 207)
- Welding Technology and AWS-3F Certification Preparation #C610 (p. 209)
- Welding Technology - Gas Metal Arc Welding #C613 (http://catalog.lorainccc.edu/academic-programs/welding-technology-gas-metal-arc-welding-cc/)

Manufacturing for College Credit Plus (High Schools Only)

- Manufacturing Fast Start #C612 (p. 208)
- Robotics Programmer #C611 (p. 209)

Accounting Clerk with Quickbooks, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C006

Effective May 2020

The accounting clerk short-term technical certificate applies towards other certificates and an associate degree in accounting. basic skills learned with this certificate are QuickBooks and Excel. Short-term certificates contain basic academic and technical courses. Some occupations or employers require an associate degree or higher.
The software development introduction certificate represents the successful completion of select computer application and programming courses that prepare the student to develop business computer applications with an emphasis on Microsoft applications and development tools commonly used in organizations. Completion of this certificate provides a foundation for entry-level software development positions, industry certification testing, and further study leading to an associate’s degree in software development, web development or mobile device development. It is also especially well suited for those individuals who have experience in one of more ‘legacy’ technologies and are seeking to upgrade their skills. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISS 121</td>
<td>MICROCOMPUTER APPLICATIONS I</td>
<td>3</td>
</tr>
<tr>
<td>CISS 143</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>CISS 160</td>
<td>INTRODUCTION TO PROGRAMMING IN C#</td>
<td>4</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite or may be taken concurrently.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a Computer Information Systems degree program to gain employment in an IT related field. Completion of this certificate provides a foundation for industry certification testing: Microsoft Technology Associate - Developer

Computer Networking and CompTia Network+ Certification Preparation, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C603
Effective May 2020

The Computer Networking and CompTia Network+ Certification Preparation provides students with the skills necessary to pass the CompTia Network+ Certification and to perform basic computer diagnostics and networking operations. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 141</td>
<td>COMPUTER DIAGNOSTIC AND REPAIR</td>
<td>3</td>
</tr>
<tr>
<td>CMNW 145</td>
<td>NETWORK INSTALLATION/DIAGNOSTICS</td>
<td>4</td>
</tr>
</tbody>
</table>

This certificate prepares students with the skills necessary to pass the CompTia Network+ Certification.
Digital Forensics and CompTIA+ Security Certification Preparation, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C604
Effective May 2020

The digital forensics and CompTia Security+ certification preparation certificate provides students with the skills necessary to pass the CompTia Security+ Certification and to perform basic digital computer and mobile forensics operations. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMNW 121</td>
<td>DATA COLLECTION ANALYSIS AND FORENSIC TOOLS</td>
<td>4</td>
</tr>
<tr>
<td>CMNW 224</td>
<td>CELL PHONE AND MOBILE DEVICE FORENSICS</td>
<td>4</td>
</tr>
</tbody>
</table>

1 CMNW 121 must be completed in the first 8 week session prior to entering CMNW 224.
2 Indicates that this course requires a prerequisite.

This certificate prepares students with the skills necessary to pass the CompTia Security+ Certification.

Electronic Engineering Technology - Electronics Fabrication, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C608
Effective May 2020

The applied electronics (ELCT) electronics fabrication certificate is designed to provide the student with the entry-level knowledge and practical skills necessary for employment in the electronic/electrical industry. Students will learn to use standard and specialized electronic test equipment in the laboratory. Upon successful completion students will earn the J-STD-001 Certified IPC Application Specialist (CIS) certificate which focuses on the knowledge and hand skills employees need to produce high quality soldered interconnections. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT 111</td>
<td>ELECTRICAL CIRCUITS I</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 115</td>
<td>FABRICATION PROCESS FOR ELECTRONICS</td>
<td>2</td>
</tr>
</tbody>
</table>

Upon successful completion students will earn the J-STD-001 Certified IPC Application Specialist (CIS) certificate.

Entry Level Industrial Safety Technology/Technician, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C609
Effective May 2020

The entry level industrial safety technology/technician prepares individuals to assist engineers and other professionals in implementing and enforcing industrial safety standards. The graduate will be prepared for a wide range of positions in the areas of Occupational and Industrial safety. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLED 153</td>
<td>FIRST AID AND SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>SAFE 145</td>
<td>SAFETY IN GENERAL INDUSTRY</td>
<td>2</td>
</tr>
<tr>
<td>SAFE 235</td>
<td>MACHINE GUARDING BASICS</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: With the exception of OSHA 30, award of these credentials depends on LCCC becoming a host site for an OSHA Education Center, and we are in negotiations for this currently).
*OSHA 511 Occupational Safety and Health Standards for General Industry;
*OSHA 2045 Intro. to Machinery and Machine Guarding Standards First Aid and Safety Certification
OSHA 30

Entry Level Machining Technician, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C607
Effective May 2020

The entry level machining technician certificate is designed to provide students with the knowledge, skills and competencies necessary to perform as an entry-level machining technician. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.
Guest Services in Hospitality, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C008
Effective May 2020

The guest services in hospitality certificate of completion will provide students with some broad knowledge related to a growing field. Guest service positions are found in most areas of hospitality and tourism. This certificate of completion may be applied to fulfill partial requirements in the hospitality and tourism management major for the associate of applied business degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMM 111</td>
<td>INTRO TO COMPUTER NUMERICAL CONTROL 1</td>
<td>2</td>
</tr>
<tr>
<td>TECN 111</td>
<td>TECHNICAL PROBLEM SOLVING</td>
<td>3</td>
</tr>
<tr>
<td>TECN 115</td>
<td>INDUSTRIAL BLUEPRINT READING</td>
<td>2</td>
</tr>
<tr>
<td>TECN 131</td>
<td>MANUFACTURING PROCESSES 1</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Indicates that this course requires a prerequisite or may be taken concurrently.

This certificate prepares students with the skills necessary to pass the National Institute of Metalworking Skills Level I NIMS Exams in Job Planning, Benchwork & Layout credential.

Medical Coding, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C204
Effective May 2020

The medical coder has advanced knowledge of how to accurately report diagnoses and procedure codes through the application of official coding guidelines and the use of current year coding manuals. They will learn to effectively identify, understand, and utilize medical codes as they will be applicable to physician reimbursement in the field of healthcare. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALHN 195</td>
<td>Medical Coding for the Physician’s Office</td>
<td>5</td>
</tr>
</tbody>
</table>

Notes

1. For questions about registration, contact LCCC Enrollment Services.
2. For questions about the course and class schedule, contact Sharon Haas shass@lorainccc.edu

This course prepares students to pass either the AHIMA Certified Coding Associate Certificate or the American Academy of Professional Coders.

Pre-License Real Estate Sales Agent, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C006

The certificate of completion in manufacturing prepares the College Credit Plus student with basic foundation skills toward earning a degree in manufacturing technology. Students are prepared to earn an OSHA 10 certification. The manufacturing fast start certificate of completion is offered by LCCC for College Credit Plus High School students.
Effective May 2020

This certificate in real estate offers opportunities for individuals to learn about and develop some basic knowledge and skills required for the State of Ohio Real Estate Salesperson’s License. Completion of this certificate in Real Estate may be applied to fulfill some of the course requirements of this major covered under the Associate of Applied Business Administration.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNCE 111</td>
<td>REAL ESTATE PRINCIPLES &amp; PRACTICES</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 112</td>
<td>REAL ESTATE LAW</td>
<td>3</td>
</tr>
<tr>
<td>FNCE 115</td>
<td>REAL ESTATE FINANCE</td>
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</tr>
<tr>
<td>FNCE 118</td>
<td>REAL ESTATE APPRAISAL</td>
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</tr>
</tbody>
</table>

Robotics Programmer, Certificate of Completion

For College Credit Plus Lorain High School Students Only

Curriculum Code #C611

Effective May 2020

The Certificate of Completion in robotics prepares the College Credit Plus student with basic foundation skills toward earning a degree in automation technology. Students are also prepared to earn a FANUC Robotics CERT Handling Tool Operations and Programming level 1 certification. The robotics programmer certificate of completion is offered by LCCC at Lorain High School.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AETC 111</td>
<td>ROBOTICS/AUTOMATED MANUFACTURING</td>
<td>3</td>
</tr>
<tr>
<td>AETC 190</td>
<td>INTRODUCTION TO SINGLE BOARD COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>AETC 193</td>
<td>INTRODUCTION TO MICROCONTROLLER ROBOTICS</td>
<td>2</td>
</tr>
<tr>
<td>AETC 194</td>
<td>MICROCONTROLLER ROBOTICS</td>
<td>2</td>
</tr>
<tr>
<td>AETC 195</td>
<td>INTRODUCTION TO UNMANNED AIRCRAFT SYSTEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 13

1 Indicates that this course has a prerequisite or may be taken concurrently.

2 Indicates that the student may select to enroll in WTEC 116 or WTEC 216 or WTEC 217 to pursue one of the following AWS-3F certifications respectively: Shielded Metal Arc Welding (SMAW) or Gas Metal Arc Welding (GMAW) or Gas Tungsten Arc Welding (GTAW).

Welding Technology and AWS-3F Certification Preparation, Certificate of Completion

Non-Pell Eligible (Students may not use Pell funding for this certificate. Grants may be available. See your advisor.)

Curriculum Code #C610

Effective May 2020

The welding technology and AWS-3F certification preparation certificate provides students with the skills necessary to pass one of the three categories the American Welding Society AWS-3F certifications, and the knowledge and skills necessary for entry-level employment in a variety of industries that utilize welding. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College’s University Partnership.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTEC 108</td>
<td>OXY-FUEL WELDING AND CUTTING ¹</td>
<td>2</td>
</tr>
<tr>
<td>WTEC 111</td>
<td>WELDING SPECIFICATIONS/PRINT READING</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following: ²

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTEC 116</td>
<td>BASIC SHIELDED METAL ARC WELDING ¹</td>
<td>3</td>
</tr>
<tr>
<td>WTEC 216</td>
<td>WIRE FED PROCESSES</td>
<td></td>
</tr>
<tr>
<td>WTEC 217</td>
<td>GAS TUNGSTEN ARC WELDING</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 7

1 Indicates that this course has a prerequisite or may be taken concurrently.

2 Indicates that the student may select to enroll in WTEC 116 or WTEC 216 or WTEC 217 to pursue one of the following AWS-3F certifications respectively: Shielded Metal Arc Welding (SMAW) or Gas Metal Arc Welding (GMAW) or Gas Tungsten Arc Welding (GTAW).
COURSE DESCRIPTIONS

How to Read the Course Descriptions

Sample Course Description

BADM 162, BUSINESS LAW II 3 (3)
A continuation of Business Law I. Topics include dispute resolution, contract issues, sale and lease, legal cyber issues, negotiable instruments, labor-management relations, international law, and labor-management relations.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: BADM 161
Typically Offered: Spring Semester

In the above sample course description,

• the subject area is business
• the course number is BADM 162
• course title is Business Law II
• the number of credit hours offered is three
• the number of contact hours is three
• and the actual course description is “A continuation of Business Law I. Topics include dispute resolution, contract issues, sale and lease, legal cyber issues, negotiable instruments, labor-management relations, international law, and labor-management relations.”

The prerequisite is BADM 161 (see following information); there is no corequisite (also see following information). It also has an infused general education requirements Critical Thinking (IN1), Diversity (IN3) and Ethics (IN4). The course is typically offered in spring semester.

Course Numbering

In the sample above, the first capital letters (BADM) indicate the subject area (see course abbreviations). The three numbers (162) following the four capital letters are the numbers assigned to a particular course within the subject area. In this case, BADM represents the subject area, business, and 162 is the number assigned to this course. Within this listing of course descriptions, courses are listed in numerical order within each subject area. Courses numbered 099 are designed to provide students with basic skills preparatory to first-year studies. If a course number starts with zero, no certificate or degree credit is offered. Courses numbered 100 through 199 are usually introductory courses. Courses numbered 200 through 299 are usually second-year courses. Courses numbered 300 through 399 are usually third-year courses. Courses numbered 400 through 499 are usually upper-level courses. Courses numbered 500 through 799 are usually graduate courses.

A course that is determined to have at least 30 percent of its content from material or resources found outside the United States is considered an international or global course. International or global courses are identified in the class schedule with a G following the course number (e.g., BADM 281G, International Business).

Credit Hours and Contact Hours

The number of semester credits for each course described in the Catalog is indicated after the course title. The number of contact hours (actual hours of class time per week) for each course described in the Catalog is indicated in parentheses after the credit hours. For example, 3(3) indicates three credit hours and three contact hours per week.

Prerequisites/Corequisites/Concurrently

Prerequisites indicate courses that must be successfully completed before entering in a more advanced or subsequent course. In the example, BADM 161 is the prerequisite and must be taken before enrolling in BADM 162. Prerequisites are established to assure that the student has an adequate and sufficient background to enroll in the course. Because technology changes so frequently, the prerequisite(s) for certain courses may change. If the listed prerequisite(s) are not met, a previous course or combination of courses (not listed or taught currently) may be substituted for the current prerequisite(s). Contact an advisor for further information. Corequisites indicate courses that must be taken during the same term. Concurrent enrollment indicates prerequisites that may be taken during the same term.

Division approval is required to have a prerequisite waived. It is the responsibility of the student to contact the proper division to obtain permission to enroll in a course in which the prerequisite has not been met.

Approval of Courses

Courses described in the 2020-2021 catalog are those approved by the LCCC Board of Trustees at the time of publication and included in the Ohio Department of Higher Education master course inventory. Inclusion of a course description does not obligate the college to offer the course in any given semester or academic year. Courses approved by the Board of Trustees after the publication of the 2019-2020 catalog may be reflected in the class schedule. Courses are subject to cancellation based on enrollment, staffing or other factors.

Course Abbreviations

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACTG</td>
<td>Accounting</td>
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</tr>
<tr>
<td>ALHN</td>
<td>Allied Health and Nursing</td>
<td></td>
</tr>
<tr>
<td>ALET</td>
<td>Alternative Energy Technology</td>
<td></td>
</tr>
<tr>
<td>ARAB</td>
<td>Arabic</td>
<td></td>
</tr>
<tr>
<td>ARCH</td>
<td>Archeology</td>
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<tr>
<td>ARTS</td>
<td>Art</td>
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<tr>
<td>ASTY</td>
<td>Astronomy</td>
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<tr>
<td>AETC</td>
<td>Automation Engineering Technology</td>
<td></td>
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<tr>
<td>AVIA</td>
<td>Aviation</td>
<td></td>
</tr>
<tr>
<td>BIOG</td>
<td>Biology</td>
<td></td>
</tr>
<tr>
<td>BLOC</td>
<td>Blockchain Engineering Technology</td>
<td></td>
</tr>
<tr>
<td>BADM</td>
<td>Business Administration</td>
<td></td>
</tr>
<tr>
<td>CHMY</td>
<td>Chemistry</td>
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</tr>
<tr>
<td>CHNS</td>
<td>Chinese</td>
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<tr>
<td>CLSC</td>
<td>Clinical Laboratory Science Technology</td>
<td></td>
</tr>
<tr>
<td>CMMC</td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>CADD</td>
<td>Computer-Aided Design</td>
<td></td>
</tr>
<tr>
<td>CAMM</td>
<td>Computer-Aided Machining</td>
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</tr>
<tr>
<td>CGSD</td>
<td>Computer Games and Simulation Design</td>
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<tr>
<td>CISS</td>
<td>Computer Information Systems</td>
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<tr>
<td>CMNW</td>
<td>Computer Maintenance and Networking</td>
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<tr>
<td>CMPR</td>
<td>Computer Programming</td>
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<tr>
<td>CNST</td>
<td>Construction</td>
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<tr>
<td>CRMJ</td>
<td>Criminal Justice</td>
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<td>CULN</td>
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<tr>
<td>CYBR</td>
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<tr>
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<tr>
<td>DATA</td>
<td>Data Analytics</td>
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<tr>
<td>DFAB</td>
<td>Digital Fabrication</td>
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<tr>
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<td>ECNM</td>
<td>Economics</td>
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<td>EDCT</td>
<td>Education</td>
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<tr>
<td>ELCT</td>
<td>Electronics</td>
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<tr>
<td>ELTA</td>
<td>Electrical Trades Apprenticeship</td>
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<tr>
<td>EMSB</td>
<td>Emergency Medical Technician-Basic</td>
<td></td>
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<tr>
<td>EMSP</td>
<td>Emergency Medical Technician-Paramedic</td>
<td></td>
</tr>
<tr>
<td>ENGR</td>
<td>Engineering Technologies</td>
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<tr>
<td>ENGL</td>
<td>English</td>
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<tr>
<td>ENVS</td>
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<tr>
<td>ESLG</td>
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<td>Entrepreneurship</td>
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<tr>
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<tr>
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<tr>
<td>HLED</td>
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<tr>
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<td>Health/Physical Education</td>
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Note: Academic divisions offer special topics (090-098, 190-198 and 290-298) periodically. These courses analyze and investigate a specific topic appropriate to content in an instructional area. Topics, student responsibilities, and formats for the course are advertised in advance. They are experimental and are not published in the Catalog. Formats for instructional delivery include, but are not limited to, extensive reading, lecture/laboratory and/or field experiences. Credit varies from one to five credit hours. Prerequisite(s) and special fees are determined by the academic division for each specific course.

Divisions may offer individualized studies (099, 199 and 299) periodically. An academic division and its faculty for a specific area of study design these courses. They are not always published in the Catalog. The faculty and administration of the individual division develop criteria. Credit varies from one to two credit hours. Prerequisite(s) and special fees are determined by the academic division for each specific course.

The divisions may offer work-based learning experience courses (287, 288 and 289) periodically.

Ohio Transfer Initiatives (p. 25)

The Ohio Department of Higher Education supports credit transfer (https://www.ohiohighered.org/transfer/) and the ability of students to transfer effectively between Ohio’s public post-secondary institutions of higher education. An approved Ohio Transfer Initiative course may have the following designation(s):

Ohio Transfer Module = OTM
Transfer Assurance Guide = TAG
General Education (GE) Requirements

CORE GE REQUIREMENTS: English (C1), mathematics (C2), natural science (C3), social science (C4) and humanities (C5) core GE requirements are met by completion of the core curriculum.

INFUSED GE REQUIREMENTS: Select at least one course for each of the following infused GE requirements: critical thinking (IN1), communication (IN2), diversity (IN3), ethics (IN4) and health (IN5).

Please note that a single course may be used to fulfill multiple GE Requirements.

GE Requirements addressed in each course are listed in parentheses at the end of each course catalog description.

Accounting (ACTG)

ACTG 151, ACCOUNTING I - FINANCIAL 4 (4)
Introduction to fundamental accounting theory, concepts, analysis and processes. A study of the accounting cycle, nature of accounts and techniques of analyzing, classifying, recording and summarizing basic financial data. An analysis of the corporate financial structure through the preparation and interpretation of the balance sheets, income statement and statement of retained earnings, and the cash flow statement. (TAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ACTG 152, ACCOUNTING II - MANAGERIAL 4 (4)
An introduction to cost and management accounting. An analysis of financial data for the purpose of determining and controlling product costs, preparing budgets, and aiding management in short and long-run decision making. An introduction to Just-In-Time and Activity Based Costing method. (TAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ACTG 151
Typically Offered: Summer, Fall and Spring Semesters

ACTG 161, PAYROLL ACCOUNTING 3 (3)
An accounting course specializing in payroll procedures including personnel records, computing and reporting payroll and related tax return preparation. Key federal payroll laws and 'special payroll situations' will be introduced. Accessing and using publications and forms from both the IRS and State of Ohio websites.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ACTG 151
Typically Offered: Fall and Spring Semesters

ACTG 199, INTRO TO WORLD OF WORK - ACTG 1 (10)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.
Course Entry Requirement(s): Prerequisite: A student must have completed a minimum of 12 semester credit courses at LCCC (courses transferred are not counted), have earned minimum 2.0 overall GPA; OR have division approval (Maximum three '1' credit courses allowed.
Typically Offered: Summer, Fall and Spring Semesters

ACTG 226, FUND ACCOUNTING 4 (4)
This course offers insight to governmental and not-for-profit accounting, theory, concepts analysis and processes. Focus will be placed on the Governmental Accounting Standards Board (GASB) as it pertains to: techniques for analyzing and classifying financial data, budgeting, capital project analysis and financial statement preparation.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ACTG 151
Typically Offered: Spring Semester

ACTG 251, INTERMEDIATE ACCOUNTING I 4 (5)
A study of accounting concepts, principles and theory with an emphasis on defining and valuing assets and liabilities for the purpose of proper financial statement presentation. Particular attention will be applied to cash, receivables, inventory and plant assets. Laboratory required.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ACTG 152
Typically Offered: Fall Semester

ACTG 252, INTERMEDIATE ACCOUNTING II 4 (5)
Continuation of Intermediate Accounting I with emphasis on intangible assets, investments, current liabilities, long term liabilities (including taxes and pensions), corporate owners' equity, cash flows, and error corrections. Laboratory required.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ACTG 251
Typically Offered: Spring Semester

ACTG 253, FORENSIC ACCOUNTING 3 (3)
This course would be a comprehensive overview of the field of forensic accounting. It highlights fraud will be discussed along with organization and highlights from Sarbanes-Oxley. This course will provide a foundation into the connectivity of forensic accounting and fraud examination. Some of the other topics discussed are: ethics, tax and financial statement fraud, business valuation, information security, identity theft and organized crime.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: ACTG 151
Typically Offered: Fall and Spring Semesters
ACTG 265, COST ACCOUNTING 3 (3)
Introduction to cost accounting systems and methods. Cost concepts, classifications, and measurement techniques in relation to their importance in income determination, planning and control. Job order and process costing methods. Standard cost accounting procedures and the analysis of variances; cost and profit planning, capital expenditure and planning and other functions and management. This course contains an opportunity for experiential learning with an applied project requirement.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ACTG 152
Typically Offered: Fall and Spring Semesters

ACTG 267, FEDERAL INCOME TAX PROCEDURES-INDIVIDUAL 4 (4)
Introduction to individual taxation, tax research and tax planning. Preparation of individual federal returns.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Concurrent: ACTG 151
Typically Offered: Fall Semester

ACTG 268, FEDERAL INCOME TAX PROCEDURES-BUSINESS ENTITIES 4 (4)
Introduction to business entity taxation, tax research and tax planning. Preparation of business entity federal tax returns.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: ACTG 267; Concurrent: ACTG 152
Typically Offered: Spring Semester

ACTG 287, WORK-BASED LEARNING I - ACTG 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of six semester hours in the discipline of placement; have a minimum GPA of 2.5 in the discipline and a 2.0 overall GPA; and division approval.
Typically Offered: Offer as required

ACTG 288, WORK-BASED LEARNING II - ACTG 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ACTG 287
Typically Offered: Offer as required

ACTG 299, INDIVIDUALIZED STUDIES/ACCOUNTING 1-2 (1)
An in-depth study of areas in accounting through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and divisional approval.
Typically Offered: Offer as required

Allied Health and Nursing (ALHN)

ALHN 107, CAREER EXPLORATIONS IN DIAGNOSTIC MEDICAL SONOGRAPHY 1 (1)
This course is an overview of the diagnostic medical sonography profession for those persons interested in exploring a possible career path in the field. It examines various sonography careers including required education preparation, benefits, roles, responsibilities, and opportunities in the field. Sonography practice settings, treatments, patient populations and specialty areas of practice are described.
General Education: IN1, IN4, IN5
Course Entry Requirement(s): Prerequisite: ALHN 112 and ALHN 113
Typically Offered: Fall and Spring Semesters

ALHN 108, CAREER EXPLORATION IN SURGICAL TECHNOLOGY 1 (1)
This course is for students considering Surgical Technology as a career. It is an orientation to the Surgical Technology Program and will cover the role of the surgical technologist as a provider of care, career options, student requirements, required educational preparation and national certification as a Certified Surgical Technologist (CST). Basic surgical technology skills and the concepts of sterile technique and surgical conscience will be presented. Ethical and legal responsibilities to the patient will be included. At the end of this course the student will be able to make an informed decision about his/her suitability for a career in surgical technology. A grade of C or better is required in order to apply to the Surgical Technology Program.
General Education: IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ALHN 110, MEDICAL TERMINOLOGY 3 (3)
This course will introduce medical terminology including common medical word roots, prefixes, suffixes and combining forms. It will include common medical abbreviations, pronunciation, spelling and definitions of medical terminology related to the human body systems. People who are pursuing an allied health or nursing program, or who are reentering health care professions or persons working in health care related agencies will enhance their knowledge of medical terminology in this course. (TAG, CTAG)
General Education: IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ALHN 112, INTRODUCTION TO MEDICAL TERMINOLOGY 1 (1)
This course provides an introduction to medical terminology including common medical word roots, prefixes, suffixes and combining forms. It will include common medical abbreviations, pronunciation, spelling and definitions of medical terminology related to the human body systems. People who are considering a career in allied health or nursing or those re-entering the health care profession. Required course for students entering diagnostic medical sonography program (not required for advanced placement students).
General Education: IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
ALHN 113, INTRODUCTION TO PATIENT CARE 1 (2)
This course introduces the student to the health care delivery system, exploring methods of providing basic patient-care skills, infection control, patient safety, and an introduction to healthcare worker safety in a medical environment. A course intended for persons considering a career in allied health or nursing, or those re-entering the health care profession. Laboratory required. (A special fee will be assessed). (CTAG)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None, None
Typically Offered: Summer, Fall and Spring Semesters

ALHN 117, INTRODUCTION TO BEHAVIORAL HEALTH 3 (3.5)
Presents an historical review of the attitudes toward mental illness; reviews roles and functions of professionals working with individuals with emotional, behavioral, addiction, and/or social problems, studies various treatment procedures used in the mental health/human services field, and investigates different facilities where treatment and services are available.
General Education: IN1, IN2, IN3, IN4, IN5
Typically Offered: Offer as required

ALHN 118, PHARMACOLOGY FOR ALLIED HEALTH AND NURSING 3 (3)
This course is designed to enable allied health students to acquire knowledge about pharmacology. General pharmacological concepts, such as drug medication preparation, drug calculations, drug classification and administration, drug interaction, will be presented. Drugs that are commonly given for diseases of the body systems will also be discussed. Drugs that are
Typically Offered: Fall and Spring Semesters

ALHN 120, CAREER EXPLORATIONS IN OCCUPATIONAL THERAPY 1 (1)
This blended course is an overview of the occupational therapy profession for those persons interested in exploring a career path in the field. It examines the different occupational therapy careers including required educational preparation, benefits, roles, responsibilities, and opportunities in the field. Occupational Therapy practice settings, treatment, patient populations and specialty areas of practice are described. This course is related to the curriculum design as it exposes the perspective OTA student to the field of OT by addressing foundational concepts such as history, activity analysis, and roles of the OT and OTA. Course is online except when completing observations is small groups during week seven of this eight week course.
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BIOG 115 or concurrent enrollment in BIOL 122 or divisional approval.
Typically Offered: Fall and Spring Semesters

ALHN 121, INTRODUCTION TO ALTERNATIVE ENERGY 3 (4)
This course introduces the student to alternative energy sources including solar, wind power, geothermal, bio-fuels, hydrogen generation and fuel cell applications. Cost effectiveness and overall fuel efficiency will be examined, as evaluated in electrical and thermal units. Laboratory activities will demonstrate alternative energy concepts. Laboratory required. (A special fee will be assessed.) (TAG, CTAG)
General Education: IN1
Typically Offered: Fall and Spring Semesters

ALHN 124, CAREER EXPLORATIONS IN PHYSICAL THERAPY 1 (1)
This course is an overview of the physical therapy profession for those persons interested in exploring a possible career path in the field. It examines various physical therapy careers including required educational preparation, benefits, roles, responsibilities, and opportunities in the field. Physical therapy practice settings, treatments, patient populations and specialty areas of practice are described.
General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ALHN 278, WORK-BASED LEARNING I - ALHN 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

ALHN 287, WORK-BASED LEARNING II - ALHN 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
Course Entry Requirement(s): Prerequisite: ALHN 287
Typically Offered: Offer as required

ALHN 289, WORK BASED LEARNING III - ALHN 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
Course Entry Requirement(s): Prerequisite: ALHN 288
Typically Offered: Offer as required

Alternative Energy (ALET)

ALET 111, INTRODUCTION TO ALTERNATIVE ENERGY 3 (4)
This course introduces the student to alternative energy sources including solar, wind power, geothermal, bio-fuels, hydrogen generation and fuel cell applications. Cost effectiveness and overall fuel efficiency will be examined, as evaluated in electrical and thermal units. Laboratory activities will demonstrate alternative energy concepts. Laboratory required. (A special fee will be assessed.) (TAG, CTAG)
General Education: IN1
Typically Offered: Fall and Spring Semesters
ALET 112, ALTERNATIVE ENERGY MECHANICAL SYSTEMS 4 (6)
This course examines the different mechanical systems used in alternative energy power generation. Included are discussions of wind turbine components, passive and active solar components, precision measurement, blueprints, hand and power tools, torque, mechanical drives, alignment, bearings, lubrication, rigging, and ladder safety. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: ALET 111; Concurrent: MTHM 121

**Typically Offered:** Fall and Spring Semesters

ALET 113, OSHA 10 CONSTRUCTION SAFETY 1 (1)
The OSHA 10 Hour Construction class provides entry level general awareness in recognizing and preventing hazards on a construction site. Course is instructed by an OSHA recognized instructor. Successful participants will be awarded an OSHA 10 card for construction safety.

**General Education:** IN1

**Typically Offered:** Spring Semester

ALET 220, WIND TURBINE TECHNOLOGY I 3 (5)
The student will study the operation, installation and maintenance of small wind turbine systems. This class is designed to give the student a theoretical and practical basis for the application of wind turbine systems. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: ALET 112

**Typically Offered:** Fall Semester

ALET 221, WIND TURBINE TECHNOLOGY II 3 (5)
This course is a continuation and practice of the concepts and skills learned in ALET 220 - Wind Turbine Technology I. The student will study the application and installation of utility scale wind turbine systems. This class is designed to give the student practical experience in the application, installation and maintenance of wind turbine systems. Project management and team based skills will be emphasized. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: ALET 220

**Typically Offered:** Spring Semester

ALET 222, SOLAR THERMAL SYSTEMS 4 (6)
This course explores the operation, design, installation, maintenance, performance estimating, site selection considerations and troubleshooting of solar thermal systems for consumer and commercial applications. The course covers heat stores, solar circuits, solar collectors, controllers, heating systems, dimensioning; heat exchangers, economic considerations, and safety.

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: ALET 111

ALET 223, PHOTOVOLTAIC SYSTEMS 4 (6)
This course explores the design, installation and use of solar-photovoltaic power systems for consumer and commercial applications. The course covers theory and hands-on lab experience required to assess, install, maintain, and troubleshoot solar-photovoltaic electrical generating systems. The course prepares students for the North American Board of Certified Energy Practitioners (NABCEP) Photovoltaic (PV) Entry Level Exam. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: ALET 111

ALET 287, WORK BASED LEARNING I - ALET 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Typically Offered:** Offer as required

ALET 288, WORK-BASED LEARNING II - ALET 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: ALET 287

**Typically Offered:** Offer as required

ALET 289, WORK-BASED LEARNING III - ALET 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: ALET 288

**Typically Offered:** Offer as required

ALET 299, INDIVIDUALIZED STUDIES IN ALTERNATIVE ENERGY 1-2 (1)
An in-depth study in areas of alternative energy presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

**Course Entry Requirement(s):** Prerequisites: Second-year standing and division approval.

**Typically Offered:** Offer as required

Arabic (ARAB)

ARAB 151G, ELEMENTARY ARABIC I 4 (5)
This course introduces the fundamental elements of effective communication in Arabic and will primarily focus on mastery of the alphabet. Language skills will be developed through cyclical practice in listening, speaking, reading, and writing. Students will develop their understanding of the Arabic phonological system, basic conversational topics, vocabulary and simple sentences. (IN1, IN2 IN3)

**General Education:** IN1, IN2, IN3

**Course Entry Requirement(s):** None

**Typically Offered:** Fall and Spring Semesters
ARAB 152G, ELEMENTARY ARABIC II 4 (5)
This course continues the fundamental elements of effective communication in Arabic, and will primarily focus on mastery of the alphabet. Language skills will be expanded through cyclical practice in listening, speaking, reading, and writing. Students will expand their Arabic vocabulary and communicate with increased complexity. Communication conventions and cultural background will provide a basis for cultural understanding.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ARAB 151G
Typically Offered: Spring Semester

Archeology (ARCH)

ARCH 155G, INTRODUCTION TO ARCHAEOLOGY 3 (3)
This course introduces the student to Anthropological Archaeology - the study of past human culture using material remains from a sociological perspective. Course emphasizes obtaining goals of archaeological research through: survey, excavation, artifact analysis and interpretation. This course provides a basic understanding of how we learn about ancient societies and how this teaches us about ourselves. ARCH 155G, URBS 155G and SOCY 155G are cross-listed courses. (OTM, TAG)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

Arts (ARTS)

ARTS 151, PHOTOGRAPHY I 3 (6)
An introduction to the fundamentals of black and white photography. The student will acquire the basic skills necessary to understand and operate a 35mm camera, develop film, and make photographic print from negatives. Students will be expected to learn how to properly present their work. Laboratory required. (A special fee will be assessed.) (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ARTS 152, PHOTOGRAPHY II 3 (6)
Photography II is a continuation in the Photography sequence. The student will continue the use of a 35mm camera and explore additional printing and post printing techniques. The relationship between the subject and the lighting of the subject will be stressed with an emphasis on the development of visual awareness. Medium format cameras will be introduced and applied. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 151
Typically Offered: Summer and Spring Semesters

ARTS 158, PRINTMAKING 3 (6)
An introduction to the techniques of woodcut, etching and related processes. Laboratory required. (A special fee will be assessed.) (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Spring Semester

ARTS 161, DRAWING I 3 (6)
An introduction to the fundamentals of drawing from observation through the use of various methods, materials, and subjects. Emphasis on black and white media. This is a foundation class and should be completed by all art majors. Laboratory required. May include the use of nude models. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ARTS 162, DRAWING II 3 (6)
Continued exploration of drawing problems and techniques, with emphasis on personal solutions. Color media used. Laboratory required. May include the use of nude models.

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 161 and ARTS 165
Typically Offered: Summer, Fall and Spring Semesters

ARTS 165, TWO-DIMENSIONAL DESIGN 3 (6)
An introduction to the visual organization of design elements in two dimensional art and design. This is a foundation class and should be completed by all art majors. Laboratory required. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ARTS 167, THREE-DIMENSIONAL DESIGN 3 (6)
A study of the elements of three-dimensional visual design and fine art and their application in creative expression. Recommended for students taking Ceramics or Sculpture, as well as, students with no previous experience. This is a foundation class and should be completed by all art majors. Laboratory required. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ARTS 171, PAINTING I 3 (6)
An introduction to the materials and techniques of painting, with emphasis on the use of color and composition. Recommended for students taking Ceramics or Sculpture, as well as, students with no previous experience. This is a foundation class and should be completed by all art majors. Laboratory required. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ARTS 172, PAINTING II 3 (6)
A continued exploration of problems from various sources, with emphasis on developing personal solutions. Recommended for fine arts majors and digital arts majors. Laboratory required. There will be the use of nude models. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 161 and ARTS 165
Typically Offered: Fall Semester

ARTS 175, WATERCOLOR PAINTING 3 (6)
An introduction to the materials and techniques of watercolor painting, with emphasis on the use of color and composition. Recommended for digital art majors and fine art majors.

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 161 and ARTS 165
Typically Offered: Spring Semester
ARTS 181, CERAMICS I 3 (6)
An introduction to working with clay in both hand building and wheel methods, including surface decoration and glazing. Laboratory required. (A special fee will be assessed.) (TAG)
General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ARTS 182, CERAMICS II 3 (6)
Advanced techniques in both hand building and wheel methods, including surface decoration and glazing. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 181
Typically Offered: Summer, Fall and Spring Semesters

ARTS 185, SCULPTURE 3 (6)
An introduction to the variety of sculpture techniques with emphasis on four categories: addition or construction, subtraction, manipulation, and substitution. Students will learn about the properties of materials as well as apply the principles of three-dimensional design. Students will become familiar with a variety of sculptors and other artists working in three dimensions, past and present. Laboratory required. (A special fee will be assessed.) (TAG)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 167
Typically Offered: Fall Semester

ARTS 243G, ART HISTORY I 3 (3)
The chronological development of Western Art and Architecture. Topics include: Prehistoric Art, Egyptian Art, Greek and Roman Art, and Medieval Art. Humanities Core Course. (OTM, TAG)
General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

ARTS 244G, ART HISTORY II 3 (3)
The chronological development of Western Art and Architecture from the Renaissance and concluding with contemporary western art. Humanities Core Course. (OTM, TAG)
General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

ARTS 245G, WORLD ART 3 (3)
An introduction to art of the non-western world, sampled from Asian, African, Oceanic, Middle Eastern and Mesoamerican history. Topics include representative art forms and traditions, key works and cultural influences shaping art production across regions of the world and eras. Students are also introduced to art vocabulary, concepts and strategies for appreciating world art. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

ARTS 246, HISTORY OF PHOTOGRAPHY 3 (3)
A survey of the history of photography including the evolution of technologies, practices, movements, key artists, works and influences. Students are also introduced to art vocabulary, concepts and strategies for appreciating photography in diverse applications, including fine art. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Fall Semester

ARTS 252, PHOTOGRAPHY III 3 (6)
Photography III is a continuation in the Photography sequence. The student will continue to explore the use of medium format. Large format will be introduced and applied. The marriage between the technical and aesthetic aspects of photography will be emphasized. Students will continue to refine printing and post printing techniques. Studio and fieldwork procedures will be explored. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 152
Typically Offered: Summer and Spring Semesters

ARTS 254, HISTORY OF AMERICAN ARCHITECTURE 3 (3)
An introductory survey of American architecture through a history of styles, origins, and symbolic themes. Topics include the evolution of housing design, the expression of national identity and institutions through design styles, and innovations by key architects, including Jefferson, Sullivan, Wright and others. Special emphasis given to the architectural history of Ohio and its Western Reserve, as well as contemporary landmarks in the region, including local communities. (OTM)
General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Spring Semester

ARTS 260, LIFE DRAWING I 3 (6)
Drawing focused on the human figure. Study of the figure in motion (gesture), anatomy and in longer poses. Students will work from nude models; students under the age of 18 must get parental permission to register for the class. Laboratory required. (TAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ARTS 161 and ARTS 165
Typically Offered: Spring Semester

ARTS 261, GRAPHIC DESIGN I 3 (6)
An introduction to the fundamentals of graphic design, including aesthetics and organization of type and graphic elements in space, the elements of visual communication, and the process of ideation and presentation from thumbnails through comprehensives. The student will also be exposed to problems in design history and current trends in graphic design. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 161 and ARTS 165 and previous or concurrent enrollment in ARTS 271
Typically Offered: Spring Semester

ARTS 262, GRAPHIC DESIGN II 3 (6)
A continuation of the graphic design sequence, expanding the students understanding of the interaction of text, graphic and photographic elements in visual communication. Students will be introduced to a variety of organizing design principles, as well as the interplay between form and content. Students will be expected to produce designs for a variety of contexts ranging from the printed page to the digital screen. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 261
Typically Offered: Fall Semester
ARTS 263, GRAPHIC DESIGN III 3 (6)
A continuation of the graphic design sequence, concentrating on pre-press production. The designer's relationship with the service bureau, photographer, pre-press house, and printer will be explored and the use of the computer as an companion in the process will be stressed. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 262; Concurrent: ARTS 272
Typically Offered: Spring Semester

ARTS 264, NON-LINEAR EDITING 3 (5)
This class is an exploration of non-linear video and digital sound editing. Students will be introduced to a variety of video editing and sound editing software programs and techniques. They will be expected to capture, edit, and create a series of time-based assignments as well as expanding the use of the computer as a creative tool. Conversion of analog to digital information will be explored. Production procedures will be emphasized. This course is cross-listed as ARTS 264 and TCMN 264.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 271 or ARTS 272 or TCMN 177 or Divisional approval
Typically Offered: Not offered this year; Fall and Spring Semesters

ARTS 265, LIFE DRAWING II 3 (6)
Deeper exploration of problems and techniques associated with the study of the human figure. Continued study of the figure in motion (gesture). Study of the human musculature through anatomical drawings. Students will work and explore color through the use of dry and oil pastels, markers, ink and watercolor. Drawing II students will focus on longer periods of time drawing single poses. Students will work from nude models; students under the age of 18 must get parental permission to register for the class. Laboratory required.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 260
Typically Offered: Spring Semester

ARTS 271, DIGITAL IMAGING 3 (6)
An introduction to the use of raster and vector-based digital tools in the acquisition, manipulation, and production of image-based visual art for traditional and new media applications. Students will gain hands-on experience with industry-standard hardware and software tools for the production of both screen-based (internet, mobile, and gaming) as well as print-based (design, fine arts) imaging contexts involving creative expression. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Concurrent: ARTS 161 and ARTS 165
Typically Offered: Fall and Spring Semesters

ARTS 272, DIGITAL ILLUSTRATION 3 (6)
A focus on communication ideas through visual expression using vector-based software applications. Course emphasis is on concept art development for narrative and conceptual themes; including animation, comic books, gaming, children's books and product design. Students will be expected to engage in the exploration of technique, creative process and the development of personal styles while meeting strict deadlines. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Concurrent: ARTS 271 or CGSD 271
Typically Offered: Spring Semester

ARTS 273, 2-D ANIMATION AND MOTION GRAPHICS 3 (6)
The production of time-based motion graphics including traditional and two-dimension (2D) computer animation. Principles and techniques of motion graphics from storyboarding, narrative, character development, and the uses of audio using industry standard tools. Discussion of exemplary works, historical background, and technological trends in motion graphics. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 271; Concurrent: ARTS 272
Typically Offered: Spring Semester

ARTS 274, WEB DESIGN I 3 (6)
This class is an exploration of web design from the artists' view. HTML language as well as WYSIWYG design software will be used to create web pages on the internet. The computer will be used to produce both simple and complex web pages. Linking, rollovers, frame technology, Java, and other processes will be discussed and utilized. Students will expand their usage of a variety of software programs to assist them in Web production. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 271 and ARTS 280
Typically Offered: Spring Semester

ARTS 275, DIGITAL PHOTOGRAPHY 3 (6)
This class is a merging of the photographic and computer technologies. The students will explore the use of the computer and its abilities to produce photographic imagery without the use of traditional means. Digital cameras and scanners will expand the student's ability to create, modify, and produce files suitable for grayscale or four-color printings. Discussion about the legal implications of modified imagery will be discussed in terms of evidentiary and intellectual property issues. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 271 or ARTS 151
Typically Offered: Fall and Spring Semesters

ARTS 276, 3-D MODELING AND ANIMATIONS 3 (6)
This class is an exploration of three dimensional modeling and animation. Students will be introduced to select software that produce vector and fractal based objects. The computer will be used to create and/or modify primitives, apply surface textures, control lighting, and camera position. The students will learn how to animate the resulting objects and create environments. The class will expand their understanding of the computer's potential as a creative tool. (A special fee will be assessed.)
This course is cross-listed as ARTS 276 and CGSD 276.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 271
Typically Offered: Fall Semester

ARTS 277G, TYPOGRAPHY 3 (6)
An introduction to type as a graphic element concentrating on the aesthetics of type as a graphic element on a two-dimensional page. The student will also be exposed to the history of font and type design. The student will be encouraged to use typography as an expressive medium. Laboratory required. (A special fee will be assessed.)
Prerequisite: ARTS 161 and ARTS 165 or divisional approval and previous or concurrent enrollment in ARTS 271.
General Education: IN1, IN2
Typically Offered: Fall Semester
ARTS 278, 3-D MODELING AND ANIMATION II 3 (6)
This class is a continuation of ARTS 276 3D Modeling and Animation I, constituting further study and development of virtual 3D content. Students will have the opportunity to develop individual artistic projects using industry-standard 3D modeling and animation tools. The class will expand their understanding of the computer’s potential as a creative tool. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 276
Typically Offered: Spring Semester

ARTS 279, WEB DESIGN II 3 (6)
This class is a continuation of Web Design I, constituting further study and development of internet-based aesthetic content from an artist’s point of view. Students will study and experience examples of internet arts, expand their knowledge of interactive design, non-linear narrative structures, and screen-based aesthetic experiences while gaining proficiency with industry-standard development tools.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 274
Typically Offered: Spring Semester

ARTS 280, COMPUTER PROGRAMMING FOR ARTISTS 3 (6)
An introduction to creating visual art using computer programming as a primary artistic medium. Students will learn the fundamentals of computer programming as applied to the creation of images (raster and vector-based), interactive experiences (web based and gaming), and motion graphics (2 and 3D animation). Discussion of exemplary works, historical background, and contemporary trends will contextualize computer programming as an artist medium. Laboratory required. (A special fee will be assessed.) (CTAG)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 271
Typically Offered: Fall Semester

ARTS 282, DIGITAL PHOTOGRAPHY II 3 (6)
This class is part of the digital photography sequence. The focus of the class is to continue the development of the students in becoming photographic artists. This course focuses on the principles and techniques of communicating information, ideas, moods, and feelings through the creation of digital images. Visual photographic series and/or slider work is focused on and developed. Collaborative imagemaking will be explored. Photographic studio and flash lighting will be explored. Laboratory required.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ARTS 275 or divisional approval
Typically Offered: Summer Semester

ARTS 285, PORTFOLIO 1 3 (3)
A capstone course to provide students with the opportunity to demonstrate skills and concepts learned in the art curriculum. Laboratory required. Prerequisites: Second year standing and completion of at least 20 semester hours in the art curriculum.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Second year standing and completion of at least 20 semester hours in the art curriculum
Typically Offered: Spring Semester

ARTS 287, WORK-BASED LEARNING I - ARTS 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

ARTS 299, INDIVIDUALIZED STUDIES IN ART 1-2 (1)
An in-depth study of areas in art through discussion and/or individual research, reading, writing and studio production. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and completion of at least 20 semester hours in the art curriculum
Typically Offered: Offer as required

Astronomy (ASTY)

ASTY 151, STARS, GALAXIES AND COSMOLOGY 4 (5)
Course designed for the non-science major. Topics include scientific models of our solar system, properties of stars, stellar evolution, galaxies, and cosmology. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)
General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ASTY 152, SOLAR SYSTEM ASTRONOMY 3 (3)
Introduction to general astronomical concepts concerning the mechanics, formation, properties and exploration of the planets in our solar system. Natural Science Core Course. (OTM)
General Education: C3, IN1
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment into college level mathematics or previous or concurrent enrollment in a co-requisite mathematics course.
Typically Offered: Summer, Fall and Spring Semesters

ASTY 299, INDIVIDUALIZED STUDIES IN ASTRONOMY 1-2 (1)
An in-depth study of areas in Astronomy presented by discussion and/or individual research and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisite: Second-year standing and divisional approval.
Course Entry Requirement(s): Prerequisite: Second-year standing and divisional approval
Typically Offered: Offer as required
Automation Engineering Technology (AETC)

AETC 111, ROBOTICS/AUTOMATED MANUFACTURING 3 (5)
Study of automated manufacturing and the computer-based technologies that are available for this task. Topics covered will include computer aided design (CAD), computer numerical control (CNC), programmable logic controllers (PLC), and computer integrated manufacturing (CIM). Emphasis will be placed on programming of industrial robots for the purpose of automated manufacturing. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Typically Offered: Fall Semester

AETC 121, PROGRAMMABLE LOGIC CONTROLLERS 3 (5)
Study of programming and application of programmable logic controllers (PLC). Theory and practice of hardware selection, setup, configuration, and troubleshooting. Students will apply their skills towards the programming of PLC hardware for industry related situations. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Typically Offered: Spring Semester

AETC 131, PIPING SYSTEMS AND CODES 3 (4)
This course is an introduction to specifications, selections, applications, and maintenance of pipes, fittings, and valves. Simple pipe calculations, selection of appropriate tools, types, and purposes of valves, and piping codes will be discussed. Also covered are unique pipe installation and maintenance procedures related to steam heating systems, hydraulic systems, fire protection systems, refrigeration, and air conditioning systems. Laboratory required. (A special fee will be assessed.)

General Education: IN1

AETC 132, PNEUMATIC COMPONENTS AND SYSTEMS 2 (3)
This course covers the principles of pneumatics, types of components, and design of typical pneumatic circuits. The history and applications of pneumatics are reviewed. Emphasis is placed on the compression, distribution and use of pneumatics in industry today. Use of various forms of documentation of pneumatic logic circuits is discussed. Laboratory required. (A special fee will be assessed.)

General Education: IN1

AETC 211, WORKCELL INTERFACING 3 (5)
This course concentrates on the development of digital communications needed to interface various forms of industrial equipment. Students will use laboratory time to apply the concepts of voltage conversions, isolation techniques, and signal conditioning. Selection and application of available sensor technologies will also be covered. Laboratory required. (A special fee will be assessed.)

General Education: IN1

AETC 221, AUTOMATED SYSTEMS TROUBLESHOOTING 2 (3)
This course covers the concepts and procedures that are necessary to identify problems, troubleshoot, and repair different configurations of automated work cells. Topics discussed and demonstrated include operation of work cell through the software applications, schematics, control circuits, and problem solving techniques. Laboratory is required. (A special fee will be assessed.)

General Education: IN1

AETC 222, HYDRAULIC COMPONENTS AND CIRCUITS 2 (3)
This course covers the principles of operation, construction, and functions of hydraulic components in a closed circuit. Emphasis is placed on skill development in selection of hydraulic components, fluid media and development of hydraulic circuits. Set-up and operation, test and troubleshooting maintenance and repair of hydraulic circuits will be studied. Laboratory required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): Prerequisite: TECN 121

AETC 223, PROGRAMMABLE LOGIC CONTROLLERS II 3 (5)
This course covers advanced programmable logic controller (PLC) concepts. Topics include motion control, PLC related networking, and human machine interfaces (HMI). Laboratory exercises will involve developing systems based upon these topics. Automatic identification, positional sensors, and automation related mechanisms will also be discussed. Laboratory required. (A special fee will be assessed.)

General Education: IN1

AETC 231, FLEXIBLE MANUFACTURING SYSTEMS 3 (6)
Study of applications of flexible manufacturing. Designed to take the students through the entire process of developing, designing, programming, and documenting a flexible manufacturing system. Project management and team based skills will be emphasized. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2

Course Entry Requirement(s): Prerequisite: AETC 211 or division approval

Typically Offered: Spring Semester

AETC 235, COMPUTER INTEGRATED MANUFACTURING 3 (5)
Study of the components, equipment, and processes that are related to the concept of computer integrated manufacturing (CIM). This course will focus on the entire spectrum of manufacturing with emphasis on how the components interrelate in a completely automated manufacturing environment. Material handling devices and different methods of automatic identification will also be explored. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2

Course Entry Requirement(s): Prerequisite: AETC 111, 121 or division approval

Typically Offered: Spring Semester

AETC 241, INSTRUMENTATION AND CONTROL 3 (5)
An application oriented course to include the terminology, symbols, process variables and typical control methods used in process control, measuring techniques of variables, and the methods employed to control these variables. Feedback control methods covered include proportional, integral, derivative, PID, tuning methods, as well as cascade and ratio control. Students install, calibrate, tune, and operate feedback control systems in the laboratory, including flow, temperature, level, and cascade control systems. Laboratory required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): Prerequisite: ELCT 111 or division approval.

Typically Offered: Fall Semester

Course Entry Requirement(s): Prerequisite: ELCT 111 or division approval.

Typically Offered: Spring Semester
AETC 287, WORK-BASED LEARNING I - AETC 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

AETC 288, WORK BASED LEARNING II - AETC 1-3 (1)
Building on prior Work Based Learning experience(s), this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: AETC 287
Typically Offered: Offer as required

AETC 289, WORK BASED LEARNING III - AETC 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: AETC 288
Typically Offered: Offer as required

AETC 299, INDIVIDUALIZED STUDIES IN AUTOMATION TECHNOLOGY 1-2 (1)
An in-depth study in areas of automation engineering technology presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisites: Second-year standing and divisional approval.

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval.
Typically Offered: Offer as required

Biology (BIOG)

BIOG 115, BODY STRUCTURE AND FUNCTION 3 (3)
Basic introduction to the structure and function of the human body systems. A course intended primarily for Health and Wellness certificate program students or as a preliminary course to prepare for Anatomy and Physiology I and II. Natural Science Core Course.

General Education: C3, IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

BIOG 121, ANATOMY AND PHYSIOLOGY I 4 (6)
This course offers an introduction to chemistry, cell biology and histology, as well as an in-depth study of the following human organ systems: integumentary, skeletal, muscular, nervous (including special senses), and endocrine. This course is intended primarily for Health and Wellness associate degree students and Science majors. Laboratory (involving dissection of specimens) required. (A special fee will be assessed.) Recommend prior completion of one or more of the following: high school biology or chemistry, BIOG 115, or CHMY 161. Natural Science Core Course. (OTM)

General Education: C3, IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

BIOG 122, ANATOMY AND PHYSIOLOGY II 4 (6)
This course is a continuation of Anatomy & Physiology I. The structure and function of the following human organ systems are examined: reproductive (including embryology and fetal development), digestive, cardiovascular, lymphatic (including immunity), respiratory, and urinary (including fluid/electrolyte and acid/base balance). Cadaver-based laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

General Education: C3, IN1, IN5
Course Entry Requirement(s): Prerequisite: Grade of C or better in BIOG 121
Typically Offered: Summer, Fall and Spring Semesters

BIOG 123, CROSS-SECTIONAL ANATOMY 2 (2)
A survey of the human body as seen in cross-section. Course is designed primarily for students of Radiologic Technology and Diagnostic Medical Sonography.

General Education: IN1
Course Entry Requirement(s): Prerequisite: BIOG 121 and previous or concurrent enrollment in BIOG 122.
Typically Offered: Fall and Spring Semesters

BIOG 150, INFECTIOUS DISEASE A TO Z 2 (2)
This course is designed for both science and non-science majors. The stresses of increased population size, climate change, increased world travel, and global commerce threatens a greater disease burden in the coming years. This course will examine various organisms, disease transmission, the host’s response to infection, and medical treatments, as well as various public health procedures that can help control infectious diseases in the population. Natural Science Core Course. (OTM)

General Education: C3, IN1, IN5
Typically Offered: Fall and Spring Semesters

BIOG 151, GENERAL BIOLOGY 4 (5)
An introductory biology course designed for non-science majors. Topics include basic chemistry and cell biology, evolution, genetics, ecology and a survey of the kingdoms. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

BIOG 152, HUMAN BIOLOGY 4 (5)
An introductory course intended for the non-science major covering basic anatomy and physiology of the human body. Laboratory with dissection of preserved specimens required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

General Education: C3, IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
BIOG 153, BASIC HUMAN NUTRITION 3 (3)
Course designed for the non-science major to educate the consumer about normal physiological activities used to process food nutrients, dietary requirements for all stages of the human life cycle, and food safety. World hunger and global issues related to the food supply are also addressed.

**General Education:** IN1, IN3, IN5

**Course Entry Requirement(s):** None

**Typically Offered:** Summer, Fall and Spring Semesters

BIOG 156, HIV/AIDS 1 (1)
The study of the biology and issues which surround the transmission and containment of HIV, the virus that causes acquired immune deficiency syndrome (AIDS). Current medical protocol, the political ramifications of the disease and the challenge of dealing with human behaviors, attitudes and social stigmas will be addressed.

**General Education:** IN1, IN3, IN4, IN5

**Course Entry Requirement(s):** None

**Typically Offered:** Fall and Spring Semesters

BIOG 159, AQUATIC LIFE 3 (4)
Introductory course designed for non-science majors to explore various aquatic environments, with an emphasis on aquatic species and the interaction of humans with such environments. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

**General Education:** C3, IN1

**Course Entry Requirement(s):** None

**Typically Offered:** Summer, Fall and Spring Semesters

BIOG 161, PRINCIPLES OF BIOLOGY I 4 (6)
Course designed for science majors that focuses on the principles of biology recommended for Science majors. Topics include basic chemistry, the cell, metabolism, photosynthesis, genetics and evolution. A considerable writing component is present. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)

**General Education:** C3, IN1

**Course Entry Requirement(s):** Course placement policy: Satisfactory placement assessment into college level mathematics or previous or concurrent enrollment in a co-requisite mathematics course.

**Typically Offered:** Fall and Spring Semesters

BIOG 162, PRINCIPLES OF BIOLOGY II 4 (6)
A continuation of BIOG 161 emphasizing a taxonomic survey of the kingdoms, as well as a study of animal and plant anatomy and physiology and ecology. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)

**General Education:** C3, IN1, IN2

**Course Entry Requirement(s):** Prerequisite: BIOG 161 or division approval.

**Typically Offered:** Fall and Spring Semesters

BIOG 163, THE MICROBIAL WORLD 4 (5)
Course designed for non-science majors which examines the Unseen Life on Earth. Students will explore the scientific detective work that leads investigators from the world of the very large to the world of the very small, from the present to the remote past, from humankind at large to the delicate life systems within and around every one of us. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

**General Education:** C3, IN1, IN5

**Course Entry Requirement(s):** None

**Typically Offered:** Fall and Spring Semesters

BIOG 164, EXPLORATIONS IN FIELD SCIENCE 3 (4)
This course is designed to introduce students to methods of sampling and analysis in Environmental Science. Topics include air pollution; noise pollution; water pollution; soil health assessment; plant identification and biodiversity estimation; and methods in basic statistics, experimental design, and scientific reporting. Students will participate in the design, implementation, analysis, and presentation of a Capstone Project based on original student research. Course may include a service learning component. Natural Science Core Course. (OTM)

**General Education:** C3, IN1, IN2

**Course Entry Requirement(s):** Course placement policy: Satisfactory placement assessment into college level mathematics or previous or concurrent enrollment in a co-requisite mathematics course.

**Typically Offered:** Fall Semester

BIOG 165, INTRODUCTION TO ECOLOGY 3 (3)
Introductory course provides a survey of environmental issues and highlights interactions between human beings and the ecosystem. Course also addresses the economic, social and environmental dimensions of sustainable development. Course may include a Service Learning component. Natural Science Core Course. (OTM, CTag)

**General Education:** C3, IN1, IN3, IN5

**Course Entry Requirement(s):** None

**Typically Offered:** Summer, Fall and Spring Semesters

BIOG 185, SUPPLEMENTAL BIOLOGY LAB I 11 (2)
Laboratory-only course designed to provide lab experience for students transferring in credits from another institution or for transient students completing requirements for a two-hour lab for a lab science biology course. This lab will be used for an Anatomy and Physiology, General Biology, or Human Biology lab experience. (A special fee will be assessed.) Course repeatable up to 2 times.

**Course Entry Requirement(s):** Prerequisite: Previous credit in acceptable lecture-only course from a transfer institution and division approval

BIOG 251, GENERAL MICROBIOLOGY 4 (6)
Course designed for Health and Wellness associate degree students and Science majors which explores the major groups of microorganisms and the role they play in the environment and in disease. The host response to microorganisms, as well as control of microbial disease, are addressed. Laboratory provides the student with basic techniques of infection control, microbial identification, microscopy, and sterile technique. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

**General Education:** C3, IN1, IN5

**Course Entry Requirement(s):** Prerequisite: Grade of C or better in BIOG 121 or BIOG 161 or CHMY 161

**Typically Offered:** Summer, Fall and Spring Semesters

BIOG 252, MICROBIOLOGY 5 (7)
Course designed for Science Majors. Discussion of the major groups of microorganisms and the role they play in the environment, disease, agriculture, biotechnology, and the food/beverage industry. This class will examine the host response to microorganisms, as well as chemical and pharmaceutical control of microbial disease. Laboratory provides the student with techniques of infection control, microbial identification, molecular genetic techniques involving manipulation of nucleic acid and proteins, microscopy, and sterile technique. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

**General Education:** C3, IN1, IN5

**Course Entry Requirement(s):** Prerequisite: Grade of C or better in BIOG 161 and CHMY 171 or division approval

**Typically Offered:** Spring Semester
BIOG 261, BOTANY 4 (6)
Introductory course designed for Science majors exploring the various aspects of plant biology. Topics include plant anatomy, physiology, genetics, diversity, growth, reproduction, ecology and impact on human society. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)
General Education: C3, IN1, IN5
Typically Offered: Spring Semester

BIOG 268, CLINICAL NUTRITION 3 (3)
The science of food nutrients, their role in the body, and their effects on health and disease. Topics include digestion, absorption, metabolism of nutrients, food energy and nutrient requirements throughout the life cycle. This course is designed for Health and Wellness associate degree students and Science majors. Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: Grade of C or better in CHMY 161 or CHMY 171 or division approval
Typically Offered: Summer and Spring Semesters

BIOG 275, GENETICS 4 (4)
GENETICS Course designed for Science majors that will examine gene transmission, function, expression, and regulation in prokaryotic and eukaryotic organisms. Natural Science Core Course. (OTM)
General Education: C3, IN1, IN2, IN3
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment into college level mathematics or previous or concurrent enrollment in a co-requisite mathematics course; Prerequisite: BIOG 161 or BIOG 251
Typically Offered: Fall and Spring Semesters

BIOG 281, MOLECULAR BIOLOGY 4 (4)
Course designed for Science majors that will study how the biological molecules DNA, RNA and proteins determine the properties of living things. This course will explore gene transmission, expression, and regulation in prokaryotic and eukaryotic cells. Natural Science Core Course.
General Education: C3, IN1, IN2
Course Entry Requirement(s): Prerequisite: Grade of C or better in BIOG 161 or BIOG 251 or BIOG 252 and CHMY 161 or CHMY 171
Typically Offered: Spring Semester

BIOG 282, METHODS IN BIOTECHNOLOGY I 3 (5)
Course designed for Science majors that focuses on basic laboratory techniques that are fundamental to everyday work in all biotechnology/bioscience laboratories. Students will become proficient in tissue culture techniques, molecular techniques involved in manipulating and analyzing proteins, and the use of computers in the laboratory for biostatistics and bioinformatics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course.
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: BIOG 282
Typically Offered: Spring Semester

BIOG 283, METHODS IN BIOTECHNOLOGY II 3 (5)
A continuation of Methods in Biotechnology I focusing on basic laboratory techniques that are fundamental to everyday work in all biotechnology/bioscience laboratories. Students will become proficient in tissue culture techniques, molecular techniques involved in manipulating and analyzing proteins, and the use of computers in the laboratory for biostatistics and bioinformatics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course.
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: BIOG 282
Typically Offered: Spring Semester

BIOG 284, INDEPENDENT STUDENT RESEARCH 1 (5)
Laboratory-only course designed to provide students with an opportunity to participate in authentic scientific research utilizing appropriate research techniques and laboratory equipment. (A special fee will be assessed.) Course repeatable up to 10 times.
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

BIOG 285, SUPPLEMENTAL BIOLOGY LAB II 1 (3)
Laboratory-only course designed to provide lab experience for students transferring in credits from another institution or for transient students completing requirements for a three-hour lab for a lab science biology course. This course will be used for a Principles of Biology or Microbiology lab experience. (A special fee will be assessed.) Course repeatable up to 2 times
Course Entry Requirement(s): Prerequisite: Previous credit in acceptable lecture-only course from a transfer institution and division approval

BIOG 287, WORK-BASED LEARNING I - BIOG 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

BIOG 288, WORK-BASED LEARNING II - BIOG 1-3 (1)
Building on experiences from Work-Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BIOG 287
Typically Offered: Offer as required
BIOG 289, WORK-BASED LEARNING III - BIOG 1-3 (1)
Building on experiences from Work-Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BIOG 288
Typically Offered: Offer as required

BIOG 299, INDIVIDUALIZED STUDIES IN BIOLOGY 1-2 (1)
An in-depth study of areas in Biology presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Boilermakers (BMKR)

BMKR 108, OXY-FUEL WELDING AND CUTTING 2 (4)
This course covers the basic theories and practices of oxyacetylene gas welding, cutting, and brazing, types of welding equipment and operational safety issues. Welding equipment design, use, care, and maintenance are emphasized. Oxy-Fuel laboratory work will include fusion welding, brazing, and manual and semiautomatic cutting. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 108 and BMKR 108.

General Education: IN1
Typically Offered: Fall Semester

BMKR 111, WELDING SPECIFICATIONS/PRINT READING 2 (2)
This course covers basic engineering drawing principles, fundamental concepts of welding specifications, symbols, and blueprint reading as used in industry, and types of welding equipment and operational safety issues. Emphasis is on print reading, interpretation and analysis and safety procedures. This course is cross-listed as WTEC 111 and BMKR 111.

General Education: IN1
Typically Offered: Fall Semester

BMKR 112, WELDING CODES AND STANDARDS 2 (2)
This course is designed to familiarize the student with the many governing codes and standards that are used in the welding industries today. Emphasis is to not only learn the correct applications of welding codes and standards, but to become aware of their function as a quality tool. This course is cross-listed as WTEC 112 and BMKR 112.

General Education: IN1
Typically Offered: Summer Semester

BMKR 113, ENGINEERING MATERIALS 3 (4)
This course covers the properties, structure, and technical information that a technician needs to know to select appropriate materials and treatment processes that could be used in engineering applications. Also covered are the limitations and production processes of plastics, metals, ceramics, composites, cemented carbides, and other materials and variety of testing methods used for selection and specifying design specifications. Laboratory required. (A special fee will be assessed.) This course is cross-listed as EMCH 112 and BMKR 113. (TAG)

General Education: IN1
Typically Offered: Fall and Spring Semesters

BMKR 116, BASIC SHIELDED METAL ARC WELDING 3 (5)
This course covers the basic theories and practices of AC and DC shielded metal arc welding, flat position welding of ferrous metal, and required welding code applications. Welding equipment design, use, care, safety, and maintenance are emphasized. Laboratory, exercises that develop welding skills in a variety of welding positions will be practiced. Welding power source selection will also be studied. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 116 and BMKR 116.

General Education: IN1

Typically Offered: Spring Semester

BMKR 212, WELDING FABRICATION, LAYOUT/DESIGN 4 (6)
This course introduces the student to the field of welding fabrication. It will provide the student the opportunity to apply knowledge of welding metallurgy, filler metal selection, testing and inspection of welds, Welding codes, standards and certifications, joint design, layout plans and cost estimates to welding fabrication projects. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 212 and BMKR 212.

General Education: IN1
Typically Offered: Summer Semester

BMKR 216, WIRE FED PROCESSES 3 (5)
This course covers the basic principles and practices of gas metal arc welding (GMAW). Laboratory work involves the application of GMAW as it is used in industry today. Use of various metal transfer modes for aluminum and steel, joint styles, welding positions, and manipulation techniques will be emphasized. Wire fed processes will include sub-arc theory. Laboratory exercises will include flux-covered arc welding. Welding equipment, design, use, care, safety and maintenance are emphasized. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 216 and BMKR 216.

General Education: IN1
Typically Offered: Fall Semester

BMKR 217, GAS TUNGSTEN ARC WELDING 3 (5)
This course covers the basic principles and practices of gas tungsten arc welding (GTAW). Laboratory work involves the application of GTAW as it is used in industry today. Use of various metal transfer modes for aluminum, carbon steel, and stainless steel, joint styles, welding positions and manipulation techniques will be emphasized. Welding equipment, design, use, care, safety and maintenance are emphasized. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 217 and BMKR 217.

General Education: IN1
Typically Offered: Spring Semester

BMKR 219, ADVANCED ARC WELDING 3 (5)
This course covers advanced theories and practices of groove, pipe, resistance and other material joining principles. Welding equipment design, use, care, safety and maintenance are emphasized. Laboratory exercises that develop welding skills in a variety of welding positions will be practiced. Welding power source selection will also be studied. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 219 and BMKR 219.

General Education: IN1
Typically Offered: Spring Semester
BMKR 221, WELD QUALITY INSPECTION 3 (5)
This course introduces the student to the variety of weld test procedures used in the welding industries, and how to determine weld strength and selection of proper weld materials. Test procedures such as visual weld inspection, non destructive testing, and radiographic testing will be covered. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 221 and BMKR 221.

General Education: IN1
Typically Offered: Fall Semester

Business Administration (BADM)

BADM 153, RECRUITMENT SELECTION TRAINING AND DEVELOPMENT 3 (3)
This course covers recruitment techniques, interviewing strategies and analysis, training methods and evaluation, and approaches to employee development.

General Education: IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

BADM 154, COMPENSATION AND BENEFITS 3 (3)
A study of techniques for determining and implementing compensation systems. Benefits are also discussed.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

BADM 155, INTRODUCTION TO BUSINESS ADMINISTRATION 3 (3)
An introduction to the nature of the business environment with an exploration of the various business functions.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

BADM 161, BUSINESS LAW I 3 (3)
Introduction to major points of business law. Topics include legal environment of business, torts and criminal law, contracts, sales and lease contracts and negotiable instruments, warranties and product liability.

General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Summer and Fall Semesters

BADM 162, BUSINESS LAW II 3 (3)
A continuation of Business Law I. Topics include dispute resolution, contract issues, sale and lease, legal cyber issues, negotiable instruments, labor-management relations, international law, and labor-management relations.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: BADM 161
Typically Offered: Spring Semester

BADM 164, LABOR LAW 3 (3)
A practical examination of labor laws.

General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

BADM 165, LEGAL ENVIRONMENT OF BUSINESS 3 (3)
The nature, structure and significance of the legal and regulatory areas that govern business. (TAG)

General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

BADM 171, INTRODUCTION TO E-COMMERCE 3 (3)
An introduction to electronic commerce (EC), which is a manner in which transactions occur over networks, primarily the Internet. Topics include merchandising and logistics of E-commerce, information and services, electronically, with attention given to the economic, legal, and political environments.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

BADM 199, INTRODUCTION TO THE WORLD OF WORK 1 (1)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.

Course Entry Requirement(s): A student must have completed a minimum 12 semester credit course at LCCC (courses transferred are not counted); have earned a minimum 2.0 overall GPA; OR have division approval. (Maximum three '1' credit courses allowed)

Typically Offered: Summer, Fall and Spring Semesters

BADM 211, BUSINESS COMMUNICATIONS 3 (4)
Development of written, oral, and implied communication skills to produce effective business messages including letters, memoranda, reports, resumes, and oral presentations. Use of word processing software will promote the review and revision of documents and revision of document drafts with efficiency. Special emphasis on developing proficiency in editing and proofreading all aspects of accuracy and presentation. Laboratory required. (IN2, IN4, IN5)

General Education: IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: CISS 121 or division approval
Typically Offered: Summer, Fall and Spring Semesters

BADM 220, PRINCIPLES OF SUPPLY CHAIN MANAGEMENT 3 (3)
This course provides a comprehensive overview of the integration of activities that procure materials, transform them into intermediate goods and final products, and deliver them to external customers. Supply chain management consists of firms collaborating to leverage strategic positioning and to improve operating efficiency. A supply chain strategy is a channel arrangement based on acknowledged dependency and collaboration. Supply chain operations require managerial processes that span functional areas within individual firms and link trading partners and customers across organizational and international boundaries.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: BADM 251
Typically Offered: Spring Semester

BADM 251, PRINCIPLES OF MANAGEMENT 3 (3)
Introduction to various concepts, principles and methods in general management of an organization. Emphasis on the functions and skill requirements of effective management in a dynamic environment. (TAG)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

BADM 255, HUMAN RESOURCES MANAGEMENT 3 (3)
This course will examine a variety of topics that relate to the management of an organization's human resources.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: None
Typically Offered: Summer, Fall and Spring Semesters
**BADM 264, LABOR-MANAGEMENT RELATIONS 3 (3)**
This course provides an overview of issues and concepts in United States and international labor-management relations. The issues and concepts include a history of labor relations, labor and management strategies, bargaining, strikes, dispute resolution, globalization and contract administration.

- **General Education:** IN1, IN2, IN3, IN4
- **Course Entry Requirement(s):** None
- **Typically Offered:** Summer, Fall and Spring Semesters

**BADM 281G, INTERNATIONAL BUSINESS 3 (3)**
This course provides an overview of issues and concepts in international business. The issues and concepts include a history of globalization, international economic theories, socio-cultural issues, political and environmental forces, legal issues, international marketing, international human resource management, international financial management, and global operations management.

- **General Education:** IN1, IN2, IN3, IN4
- **Course Entry Requirement(s):** Prerequisite: BADM 155 or BADM 251 or division approval
- **Typically Offered:** Summer and Fall Semesters

**BADM 287, WORK-BASED LEARNING I - BADM 1-3 (1)**
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

- **General Education:** IN1, IN2, IN3, IN4
- **Course Entry Requirement(s):** A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
- **Typically Offered:** Offer as required

**BADM 288, WORK-BASED LEARNING II - BADM 1-3 (1)**
Building on experiences from Work-Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

- **General Education:** IN1, IN2, IN3, IN4
- **Course Entry Requirement(s):** Prerequisite: BADM 287
- **Typically Offered:** Offer as required

**BADM 289, WORK-BASED LEARNING III - BADM 1-3 (1)**
Building on experiences from Work-Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

- **General Education:** IN1, IN2, IN3, IN4
- **Course Entry Requirement(s):** Prerequisite: BADM 288
- **Typically Offered:** Offer as required

**BADM 299, INDIVIDUALIZED STUDIES IN BUSINESS ADMINISTRATION 1-2 (1)**
An in-depth study of areas in general business through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

- **Course Entry Requirement(s):** Prerequisite: Second-year standing and division approval
- **Typically Offered:** Offer as required

**Chemistry (CHMY)**

**CHMY 155G, CHEMISTRY AND SOCIETY 3 (3)**
Course designed for non-science and non-Health and Wellness students. An introduction to chemistry presented in the context of current world problems (i.e. ozone depletion, acid rain, and global warming) and commercial products (foods, drugs, plastics). Natural Science Core Course. (OTM)

- **General Education:** C3, IN1
- **Course Entry Requirement(s):** Course placement policy: Satisfactory placement assessment into college level mathematics or previous or concurrent enrollment in a co-requisite mathematics course.
- **Typically Offered:** Summer, Fall and Spring Semesters

**CHMY 161, GENERAL, ORGANIC AND BIOCHEMISTRY I 4 (6)**
Designed to give the Health and Wellness student an understanding of and appreciation for general chemistry. Includes atomic and molecular structure, intermolecular and intramolecular forces, properties of matter, states of matter, solutions, principles of reactions (including acid-base, redox), and nuclear chemistry. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

- **General Education:** C3, IN1
- **Course Entry Requirement(s):** Course placement policy: Satisfactory placement assessment into college level mathematics or previous or concurrent enrollment in a co-requisite mathematics course.
- **Typically Offered:** Summer, Fall and Spring Semesters

**CHMY 162, GENERAL, ORGANIC AND BIOCHEMISTRY II 4 (6)**
Continuation of CHMY 161. Emphasis is on organic and biochemistry. Topics include nomenclature; structure classification and typical reactions of organic compounds; and properties, synthesis, and metabolism of carbohydrates, lipids, nucleic acids, and proteins. Role of enzymes, hormones, vitamins, and drugs is also discussed. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

- **General Education:** C3, IN1
- **Course Entry Requirement(s):** Prerequisite: CHMY 161 or division approval
- **Typically Offered:** Summer, Fall and Spring Semesters

**CHMY 171, GENERAL, CHEMISTRY I 5 (7)**
Course recommended for Science majors as an introduction to the principles of chemistry. Emphasis is on atomic, molecular, and electronic structures, gas laws, stoichiometry, chemical bonding, solutions, and equilibrium. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)

- **General Education:** C3, IN1
- **Course Entry Requirement(s):** Prerequisite: CHMY 161 or division approval
- **Typically Offered:** Summer, Fall and Spring Semesters

**CHMY 172, GENERAL, CHEMISTRY II 5 (7)**
Course recommended for Science majors as an introduction to the principles of chemistry. Emphasis is on atomic, molecular, and electronic structures, gas laws, stoichiometry, chemical bonding, solutions, and equilibrium. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)

- **Typically Offered:** Summer, Fall and Spring Semesters
CHMY 172, GENERAL CHEMISTRY II 5 (7)
Continuation of CHMY 171. Emphasis is on acids and bases, thermodynamics, electrochemistry, coordination compounds, nuclear chemistry, descriptive chemistry, and reaction kinetic. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: CHMY 171
Typically Offered: Summer, Fall and Spring Semesters

CHMY 265, QUANTITATIVE ANALYSIS 5 (9)
Theory and applications of gravimetric, volumetric, and spectroscopic methods of analysis along with common separation techniques. Laboratory required. (A special fee will be assessed.) Natural Science Core Course.
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: CHMY 172
Typically Offered: Fall Semester

CHMY 271, ORGANIC CHEMISTRY I 5 (7)
Course designed for science majors that focuses on the fundamentals of hydrocarbon and functional group chemistry with emphasis on structure, properties, preparation, stereochemistry, reactions (mechanism and synthesis), and spectroscopy. The course includes theoretical discussion of lab techniques. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: CHMY 172
Typically Offered: Fall Semester

CHMY 272, ORGANIC CHEMISTRY II 5 (7)
Continuation of Organic Chemistry I. Course designed for science majors that focuses on structure, properties, and reactions of aromatic and polyfunctional compounds. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: CHMY 271
Typically Offered: Spring Semester

CHMY 273, ANALYTICAL AND QUANTITATIVE CHEMISTRY 5 (6)
The course covers theory and application of volumetric, gravimetric, and spectroscopic methods of analysis along with chromatographic separation.
General Education: C3, IN4
Course Entry Requirement(s): Prerequisite: MTHM 168 AND CHMY 172
Typically Offered: Fall Semester

CHMY 274G, ENVIRONMENTAL CHEMISTRY 3 (3)
The course covers chemical theory on the carbon cycle (organic chemistry of fossil fuels), the atmosphere (oxygen chemistry, ozone, and air pollution), the hydrosphere (water quality and health hazards), and the biosphere (nitrogen cycle and environmental toxicity including pesticides and insecticides).
General Education: C3, IN1, IN2, IN3, IN5
Typically Offered: Spring Semester

CHMY 275, BIOCHEMISTRY I 3 (3)
This course is the first semester of a two-semester sequence; course focuses on the principles of structure and function of important biomolecules: proteins, nucleic acids, lipids and carbohydrates, and general metabolic pathways. This course is designed for science majors. Prerequisite: MTHM 171 and CHMY 272. Natural Science Core Course
General Education: C3, IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: MTHM 171 and CHMY 272

CHMY 276, BIOCHEMISTRY II 3 (3)
This course is the second of a two-semester sequence; course continues the study of metabolism begun in CHMY 275; including lipids, carbohydrates, nucleic acids and nucleotides metabolisms. Additionally, it examines the transmission and expression of the genetic material in bacterial and euakaryotic cells. This course is designed for science majors. Prerequisite: CHMY 275. Natural Science Core Course
General Education: C3, IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CHMY 275

CHMY 286, INTERNSHIP IN ENVIRONMENTAL CHEMISTRY 3 (15)
The overall goal of this class is to further develop and refine the students’ laboratory and analytical skills within the restrictions of a real-world environmental laboratory setting. This course will provide students with unique opportunities to gain hands-on experience with employers. Throughout the class students will work in specific duties assigned and in positions developed around the needs of the laboratory. Students will gain valuable experience in sample collection, sample analysis, data analysis and reporting.
Course Entry Requirement(s): Prerequisite: CHMY 274 and second year standing and/or division approval.
Typically Offered: Offer as required

CHMY 287, WORK-BASED LEARNING I - CHMY 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

CHMY 288, WORK-BASED LEARNING II - CHMY 1-3 (1)
Building on experiences from Work-Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CHMY 287
Typically Offered: Offer as required

CHMY 289, WORK-BASED LEARNING III - CHMY 1-3 (1)
Building on experiences from Work-Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CHMY 288
Typically Offered: Offer as required
CHMY 299, INDIVIDUALIZED STUDIES IN CHEMISTRY 1-2 (1)
An in-depth study of areas in Chemistry presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Chinese (CHNS)

CHNS 151G, ELEMENTARY CHINESE I 4 (5)
This course provides the fundamental elements of effective communication in Chinese. Language skills are developed through cyclical practice in listening, speaking, reading and writing. Students will learn the Chinese phonological system, the basic conversational topics, vocabulary, and grammar. Communicative conventions and cultural background will provide a basis for cultural understanding.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Fall Semester

CHNS 152G, ELEMENTARY CHINESE II 4 (5)
This course is a continuation of Elementary Chinese I. It is designed to develop the ability to comprehend and communicate in a daily life setting and special social occasions. Cultural background is introduced along with the lesson content. More intensified reading and writing Chinese Pinyin system will be continued. Reading and writing simplified Chinese will be introduced as well. Basic grammar will be incorporated within the reading and writing exercises.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): CHNS 151G
Typically Offered: Spring Semester

Clinical Laboratory Science Technology (CLSC)

CLSC 111, INTRODUCTION TO CLINICAL LABORATORY SCIENCE TECHNOLOGY 2 (2)
Introduction of the student to the profession of laboratory medicine. This includes: organizational structure of hospitals and laboratories; medical ethics; related medical terminology; quality assurance; laboratory safety; laboratory calculations; venous and micro skin puncture blood collection techniques; basic laboratory equipment, and knowledge of routine laboratory tests by department. (TAG, CTAG)
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): High school algebra or equivalent and acceptance into the Clinical Laboratory Science Technology program; Corequisite: CLSC 131, CLSC 132 and CLSC 133
Typically Offered: Fall Semester

CLSC 131, INTRODUCTION TO HEMATOLOGY 2 (2)
Introduction to venous and micro blood collection techniques. Introduction to basic hematology theory and laboratory procedures. College competency required in the performance of venous and micro blood collection, normal WBC differentials, Erythrocyte Sedimentation Rates, platelet counts, and reticulocyte counts. Prerequisite: High school algebra or equivalent. (A special fee will be assessed.) (TAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: High school algebra or equivalent; Corequisite: CLSC 111, CLSC 133
Typically Offered: Fall Semester

CLSC 132, BODY FLUIDS AND URINALYSIS 2 (2)
Body fluid cell counts and chemical analysis, and basic urinalysis theory and procedures. College competency required in the performance of routine urinalysis, CSF cell counts. (A special fee will be assessed.) (TAG)
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: CLSC 131; Corequisite: CLSC 111, CLSC 133
Typically Offered: Fall Semester

CLSC 133, HEMATOLOGY I/URINALYSIS CLINICAL PRACTICUM 3 (9)
Clinical practicum in Hematology and Urinalysis at an affiliated clinical agency. Clinical competency required in the performance of venous and micro blood collection, routine urinalysis, CSF cell counts, normal WBC differentials, Erythrocyte Sedimentation Rates, platelet counts, and reticulocyte counts. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: High school algebra or equivalent; Corequisite: CLSC 111, CLSC 131, CLSC 132
Typically Offered: Fall Semester

CLSC 134, ADVANCED HEMATOLOGY AND HEMOSTASIS 2 (3.5)
Hematologic and cytochemical findings in anemias, leukemias and selected diseases; instrumentation; calculations; abnormal histogram and scattergram interpretation; basic theory in hemostasis and coagulation test procedures. College laboratory required with competency in hematology and coagulation procedures. (A special fee will be assessed.) (TAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CLSC 135; Corequisite: CLSC 136
Typically Offered: Spring Semester

CLSC 135, IMMUNOHEMATOLOGY CONCEPTS & PROCEDURES 2 (3.5)
Humoral immune response; basic blood groups and types; direct and indirect antiglobulin tests; crossmatching; donor testing and selection; hemolytic disease of the newborn; Rh immune globulin candidacy testing; advanced coagulation tests; quality control. College laboratory required with competency in immunohematology procedures. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CLSC 132 and CLSC 133; Corequisite: CLSC 136
Typically Offered: Spring Semester

CLSC 136, HEMATOLOGY II/IMMUNOHEMATOLOGY CLINICAL PRACTICUM 3 (9)
Clinical practicum Advanced Hematology methods and instrumentation, abnormal WBC differentials, and Immunohematology methods at an affiliated clinical agency. Clinical competency hematology, coagulation, and immunohematology methods required. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CLSC 132 and CLSC 133
Typically Offered: Spring Semester
CLSC 213, CLINICAL MICROBIOLOGY, IMMUNOLOGY AND SEROLOGY 9 (22)
Review of clinically popular specimen collection and plate reading techniques in medical microbiology; medias used for isolation of microorganisms; study of key biochemical tests identifying commonly isolated pathogenic bacteria to genus/species; antibiotic sensitivity testing; etiologic agents of common bacterial/viral disorders; epidemiology, and diagnosis of clinically important pathogenic fungi and parasites; common instrumentation used in clinical microbiology laboratories; study of principles and procedures for serological diagnosis of pregnancy, infections and immunologic diseases. College/clinical laboratory required with competency in isolation techniques, gram staining, plate reading, antimicrobial sensitivity testing, microorganism identification, and serology. (A special fee will be assessed.)
General Education: IN1, IN4, IN5
Course Entry Requirement(s): Prerequisite: CLSC 134 and CLSC 136
Typically Offered: Fall Semester

CLSC 221, CLINICAL CHEMISTRY 10 (23)
Chemistry for Clinical Laboratory Science students will include carbohydrates, nonprotein nitrogen metabolism, water and electrolyte balance, trace elements, arterial blood gases, liver function tests, protein metabolism, enzymeology, renal function tests, lipid metabolism, abnormal hemoglobins, endocrinology, therapeutic drug monitoring and toxicology. Instrumentation and correlation of laboratory data to human disease. Clinical and college laboratory required with competency in accurate/precise measurement of organic and inorganic analyses in body fluids. (A special fee will be assessed.)
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: CLSC 213; Corequisite: CHMY 162
Typically Offered: Spring Semester

Communication (CMMC)

CMMC 151, ORAL COMMUNICATION 3 (3)
Oral Communication is designed to provide students with the fundamental knowledge and skills to become better overall communicators. Students will gain a foundation in interpersonal and small group communication, as well as solid grounding in public speaking. Students are required to deliver four speeches throughout the semester: a researched informative speech, a researched persuasive speech, a researched group presentation, and an impromptu speech. (OTM, TAG)
General Education: C1, IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CMMC 152, COMMUNICATION THEORY 3 (3)
This course is designed to provide students with grounding in the key social and rhetorical theories in communication. It will explore how communication theories are developed and applied in a variety of contexts, including interpersonal communication, persuasion, group communication, mass communication, and intercultural/gender communication. Emphasis will be placed on the practical application of theory to real life situations. (TAG)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CMMC 163, ORAL INTERPRETATION 3 (3)
In Oral Interpretation, students study literature through performance. Students will gain experience in the performance and analysis of poetry, prose fiction, drama and other literary forms as well as means to enhance comprehension and appreciation of literature.
General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Not offered this year

CMMC 165, INTERPERSONAL COMMUNICATION 3 (3)
This course provides an introduction to interpersonal communication. It is designed to provide students with the knowledge and skills needed to improve person-to-person communication. Students will gain a foundation in interpersonal theory, as well as practical strategies of improving every day communication. The course will include such topics as perception, listening, self-concept, language and communication, culture and communication, nonverbal communication, self-disclosure, expressing emotions, communication climate, development of friendships and romantic relationships, and conflict resolution. Emphasis will be placed on the application of communication theory to real-life situations. (TAG)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CMMC 169, SMALL GROUP COMMUNICATION 3 (3)
This course is designed to provide students with the fundamental knowledge and skills to become more effective participants in groups. Throughout the course, emphasis will be placed on the application of communication theory to actual group experience, with focus on overcoming obstacles to effective group dynamics. The course will include such topics as group roles, dealing with conflict in groups, problem-solving and decision-making, creating a constructive group climate, and leadership. (TAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Not offered this year

CMMC 175, PERSUASION 3 (3)
Persuasion is a course designed to help students better understand the persuasive process and to become more effective consumers of persuasive messages. The course will provide theoretical knowledge about the nature and function of persuasion in our society as well as the opportunity to apply that knowledge in a variety of contexts. The class will examine persuasive influence in advertising, politics, mass media, and interpersonal relationships with a particular emphasis on the application of persuasive strategies to real life situations.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

CMMC 177G, INTERCULTURAL COMMUNICATION 3 (3)
This course is designed to provide students with the knowledge and skills to become more proficient intercultural communicators. Students will come to understand their own culture and communication more completely, become more knowledgeable about communication in differing cultures and learn to deal with the barriers that sometimes make effective intercultural communication difficult. The course offers a combination of communication theory and hands-on application for improvement.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
CMMC 199, INTRODUCTION TO THE WORLD OF WORK - CMMC 1 (1)
This course provides an internship-level supervised work experience with an approval employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.

Course Entry Requirement(s): A student must have completed a minimum of 12 semester credit courses at LCCC (courses transferred are not counted), have earned minimum 2.0 overall GPA; OR have divisional approval. Maximum three ‘1’ credit courses allowed.

Typically Offered: Offer as required

CMMC 271, INTRODUCTION TO LANGUAGE AND LINGUISTICS 3 (3)
This course provides a survey of the properties of human languages and their systematic study in the field of linguistics. We will examine language as a structured system of form and meaning and how language interacts with various aspects of society. This course provides the groundwork for future studies of language and communication in a broad range of disciplines: modern languages, communication, education, artificial intelligence, health, speech therapy, business, philosophy, sociology, anthropology and many other disciplines. No prior course work or exposure to linguistics is necessary. We will begin with the basic assumptions that are shared by those who study language from a variety of perspectives.

General Education: C5, IN1, IN2, IN3, IN4, IN5

Typically Offered: Fall and Spring Semesters

CMMC 287, WORK-BASED LEARNING I - CMMC 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4

Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Offer as required

CMMC 299, INDIVIDUAL STUDIES IN COMMUNICATION 1-2 (1)
An in-depth study of areas of communication presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Divisional approval

Typically Offered: Offer as required

Computer Games and Simulation Design (CGSD)

CGSD 120, INTRODUCTION TO COMPUTER GAMES & SIMULATIONS 3 (4)
This is a basic course for students interested in designing, programming and developing computer games and simulations. Topics will include basic game/simulation design, programming and development, as well as the role of the game/simulation designer, programmer and developer. Students will be introduced to programming using a game engine. The students will use provided or leverage their own created assets and create a small introductory game or games using existing game engine software. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN4

Course Entry Requirement(s): None

Typically Offered: Fall and Spring Semesters

CGSD 121, 2D GAME PROGRAMMING 3 (4)
This is a basic course for students interested in designing, programming and developing computer 2D games using a game engine. This course will build on CGSD 120 adding program scripting and programming concepts, as well as the roles of the game/simulation designer, programmer and developer. The students will use provided or leverage their own created assets and create small introductory games using Torque, a commercial game engine. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2

Course Entry Requirement(s): Prerequisite: CGSD 120 and CMPR 166

Typically Offered: Spring Semester

CGSD 125, FLASH FOR GAMES AND SIMULATIONS 3 (4)
A course of Flash with ActionScript 3.0 for game and simulation programming that includes: creating visual objects, using events to accept user input, animating the interactions between the visual object based on the user interaction and the program script, developing and debugging programs, accessing external data and publishing the game/simulation. Examples are used throughout the course. Laboratory required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): Prerequisite: CMPR 166 and MTHM 171 or division approval.

Typically Offered: Spring Semester

CGSD 130, GAME APPLICATIONS FOR EMERGENT PLATFORMS 3 (4)
This is a course for programming games and simulations on Android and iOS devices. Students in the course will learn how to use visual objects for the above mentioned mobile platforms. In this course, visual objects will be made to move according to different gravity or elasticity of game or simulation environment (bounce, rotations, translations, acceleration). The sensors of the mobile device (i.e. accelerometer and magnetometer) will constitute an input for some of these visual object movements. The course assumes that students know general programming concepts learned from the pre-requisites. Students will spend time utilizing both PC/Android and Mac/iOS devices. An Android tablet, an Android smartphone, an iPad2 and iPhone will be available for testing during class. The mobile devices are not required from the students in order to take the course.

General Education: IN1, IN2

Course Entry Requirement(s): Prerequisite: CMPR 166; Corequisite: MTHM 171

Typically Offered: Spring Semester
CGSD 221, 3D GAME PROGRAMMING 3 (4)
This is a course for students interested in designing, programming and developing computer 3D games using a game engine. This course will build on CGSD 121 adding game engine development and graphics and gaming concepts. The students will use provided or leverage their own created assets and create small introductory games using a commercial game engine. Laboratory required. (A special fee will be assessed.)

Typically Offered: Fall Semester

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CGSD 121 and CGSD 272 and previous or concurrent enrollment in CMPR 168 or division approval

CGSD 222, 3D GAME LEVEL DESIGN 3 (5)
This course covers computer game level design. Students learn the techniques used in creating level designs for games including creation and optimization of the terrain map, structure design, lighting, triggers of game code, texturing and shadowing. Laboratory required. (A special fee will be assessed.)

Typically Offered: Spring Semester

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CGSD 121 or division approval

CGSD 223, SERIOUS GAMES AND SIMULATIONS 3 (4)
This is a basic course for students interested in designing, programming and developing serious games and simulations. Topics will include simulation design, basic pedagogy of serious games, basic mathematical modeling, and an introduction to the creation and analysis of industrial simulations. Students will develop serious games and training simulations using a basic Game Engine, and develop industrial simulations using an industrial simulation package. Laboratory required. (A special fee will be assessed.)

Typically Offered: Spring Semester

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: CGSD 121 or division approval

CGSD 225, ADVANCED GAME PROGRAMMING 3 (5)
This is an advanced course for students interested in programming and developing computer games. Topics presented in this course prepare students to modify a game engine, enhance a program, and add components to a commercial game engine with emphasis on sound engineering principles and methods. Learning experiences may include extending a game engine design to: enhance physics functions; simulate a networked manufacturing process; simulate electronic circuits; simulate human-machine interface engineering; simulate realistic cityscape; simulate a crime scene and other topics as appropriate. Laboratory required. (A special fee will be assessed.)

Typically Offered: Spring Semester

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CGSD 221 or CMNW 221 or division approval

CGSD 271, DIGITAL IMAGING 3 (6)
An introduction to the use of raster and vector-based digital tools in the acquisition, manipulation, and production of image-based visual art for traditional and new media applications. Students will gain hands-on experience with industry-standard hardware and software tools for the production of both screen-based (internet, mobile, and gaming) as well as print-based (design, fine arts) imaging contexts involving creative expression. Laboratory required. (A special fee will be assessed.)

Typically Offered: Spring Semester

General Education: IN1, IN2
Course Entry Requirement(s): None

CGSD 272, DIGITAL ILLUSTRATION 3 (6)
A focus on communication ideas through visual expression using vector-based software applications. Course emphasis is on concept art development for narrative and conceptual themes; including animation, comic books, gaming, children’s books and product design. Students will be expected to engage in the exploration of technique, creative process and the development of personal styles while meeting strict deadlines. Laboratory required. (A special fee will be assessed.)

Typically Offered: Spring Semester

General Education: IN1, IN2
Course Entry Requirement(s): None

Computer Information System (CISS)

CISS 115, INTERNET RESEARCH AND TOOLS 1 (1.5)
The Internet is a global information infrastructure that offers many services. This course will review the characteristics and trends that will continue to impact these technologies in the areas of collaboration, creativity, communication, research, applications, privacy, security, etc. Laboratory required. (A special fee will be assessed.)

Typically Offered: Spring Semester

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): None

CISS 121, MICROCOMPUTER APPLICATIONS I 3 (4)
Introduction to microcomputer applications. Survey of application packages including Windows, word processing, spreadsheets, Internet, presentation and graphics. Includes hardware concepts and basic computer terminology and email. Guidelines for selecting and evaluating hardware and software. Laboratory required. (A special fee will be assessed.)

Typically Offered: Summer, Fall and Spring Semesters

General Education: IN2, IN4, IN5
Course Entry Requirement(s): None, None

CISS 122, MICROCOMPUTER APPLICATIONS II 3 (4)
Basic concepts of personal finance software and presentation software. Procedures for installing and upgrading software, virus detection and removal software and modem software. Additional topics on customizing the operating system environment, configuring computer for an ISP, and troubleshooting software conflicts. Laboratory required. (A special fee will be assessed.)

Typically Offered: Summer, Fall and Spring Semesters

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 121

Lorain County Community College
CISS 125, OPERATING SYSTEM INTERFACES 3 (4)
Theory of single user, multitasking, and multi-user operating systems. The user interface will be examined as well as the operating system commands, command syntax, parameters, and operating systems troubleshooting. Topics on OS layering, hardware, disk storage, file management utilities, directory management utilities, backup, recovery, and editors. UNIX and Windows will be installed and used in the labs. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Concurrent: CISS 121 or division approval
**Typically Offered:** Summer, Fall and Spring Semesters

CISS 143, DATABASE DESIGN AND IMPLEMENTATION 3 (4)
Relational database theory, database design using microcomputer software, use of command language and application generator, database administration. Laboratory required. (A special fee will be assessed.)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: CISS 125
**Typically Offered:** Fall and Spring Semesters

CISS 145, LOCAL AREA NETWORKS 4 (5)
Theory, installation, and operating principles behind local area networks. Topics on topologies, hardware configuration for topologies, network operating systems, server administration, media and software installation will be covered. Students will install and administer a local area network. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: CISS 125
**Typically Offered:** Fall and Spring Semesters

CISS 155, FUNDAMENTALS OF NETWORK SECURITY 3 (4)
CCNA Security equips students with the knowledge and skills needed to prepare for entry-level security specialist careers. Students will learn about IT security principles, risk assessment and basic network related attack methodologies. Specific skills to mitigate these risks will be developed in the use and configuration of firewalls, intrusion detection/prevention and virtual private networking technologies. Other topics include configuration standards and secure networking equipment and the use of protocols to authenticate and authorize users. Cisco Curriculum provided to LCCC under contract with Cisco Systems, Inc. as part of LCCC's Cisco Networking Academy.
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: CISS 162 or division approval
**Typically Offered:** Fall and Spring Semesters

CISS 160, INTRODUCTION TO PROGRAMMING IN C# 4 (5)
An introduction to the program development process and business programming using the C# (C-sharp) programming language. Topics include programming fundamentals, algorithm design, functions and procedures, arrays, sequential file processing, and database access. The object-oriented programming (OOP) model is emphasized throughout the course. Laboratory required. (A special fee will be assessed.)
**General Education:** IN1, IN4
**Course Entry Requirement(s):** Prerequisite: CISS 121 or division approval
**Typically Offered:** Fall and Spring Semesters

CISS 161, CISCO CCNA INTRODUCTION TO NETWORK 3 (4)
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: CISS 145 or CMNW 145 or division approval
**Typically Offered:** Summer, Fall and Spring Semesters

CISS 162, CISCO CCNA ROUTING & SWITCHING ESSENTIALS 3 (4)
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single- area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: CISS 161
**Typically Offered:** Summer, Fall and Spring Semesters

CISS 163, CISCO CCNA SCALING NETWORK 3 (4)
This course describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. Laboratory required. (A special fee will be assessed.) (CTAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: CISS 162
**Typically Offered:** Fall and Spring Semesters

CISS 164, CISCO CCNA CONNECTING NETWORKS 3 (4)
This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement IPsec and virtual private network (VPN) operations in a complex network. Laboratory required. (A special fee will be assessed.) (CTAG)
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: CISS 163
**Typically Offered:** Fall and Spring Semesters
CISS 165, CISCO CCNA V7 INTRODUCTION TO NETWORKING 3 (4)
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CISS 145 or CMNW 145 or division approval
Typically Offered: Summer, Fall and Spring Semesters

CISS 166, CISCO CCNA V7 LOCAL AREA NETWORK OPERATIONS 3 (4)
This course describe how switched Ethernet LANs are architected and configured. Students will learn how routing concepts are deployed in multi-layered switched networks, the configuration of VLANs, and implementation of wireless networking components. These concepts will be taught within the context of network security needs and troubleshooting techniques. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CISS 165
Typically Offered: Summer, Fall and Spring Semesters

CISS 167, CISCO CCNA V7 ROUTING AND WIDE AREA NETWORK OPERATIONS 3 (4)
This course describes the architecture, components, and operations of routers, network. Students learn how to configure routers for advanced functionality. Students will learn about routing protocols (OSPF), network address translation (NAT), virtual private networking (VPN) and the use of access lists (ACLs). These topics will be presented within the context of good security practice, applied troubleshooting and management techniques. Laboratory required. (A special fee will be assessed.) (CTAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 165
Typically Offered: Fall and Spring Semesters

CISS 212, SPREADSHEET APPLICATIONS 3 (4)
Use of spreadsheet software to create templates as well as menu-driven spreadsheets. Focus will be on using functions, databases, data tables, macros, charts, advanced formulas, pivot tables, pivot charts, and graphics. Additional topics include multiple worksheets, financial and what-if analyses, external data usage, and Visual Basic application integration. (A special fee will be assessed.)

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: CISS 121
Typically Offered: Summer, Fall and Spring Semesters

CISS 215, MULTIMEDIA FUNDAMENTALS 3 (4)
Theory and techniques for developing multimedia projects. Principles of effective design. Use of multimedia tools, including video, audio and animation to develop a variety of projects. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 121 or division approval
Typically Offered: Spring Semester

CISS 216, WEB DEVELOPMENT 3 (4)
Web site development with a focus on design strategies, electronic publishing, and graphic layout for the evolving business world. An overview of copyright, security, and domain name registration issues will also be covered. HTML/XHTML, JavaScript, CSS and/or emerging languages will be used. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 121 or division approval
Typically Offered: Summer, Fall and Spring Semesters

CISS 222, ADVANCED PROGRAMMING IN C# 3 (4)
Advanced object-oriented programming techniques in C# including using class instances, creating new classes, and using the .NET base class libraries. Topics include object-oriented analysis and design, inheritance, polymorphism, interfaces, namespaces, delegates, and events. The role of object-orientation in effective software development is emphasized. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: CISS 135 or CISS 160 or division approval
Typically Offered: Fall Semester

CISS 226, INTRODUCTION TO PROGRAMMING IN JAVA 3 (4)
An introduction to programming using the JAVA programming language. Topics include language fundamentals, GUI design tools including Swing and AWT, object class design and implementation, and applets. Both desktop and web applications are introduced using an object-oriented methodology. Laboratory required. (A special fee will be assessed.) (CTAG)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 135 or CISS 160
Typically Offered: Fall and Spring Semesters

CISS 227, INTRANET/INTERNET NETWORKING 4 (5)
Installation and support of Intranet/Internet servers. Site planning, performance and resource monitoring, security planning and troubleshooting. Students will install, configure, manage, and troubleshoot DNS servers, web servers, FTP servers, e-mail servers with both Windows and Linux operating systems. Additional topics on firewalls, DMZ, NAT, PAT, domain registration, Internet routing and VPN tunnels. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 135 or CISS 160
Typically Offered: Fall and Spring Semesters

CISS 232, SCRIPTING IN THE CLIENT SERVER ENVIRONMENT 3 (4)
Study the principles of Client/Server programming. Development of web application interfaces using current web standards such as XHTML, CSS, Client side JavaScript and server side programming. Development of Web applications that include Server Side processing using current languages such as PHP. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 216 and CISS 160 or CISS 135
Typically Offered: Spring Semester
CISS 236, VIRTUALIZATION AND CLOUD COMPUTING 3 (4)
This course will equip the student with the knowledge, skills and abilities to build and run a VMware vSphere environment. This course focuses on the installation and configuration of VMware ESXi hosts and vCenter server. This course also focuses on the management of ESXi hosts and virtual machines utilizing the vCenter server. Upon completion of this course, students will be able to deploy, configure and manage ESXi, vCenter and storage subsystems. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 145 or division approval
Typically Offered: Not offered this year

CISS 240, CERTIFICATION EXAM PREP 2 (3)
This lab course is designed as a self-study Certification exam preparation course for Computer Information systems students who have completed a sequence of courses and wish to prepare or review for Microsoft, Cisco, or other IT certification exams. Students will have access to lab equipment and software to help them review for one or more of the certifications.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 136 or CISS 225 or CISS 154
Typically Offered: Offer as required

CISS 243, WEB DATABASE INTEGRATION 4 (5)
Theory and strategies for development of integrated web database applications. Students will create SQL-based applications that view, search, and modify databases, using current Server Side languages/frameworks, such as ASP.NET. Strategies for building robust Internet applications, and database theory will also be covered. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 216 and CISS 160 or CISS 135
Typically Offered: Fall and Spring Semesters

CISS 245, NETWORK INTEGRATION AND MANAGEMENT 4 (5)
Theory and best practices for larger networks and the interconnection of local area networks and wide area networks. Topics on routers, network servers, virtualization of servers, virtualization of clients, network attached storage, remote storage, and video conferencing. Integration of both Windows and Linux servers and clients, biometric security devices, automated backups, and other emerging technologies. Topics on IP addressing, subnetting, WAN topologies, management issues, and disaster recovery. Laboratory required. (A special fee will be assessed.) (CTAG) (MTAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 145
Typically Offered: Fall and Spring Semesters

CISS 247, SYSTEMS DEVELOPMENT 3 (4)
Methodologies implemented by project teams. Includes initial investigation, feasibility study, systems analysis, systems design, and implementation planning. Laboratory required. (A special fee will be assessed). Prerequisite: Completion of 40 credit hours, which include 18 Computer Information Systems credit hours including CISS 143.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: Completion of 40 credit hours which include 18 computer information systems credit hours including CISS 143
Typically Offered: Spring Semester

CISS 251, CYBER DEFENSE METHODS 3 (4)
This course introduces practices and techniques for building an integrated secure business network with a focus on incident handling techniques. IT security concepts are reviewed along with the current risks faced by most business with regard to IT security. Specific tools, practices and technologies are employed to build up a layered defense for business networks. Hands on labs allow students to learn how to harden Windows and Linux servers, routers and switches. The benefits of deploying firewalls and prevention tools complete the defense lab approach. The labs involve the use of tools that can evaluate and exploit security holes so that students can gauge their level of success in building a secure network. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CISS 145 or CMNW 145
Typically Offered: Fall Semester

CISS 252, IT SECURITY CONCEPTS 4 (4)
This course represents an overview of IT Security topics as defined by the 8 domains of the CISSP (Certified Information Systems Security Professional). This course is designed to give students an overview of the technical, legal and operational information technology issues in any organization. The coverage of the full range of IT Security topics is ideal for the IT professional. While this course is not a CISSP review course, it can serve as a good foundation for anyone pursuing the CISSP certification.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

CISS 260, INTRODUCTION TO IPHONE/IPAD PROGRAMMING 4 (5)
This course will introduce the development of software applications for the Apple iPhone and iPad. Applications will be created using the Objective-C programming language and the Xcode development environment. Additional topics include application distribution through the Apple App Store as well as requirements and techniques for distribution through private computer networks. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CISS 160 or CISS 135
Typically Offered: Spring Semester

CISS 264, INTRODUCTION TO ANDROID PROGRAMMING 3 (4)
This course will introduce the development of software applications for mobile Android devices (phone and tablets). Applications will be developed using Java and the Android SDK, tested and deployed. Application development will adhere to object oriented programming techniques. Additional topics include addressing resource issues, user interface design, and access to Android System Components. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CISS 160 or division approval;
Corequisite: CISS 226 or division approval
Typically Offered: Spring Semester

CISS 266, ADVANCED ANDROID PROGRAMMING 4 (5)
Advanced design and development of software applications for mobile Android devices. Building of more complex applications that meet the needs of the user clientele. Additional topics on applications that take advantage of the rich features of mobile devices such as GPS location, motion sensation, and voice recognition.
General Education: IN1
Course Entry Requirement(s): Prerequisite: CISS 264
Typically Offered: Spring Semester
CISS 268, MOBILE WEB DEVELOPMENT 4 (5)
Design and development of web sites that are optimized for mobile devices. Course will cover both the technical and design aspects associated with mobile platforms. Attention will be given to developing web sites that work well both when browsed from a computer and a mobile device without excessive duplication of effort. Additional topics on the development of web applications and rich multimedia. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CISS 232
Typically Offered: Fall Semester

CISS 285, INFORMATION SYSTEMS PRACTICUM 2 (11)
Students are placed in MIS departments for the purpose of observing and performing various computing activities. Students will be assigned an on-the-job sponsor who will be responsible for directing and evaluating their activities.

Course Entry Requirement(s): Prerequisite: Completion of 40 credit hours which include 18 Computer Information System credits

CISS 287, WORK-BASED LEARNING I - CISS 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

CISS 288, WORK-BASED LEARNING II - CISS 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 287
Typically Offered: Offer as required

CISS 289, WORK-BASED LEARNING III - CISS 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CISS 288
Typically Offered: Offer as required

CISS 299, INDIVIDUALIZED STUDIES IN CISS 1-2 (1)
An in-depth study of areas in computer information systems presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. (A special fee will be assessed.)

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Computer Maintenance and Networking (CMNW)

CMNW 101, A+ CERTIFICATION PREPARATION I 4 (6)
This course is the first of a two-course sequence designed to cover topics required for the A+ Certification standard examination. Students will learn computer terminology, basic safety guidelines, system components and architectures, portable systems specifications, soft-ware setup, and other topics as required by the most current A+ standards. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CMNW 111, INTRODUCTION TO COMPUTER HARDWARE 2 (2)
An introductory course designed to acquaint the student with the following topics: computer terminology, basic hardware building blocks, computer organization, I/O devices, computer classifications, role of software, examples of representative hardware available in the marketplace, and career opportunities. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CMNW 115, BASIC MOBILE DIGITAL FORENSICS 3 (3)
This course provides the knowledge and skills necessary for entry level mobile device examiners to gain a basic understanding of mobile devices: Data storage; data interpretation and numbering systems; cellular networks functionality; evidence collection and verification; troubleshooting connectivity; understanding of the forensic process. This course may be repeated up to ten (10) times for credit, but can satisfy only three (3) credits for academic program requirement. (A special fee will be assessed.)

General Education: IN1, IN2
Typically Offered: Spring Semester

CMNW 120, CYBER-FOREN CYBER CRIME THE LAW 4 (6)
This course explores computer related crime in cyber space and covers digital forensics and data discovery methods, tools and techniques used by forensics professionals to discover, retrieve and document pertinent data. Ethical and criminal infractions in personal and work related situations are studied from a digital forensics perspective. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer and Fall Semesters
CMNW 121, DATA COLLECTION ANALYSIS AND FORENSIC TOOLS 4 (6)
This course is an introduction to the science of computer forensics. Topics include how data is stored; where forensics data is located; how to recover data using commercial and open source utilities and hardware devices to conduct digital forensics data investigations; and computer forensics investigation in a virtual environment. Students will gain hands-on experience in the laboratory. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CMNW 141, COMPUTER DIAGNOSTIC AND REPAIR 3 (5)
The topics presented in this course cover diagnostics, repair and upgrade of computers and other commonly used peripheral devices. This course provides hands-on experience with computer hardware, software setup and conflict resolution between devices and device drivers. Students will learn: computer architectures, processor specifications, memory types, memory installation, memory management, hard disk drive set-up, partitioning, installation of multiple types of drives, computer optimization techniques, input and output device evaluation and installation such as CD-ROM drives and tape drives, system resources such as interrupts, DMA channels and I/O port addresses. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CMNW 145, NETWORK INSTALLATION/DIAGNOSTICS 4 (6)
Topics presented in this course prepare students to plan, design, install, configure, and troubleshoot a variety of commonly used local area networks. Students will identify and analyze various local area networking topologies, transmission media (cable standards), network protocols, and internet working devices. Students will develop criteria for network components, hardware and software requirements, procurement, comparison and evaluation, and identify short and long term LAN requirements for various environments. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CMNW 149, DIGITAL FORENSICS REPORT ANALYTICS FOR DETECTIVES 3 (3)
This course covers topics, skills, and techniques required by law enforcement detectives, to effectively interface with digital forensics experts, to gain the ability to filter digital forensic reports, to discover evidence artifacts that are pertinent to the investigation. This course may be repeated up to ten (10) times for credit, but can satisfy only three (3) credits for academic program requirement. (A special fee will be assessed.)

General Education: IN1, IN2
Typically Offered: Fall and Spring Semesters

CMNW 201, A+ CERTIFICATION PREP II 4 (6)
This course is the second of a two-course sequence designed to cover topics required for the A+ Certification standard examination. Students will learn to compare, install, manage, troubleshoot and optimize current operating systems as required by the most current A+ Certification standards. Laboratory required. (A special fee will be assessed.) (CTAG, MTAG)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CMNW 101
Typically Offered: Summer, Fall and Spring Semesters

CMNW 215, CERTIFIED DIGITAL MOBILE FORENSICS ANALYST 3 (3)
This course covers advanced topics and hands-on experiments in mobile digital forensics. Topics include: Android and iOS operating systems; data storage methods and technologies; digital forensic extraction methods utilizing commercial software packages; locking mechanisms of Android and iOS devices; encryption issues; data verification and validation; multiple data filtering methods; rooting and jailbreaking mobile systems. This course may be repeated up to ten (10) times for credit, but can satisfy only three (3) credits for academic program requirement. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CMNW 115
Typically Offered: Fall and Spring Semesters

CMNW 221, PROGRAMMING IN C & C++ FOR ENGINEERING TECHNOLOGY APPLICATIONS 4 (6)
This course covers fundamental program structuring to provide optimized solutions for problems commonly found in engineering technologies. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: MTHM 121 or MTHM 150 or instructor approval
Typically Offered: Summer, Fall and Spring Semesters

CMNW 223, NETWORK FORENSICS AND INVESTIGATIVE TECHNIQUES 4 (6)
This course covers topics of network and server forensics. Topics include the fundamentals of networks and server digital forensics, techniques for collecting, reconstructing and analyzing network packets, spoofing, port scanning, worms and other network vulnerabilities; identification of forensic data locations on a network; deployment of open-source network tools to collect and analyze network traffic; and development of per-incident network forensic collection plans, including the appropriate collection tools and their location on the network; data preservation and analysis. The course covers advanced topics in forensics such as cryptography, automatic intrusion detection, pattern matching and statistical techniques, and vulnerability scanning. Students will utilize case studies to test different scientific and investigative approaches. Classroom concepts will be applied in a laboratory setting where students will employ basic standard operating procedures. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CMNW 120 or CMNW 121
Typically Offered: Fall and Spring Semesters

CMNW 181, INDUSTRY SPECIFIC DIRECTED STUDIES 4 (6)
This course is designed to explore students to practical industrial computing applications. Students will conduct industry-specific projects and explore the work environment in their chosen industry sector.

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Divisional approval
Typically Offered: Fall and Spring Semesters
CMNW 224, CELL PHONE AND MOBILE DEVICE FORENSICS 4 (6)
This course covers cell phone and mobile device seizure, isolation techniques, unlocking handhelds, physical and logical data acquisition and examination, forensic SIM clone structure and evidence location, recovering deleted data, legal considerations and court reporting. Emphasis will be placed on determining the location, and forensic extraction of information bearing data for the most widely used chat apps such as Viber, Whatsapp, Tango and others. The laboratory is based on multiple commercial and open-source digital forensic tools. Hands-on instruction covers the acquisition and analysis of current and emerging technologies to include GSM, CDMA and iDEN mobile phones to include Android, iOS and Windows platforms. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CMNW 121 or Instructor Approval

CMNW 230, DATA COMMUNICATIONS 5 (7)
The course content presents the basic principles and building blocks used in analog and digital electronics with emphasis on their application to communication systems. Topics covered include: Analog and digital electronic devices and applications, bandwidth considerations, the handshake process between computers and communication equipment, noise analysis, error detection and correction methods, communication protocols, delta and pulse modulation, digital signal encoding format, computer and network communication, frequency shift keying, fiber optic communication and wireless communications. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ELCT 121 or AETC 121
Typically Offered: Spring Semester

CMNW 241, ADVANCED COMPUTER AND NETWORK DIAGNOSTICS 5 (7)
This course covers advanced topics in computer diagnostics. It includes software and hardware set up and diagnostics techniques and processes, as well as proper optimization upgrading procedures, and conflict resolutions for computers running current operating systems. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CMNW 141 and CMNW 145
Typically Offered: Fall and Spring Semesters

CMNW 246, INDUSTRIAL COMPUTER APPLICATIONS CAPSTONE 5 (7)
This capstone course integrates learning from the core courses in the Industrial Computing Applications Specialist major with the courses from the rest of the academic experience. IT requires the applications of that learning to design optimal solutions and to solve sector-specific technical problems related to the field of study in Computer Engineering Technology. Students are required to develop technical proposals, design, implement, and present in verbal and written form, instructor approved projects, which serve as instruments of evaluation. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Concurrent: CMNW 220, Concurrent: CMNW 220
Typically Offered: Fall and Spring Semesters

CMNW 247, COMPUTER FORENSICS AND DATA RECOVERY CAPSTONE 4 (6)
Topics presented in this course prepare students to recover computer data as a result of computer damage or a security incident. Students will learn to use the tools required to recover data from computer systems that run both Windows and Linux operating systems. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CMNW 121
Typically Offered: Spring Semester

CMNW 287, WORK-BASED LEARNING I - CMNW 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

CMNW 288, WORK BASED LEARNING II - CMNW 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CMNW 287
Typically Offered: Offer as required

CMNW 289, WORK BASED LEARNING III - CMNW 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CMNW 288
Typically Offered: Offer as required

CMNW 299, INDIVIDUALIZED STUDIES IN COMPUTER MAINTENANCE AND NETWORKING 1-2 (1)
An in-depth study in areas of computer maintenance and networking presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required
Computer Programming (CMPR)

CMPR 166, INTRODUCTION TO COMPUTER SCIENCE 3 (3)
Introduction to computer science problem-solving, and algorithm development, using a high-level structured programming language. Designed for the student seeking an introductory course to computer programming. (A special fee will be assessed.) Prerequisite: Grade of C or better in MTHM 023 or satisfactory placement assessment score or divisional approval.

General Education: IN1
Course Entry Requirement(s): Course placement policy. Grade of C or higher in MTHM 081 or MTHM 095 or satisfactory placement assessment score in mathematics
Typically Offered: Fall and Spring Semesters

CMPR 168, OBJECT-ORIENTED PROGRAMMING 4 (5)
A course in object-oriented programming including classes, objects, function and operator overloading, inheritance and polymorphism, templates, exception handling, input/output and file handling techniques and program documentation. The course includes a review of procedural programming. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CMPR 166 or previous programming course and MTHM 171 or division approval
Typically Offered: Fall Semester

CMPR 268, DATA STRUCTURES 3 (3)
Algorithm development and advanced object-oriented programming design with primary focus on data abstraction. The emphasis is on the specification, design, implementation and use of the fundamental data types such as arrays, lists, stacks, queues, trees and graphs. The programming techniques include encapsulation, information hiding, generics, inheritance, and polymorphism. Sorting and searching algorithms and introduction to graph algorithms.

General Education: IN1
Course Entry Requirement(s): Prerequisite: CMPR 168 with a 'C' or better and MTHM 270
Typically Offered: Fall and Spring Semesters

CMPR 275, COMPUTER ARCHITECTURE 3 (3)
This course is intended primarily as a computer science course in computer architecture for students pursuing a four year degree. It focuses on performance and cost analysis, computer architecture, memory systems, input/output systems, interrupt, functional units, CPU, pipelining and memory system.

General Education: IN1
Course Entry Requirement(s): Prerequisite: CMPR 168 with a 'C' or better and MTHM 270 or division approval
Typically Offered: Fall and Spring Semesters

CMPR 299, INDIVID STUDIES IN CMPTR PROGRMNG 1-2 (1)
An in-depth study of areas in Computer Programming presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Computer-Aided Design (CADD)

CADD 111, INTRODUCTION TO COMPUTER AIDED DRAFTING 2 (4)
This course introduces the student to the fundamental concepts used in creating computer-generated drawings using AutoCAD software. Topics include construction, text insertion, editing techniques, display control, inquiry techniques, dimensioning and use of part libraries in the creation of two-dimensional drawings. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Concurrent: TECN 111
Typically Offered: Summer, Fall and Spring Semesters

CADD 212, INTRODUCTION TO CREO PARAMETRIC (PRO/ENGINEER) 3 (5)
This course is an introduction to 3D parametric modeling techniques and concepts using Creo Parametric (formerly Pro/Engineer). The student will create 3D solid models and assemblies using 2D sketches and constraints to construct and edit parametric features. Part models and assemblies will be used to create 2D detail and assembly drawings. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CADD 111
Typically Offered: Fall Semester

CADD 213, INTRODUCTION TO SOLIDWORKS 3 (5)
This course is an introduction to 3D parametric modeling techniques and concepts using SolidWorks. The student will create 3D solid models and assemblies from basic 2D sketches using parametric dimensioning and constraints. Part models and assemblies will be used to create 2D detail and assembly drawings. (A special fee will be assessed.) (TAG)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CADD 111
Typically Offered: Fall and Spring Semesters

CADD 214, INTRODUCTION TO INVENTOR 3 (5)
This course is an introduction to 3D parametric modeling techniques and concepts using Inventor. The student will create 3D solid models and assemblies from basic 2D sketches using parametric dimensioning and constraints. Part models and assemblies will be used to create 2D detail and assembly drawings. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CADD 111

CADD 215, ARCHITECTURAL DRAFTING USING CAD 3 (5)
Building on the concepts learned in Introduction to Computer Aided Drafting, this course introduces the principles of architectural design and the graphical presentation of single-family residential buildings. Lab assignments will emphasize document organization, conventional materials, details, mechanical, plumbing and electrical systems and the understanding of building code requirements through the development of site plans, floor plans, elevations, sections, and details for a single family building. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CADD 111 and CNST 121
Typically Offered: Fall Semester
CADD 216, INTRODUCTION TO 3D MODELING AND PRINTING 1 (1.67)
This course is an introduction to 3D modeling and printing techniques using 3D parametric CAD software and a 3D Printer. The student will print 3D plastic models from 3D parametric solid parts created from sketches and applied features. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CADD 220, RENDERING AND ANIMATION 3 (5)
This is an advanced course for students interested in computer rendering and animation. Students learn the techniques used in rendering and animation of CAD models for use in mechanical design, architectural presentation, game development and other types of presentation. Students develop 3D virtual scenes and create renderings and dynamic animations for virtual walk-throughs, fly-by, game development, or presentation graphics. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CADD 111

CADD 235, DETAILING AND DIMENSIONING 3 (5)
Building on the concepts learned in Introduction to Computer Aided Drafting, this course covers an introduction to 3D modeling, orthographic projection, isometric and oblique projections, sectional views, auxiliary views, dimensioning and tolerancing, and threads and fasteners as they relate to two dimensional detail and assembly drawings. Laboratory required. (A special fee will be assessed.)
(A) TAG, CTAG
General Education: IN1
Course Entry Requirement(s): Prerequisite: CADD 111
Typically Offered: Spring Semester

CADD 287, WORK-BASED LEARNING I - CADD 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

CADD 288, WORK-BASED LEARNING II - CADD 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CADD 287
Typically Offered: Offer as required

CADD 299, WORK-BASED LEARNING III - CADD 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CADD 288
Typically Offered: Offer as required

Computer-Aided Machining (CAMM)

CAMM 111, INTRO TO COMPUTER NUMERICAL CONTROL 2 (4)
This introductory course covers manual CNC programming techniques for 3-axis milling machines and 2-axis turning centers. Basics of job planning, tooling, tool path graphics and verification are included. Course focuses on Fanuc-compatible controllers using late model CNC equipment. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Concurrent: TECN 111 and TECN 131
Typically Offered: Fall and Spring Semesters

CAMM 215, ADVANCED CNC MILLING MACHINES 3 (6)
Covers advanced CNC programming techniques for mills or machining centers. Topics include set-up, operation, and maintenance of the machines as well as 4th-axis programming, parametric programming and introduction to Computer-Aided Machining (CAM) techniques for machining centers. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CAMM 111; Course placement policy. Grade of C or higher in MTHM 033 or satisfactory placement assessment score in mathematics
Typically Offered: Fall Semester

CAMM 225, ADVANCED CNC LATHES 3 (5)
This course covers advanced CNC programming techniques for lathes or turning centers. Topics include set-up, operation, and maintenance of the machines as well as parametric programming techniques and introductory Computer-Aided Machining (CAM) for turning centers. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CAMM 111; Course placement policy. Grade of C or higher in MTHM 033 or satisfactory placement assessment score in mathematics
Typically Offered: Spring Semester
CAMM 235, CAD-CAM GRAPHICS 3 (6)
Course develops skill in graphic toolpath generation for machining and turning. Students build wireframe, surface, and solid models using CAM software and develop associated toolpath. The course also covers CAD data translation, CNC communications, customization of post-processors and other related topics. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CAMM 111 and CADD 111
Typically Offered: Spring Semester

CAMM 287, WORK BASED LEARNING I - CAMM 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

CAMM 288, WORK BASED LEARNING II - CAMM 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CAMM 287
Typically Offered: Offer as required

CAMM 289, WORK BASED LEARNING III - CAMM 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CAMM 288
Typically Offered: Offer as required

Construction (CNST)

CNST 120, INTRODUCTION TO (HVAC) HEATING, VENTILATION AND AIR CONDITIONING 2 (5)
This course focuses on the skills and concepts needed to plan and install heating and cooling systems in residential structures. Sheet metal forming of ductwork and their installation will also be covered. (A special fee will be assessed)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CNST 121, CONSTRUCTION DOCUMENT READING 3 (3)
This course introduces the student to the skills, concepts, instruments and tools which will be needed in order to use and understand construction drawings. The material learned will allow the student to read plans and then apply the information when planning and estimating the cost for residential structures. (CTAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CNST 122, INTRODUCTION TO CARPENTRY 4 (9)
This course is an introduction to basic carpentry procedures covering the selection, use and care of power and hand tools. The student will gain practical experience and skills in layout, cutting and assembly of rafters and stairs. The student will also make floor systems, wall assemblies and practice cutting and fitting moldings, trim, doors and windows. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CNST 123, INTRODUCTION TO ELECTRICAL WIRING 2 (5)
This course introduces the student to skills, concepts, instruments, tools and the National Electrical Codes used when wiring so that it meets the requirements of electrical inspectors and power companies. The student will learn about wiring materials, devices, splices, outlets, switch boxes, service installation, and rough in and finish work. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CNST 124, INTRODUCTION TO PLUMBING 2 (5)
This course introduces the student to skills, concepts, instruments, tools and materials used in plumbing. The student will cover the following plumbing topics: codes, take-offs, soldering and PVC & ABS and will then get hands-on training installing showers, tubs, toilets, sinks and hot water tanks. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CNST 125, INTRODUCTION TO FINISH CARPENTRY 2 (5)
This course introduces the students to skills, concepts, instruments and tools used to finish carpentry. The student will learn about and get hands-on training installing drywall, wall and floor coverings, trim and molding, cabinets and bathroom and kitchen fixtures. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

CNST 126, INTRODUCTION TO MASONRY 2 (5)
This course introduces the student to skills, concepts, instruments, tools and bonding materials used in masonry. The student will learn about and get hands-on training in the areas of flatwork, cutting, chipping, and laying in position blocks and bricks. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester
CNST 127, GREEN BUILDING & LEED RATING SYSTEMS 4 (4)
This course offers a comprehensive exposure to understanding sustainable designed projects in today’s residential and commercial buildings. It provides the basic knowledge to define and measure ‘green buildings’ according to the LEED Green Building Rating System. This course will help students prepare for the LEED (Leadership in Energy and Environmental Design) Professional Accreditation Exams.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Not offered this year

CNST 201, SURVEYING 3 (5)
An introductory course for Construction majors into the care and use of field instruments used in land surveying. Students will take field measurements and learn to make the basic computations and adjustments necessary to post process field survey measurements. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: CNST 121 and MTHM 121, None
Typically Offered: Fall Semester

CNST 205, CONSTRUCTION ESTIMATING 3 (5)
This course is designed for construction majors and will provide the foundation for understanding the costs associated with construction projects. Class and lab exercises will include the use of spreadsheet software and utilize the fundamentals of the quality takeoff process in order to complete accurate estimates for all types of construction projects. Laboratory required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: TECN 111 and CNST 121
Typically Offered: Fall Semester

CNST 206, CONSTRUCTION ESTIMATING II 3 (5)
This course is designed for construction majors and examines putting costs to the project, finalizing the bid, incorporating the estimate into the schedule, buying out the project, bidding ethics and using computer spreadsheets including Excel to automate estimating functions. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: CNST 205
Typically Offered: Spring Semester

CNST 210, SAFETY IN CONSTRUCTION 2 (3)
The course is designed to provide training to construction workers with safety responsibilities. The course will be instructed by an OSHA recognized instructor and will emphasize hazard identification, avoidance, control and prevention. Successful participants will be awarded an OSHA 30 card for construction safety. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN5
Typically Offered: Fall and Spring Semesters

CNST 287, WORK BASED LEARNING I - CNST 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Offer as required

CNST 288, WORK-BASED LEARNING II - CNST 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CNST 287
Typically Offered: Offer as required

CNST 289, WORK-BASED LEARNING III - CNST 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CNST 288
Typically Offered: Offer as required

Criminal Justice (CRMJ)

CRMJ 110, INTRODUCTION TO CRIMINAL JUSTICE 3 (3)
This course examines the historical and contemporary components of the U.S. criminal justice system, its development objectives and problems. Emphasis is placed on the evolution and constant changes to the system both historically and culturally. Analysis of federal, state, local criminal justice systems and agencies will include various work groups and careers available to students. (TAG, CTAG)

General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CRMJ 111, INTRODUCTION TO CORRECTIONS 3 (3)
A comprehensive overview of the corrections system. Topics include the history and development of corrections; the role of corrections in the criminal justice system; elements of the correctional process; and examination of local, state and federal institutions; institutional structures and functions; and current and future issues in the field. (TAG, MTAG)

General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
CRMJ 112, INTRODUCTION TO CRIMINAL COURTS 3 (3)
The exploration of federal, state, and local court systems, their structure, function, organization, administration, and history. An examination of the steps involved in criminal cases; problems and issues in the system such as delays, plea bargaining, and sentencing; the relationship between the courts and related social agencies; and an introduction to how significant criminal court decisions are briefed. 
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CRMJ 117, CRIMINAL LAW 3 (3)
The history and development of criminal law and procedure in the United States is explored with emphasis on the police function in the administration of justice and judicial review/enforcement defining and limiting police practices. (CTAG)
General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CRMJ 119, LEGAL ISSUES IN CORRECTIONS 2 (2)
This course provides an overview of Constitutional, substantive and procedural laws that impact the management of convicted offenders and their rights. Various current legal topics and court decisions are explored. 
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: CRMJ 111
Typically Offered: Fall and Spring Semesters

CRMJ 121, CRIMINALISTICS 3 (4)
This course provides students an overview of criminalistics beginning with first-responder duties and ending with laboratory analysis and results. The focus will be on the application of the scientific method in the solving of crimes with particular emphasis on recording and processing the crime scene, fingerprints, trace evidence retrieval, blood and biological evidence, impression evidence including tire/shoe impressions, ballistics/firearms analysis, arson and explosives, sexual assaults, and burglary/robbery/motor vehicle and homicide investigations. Student will be required to complete and submit a crime scene investigation portfolio. (A special fee will be assessed.)
General Education: IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CRMJ 135, COMMUNITY RELATIONS IN CRIMINAL JUSTICE 2 (2)
A multidisciplinary approach to relations between individuals and/or the community and the various parts of the criminal justice system. Emphasis on understanding the problems of social control, communications, prejudice, discrimination, deviance, etc. and their impact on the total criminal justice system. (CTAG)
General Education: IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CRMJ 146, CRIMINAL JUSTICE INVESTIGATION 3 (3)
Fundamental principles and techniques applicable to all criminal justice investigations from crime and trial through probation and parole are discussed. Use of witnesses, principles, records, physical evidence, and interviewing are also covered. (CTAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CRMJ 147, PROBATION AND PAROLE 2 (2)
An examination of the philosophy, history, and practice in the probation and parole of juvenile and adult offenders in federal, state and local correctional systems including community corrections options. (IN3, IN4)
General Education: IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CRMJ 151, LAW ENFORCEMENT FIREARMS TRAINING 3 (4)
Included in the OPOTC Basic Academy Curriculum, this course will introduce the student to the historical perspective and current use of firearms in the law enforcement profession. Students will develop safe handling techniques and firearms safety, and examine the lawful use of weapons under current legal doctrine. Lab sessions provide thorough training developing precision pistol, shotgun and police combat techniques and skills. Open to Police academy students only. (CTAG)
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: Division approval/Police Academy students only

CRMJ 152, LAW ENFORCEMENT MOTOR VEHICLE OPERATION 3 (4)
Included in the OPOTC Basic Academy Curriculum, this course will develop accepted attitudes for safe driving methods and decision-making for collision avoidance while learning to simultaneously integrate the tasks of driving and law enforcement. Open to Police Academy Students only.
General Education: IN1, IN4, IN5
Course Entry Requirement(s): Prerequisite: Division approval/Police Academy students only

CRMJ 219, MENTAL HEALTH ISSUES IN CORRECTIONS 2 (2)
This course examines the high prevalence of mental health problems among prison and jail inmates and the current ideologies and polices followed to diagnose and treat inmates incarcerated in long-term and short-term correctional facilities. (IN1, IN4)
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: PSYH 151
Typically Offered: Fall and Spring Semesters

CRMJ 225, TRAFFIC ACCIDENT INVESTIGATION 3 (4)
This course examines the objectives and functions of conducting a traffic accident investigation including planning, locating and analyzing evidence, fact gathering, processing the accident scene, measuring, diagramming, and reporting. (A special fee will be assessed.) (CTAG)
General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

CRMJ 226, JUVENILE DELINQUENCY 3 (3)
This course examines the origins of American juvenile justice and the historical shifts that have occurred since the beginning including the nature, theoretical causes, prevention, treatment, and control of delinquency; and includes an overview of the Ohio juvenile justice systems, its laws, purpose, and operations.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: SOCY 151 or divisional approval
Typically Offered: Summer, Fall and Spring Semesters
CRMJ 231, INTRODUCTION TO POLICE OPERATIONS 3 (3)
An in-depth analysis of law enforcement in the United States, both
historical and current, including police operations, its relationship with
government and society, organizational structure, management, policing
styles, discretion, ethics and deviance, civil liability, and the future role of
policing. (TAG)
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CRMJ 232, POLICE SUPERVISION 3 (3)
Administration and supervision of criminal justice organizations
with emphasis given to law enforcement agencies. Management and
supervision problems are reviewed, analyzed, and discussed.
General Education: IN1, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CRMJ 285, CRIMINAL JUSTICE INTERNSHIP I 2 (3)
This course will provide the student an observational experience
in a criminal justice agency under the direction of experienced and
qualified personnel. Classroom theory will be compared to the roles
and responsibilities of the professional in the field as well as the day-to-day
operation of the agency. The student will be required to spend a minimum
of 120 clock hours at the agency spread over the semester. The student's
schedule and hours will be agreed upon by the agency and student prior
to the start of the internship. In addition, attendance at a two-hour weekly
seminar is required. Laboratory required. Prerequisite: 30 semester hours
completed or approval by faculty coordinator.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: 30 semester hours completed or approval by faculty coordinator and host agency
Typically Offered: Summer, Fall and Spring Semesters

CRMJ 286, CRIMINAL JUSTICE INTERNSHIP II 2 (3)
This course will provide the student an observational experience
in a criminal justice agency under the direction of experienced and
qualified personnel. Classroom theory will be compared to the roles
and responsibilities of the professional in the field as well as the day-
to-day operation of the agency. The student will be required to spend a minimum
of 120 clock hours at the agency spread over the semester. The student's schedule and hours will be agreed upon by the agency and student prior to the start of the internship. In addition, attendance at a two-hour seminar is required. Laboratory required.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CRMJ 285 and approval by faculty coordinator and host agency
Typically Offered: Fall and Spring Semesters

CRMJ 299, INDIV STUDIES IN CRIMINAL JUSTICE 1-2 (1)
An in-depth study of various areas in the criminal justice system. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and divisional approval
Typically Offered: Offer as required

Culinary Arts (CULN)

CULN 152, ESSENTIALS OF DINING ROOM SERVICE 3 (7)
Students are introduced to front-of-the-house (FOH) operations and professional dining service techniques. Etiquette, quality service, positive guest relations, effective communications skills and guest check handling are emphasized. Students actively perform hot and cold food and beverage service using various service techniques.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CULN 154, INTRODUCTION TO BAKING AND PASTRY 3 (7)
Production will include basic breads and rolls, starting with mixing,
proofing and proper baking temperatures, muffins, quick breads, cookies
and pies. Proper use of the baker's scale, liquid measurement and
equipment identification are a primary focus of this course.
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: CRMJ 285 and approval by faculty coordinator
Typically Offered: Summer, Fall and Spring Semesters

CULN 157, FUNDAMENTALS OF FOOD SERVICE PRODUCTION 3 (7)
Students are introduced to basic cooking techniques through lecture,
demonstration and production focused on stocks, sauces, soups, pantry,
egg cookery and related ingredients. The proper and sanitary use of
knives, tools, small wares and equipment will be emphasized. (CTAG)
General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CULN 160, FOODSERVICE OPERATIONS AND CAREER MANAGEMENT 3
(3)
This course is the study of the theories and concepts of management
with an emphasis placed on human relations skills and proven
managerial techniques as applied to futures chefs and kitchen managers.
Legal aspects of the industry are introduced as part of human resources
and executive team responsibilities. Students will learn how to manage
their own careers through mastery of career planning, employment
search techniques and skills verifications, with emphasis placed
on establishing individual career goals, developing self-marketing
documents and building credentials in major success categories
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Concurrent: CULN 175
Typically Offered: Fall and Spring Semesters

CULN 165, ADVANCED FOOD SERVICE PRODUCTION 3 (7)
A continuation of Food Service Production I, demonstrating advanced
culinary techniques in a hands-on lab setting. Students build upon skills
learned while demonstrating proficiency in organization, sanitation, and
cooking skills.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: CULN 157 and TRSM 118
Typically Offered: Summer, Fall and Spring Semesters
CULN 175, PURCHASING AND PRODUCT IDENTIFICATION 3 (7)
Students engage in identifying and handling various fresh, frozen, canned, dry ingredients and sundry items. Food service purchasing, receiving, handling, storage, issuing and evaluation processes are discussed and demonstrated. Purchasing automation, computerized purchasing and HACCP systems are discussed and demonstrated. USDA Grading and Quality Standards are a focus. Sustainable food sources and locally grown markets are explored. (CTAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Concurrent: TRSM 118, None
Typically Offered: Fall and Spring Semesters

CULN 200, CULINARY EXTERNSHIP 2 (30)
Through a field externship/internship experience, students apply their technical knowledge, skills and professionalism in a working kitchen. Students have the opportunity to observe and participate in an operation related to their field of study, gaining practical work experience prior to graduation. (CTAG)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

CULN 205, RESTAURANT AND MENU DEVELOPMENT 3 (3)
Students will plan their own restaurant from its conception utilizing market data. The student will develop a professionally designed menu, including concept, recipes, and costs. Students will also develop a one-year profit and loss statement with a marketing plan. Students will also learn about facility planning as they construct their own blue prints of a kitchen and dining room, incorporating correct equipment, zoning and maximized workspace. Students will also develop a staff diagram, projecting labor costs, and human resources plan. Finally, students will present their plans to potential investors.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CULN 157 and TRSM 118
Typically Offered: Fall Semester

CULN 215, BEVERAGE MANAGEMENT 3 (3)
This course addresses the principles of beverage service and is designed to prepare students for management responsibilities in the culinary and hospitality industries. Students must successfully complete the Serve Safe alcohol advanced alcohol course.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

CULN 221, PRINCIPLES OF BEVERAGE SERVICE 2 (3)
The course combines introduction and application of beverage, bartending and service. Students are introduced to the identification, production and service of nonalcoholic beverages, beer, wine, spirits, cordials, cocktails, mixed drinks, coffee and tea. Students are introduced to sensory evaluation of beverages. This class incorporates and requires the student becoming certified in an industry recognized alcohol training intervention procedures program. Students much successfully complete the Serve Safe alcohol advanced alcohol course.

General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Not offered this year

CULN 224, FROM THE FARM TO THE FORK 3 (7)
This course explores traditional farming methods used throughout Ohio and around the world. Students will study heirloom varieties of vegetables as well as animal husbandry and feeds. Students will use farm products in traditional classical cooking methods and techniques.

General Education: IN1, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CULN 165
Typically Offered: Fall and Spring Semesters

CULN 225, ADVANCED BAKESHOP 3 (7)
This course is a study of the preparation of advanced, classical and international pastries. Emphasis is placed on producing quality commercial baked goods for sale in the retail outlet or restaurant of the school. Students produce advance cakes, ice cream, tortes, and mini pastries.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CULN 154 and TRSM 118
Typically Offered: Fall and Spring Semesters

CULN 255G, WORLD CUISINE 3 (7)
This course will focus on practicing baking, roasting, frying, Sautéing, stir-frying, braising and steaming through menu production from regions including the United States, Central and South America, Asia, the Caribbean and all of Europe. Various food items including meats, poultry, game, seafood, vegetables, fruits, legumes, grains and cereals will be produced and served as part of this course. Students will be involved in food production and plate presentation is emphasized.

General Education: IN1, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CULN 165, CULN 175, TRSM 118 and second year standing
Typically Offered: Fall Semester

CULN 266, RESTAURANT CAPSTONE 5 (12)
The overall goal of this class is to further develop and refine the student's culinary skills within the confines of a fine dining restaurant and to allow the student creative opportunities in developing specials and management foundations. Students will learn and implement the newest culinary trends, culinary techniques, and regional dishes while preparing various hot and cold food including but not limited to braised, stewed, grilled roasted, garde manger, molecular gastronomy, and pastry items. Throughout the class the students will work in a team setting and will partake in specific duties assigned to him or her in positions developed around the needs of the restaurant. Students will also be involved in the everyday managerial operations of the restaurant dealing with developing a restaurant manual and accounting procedures that manage the profitability of the restaurant.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CULN 255, second year standing and division approval
Typically Offered: Spring Semester

CULN 299, INDIVIDUALIZED STUDIES - CULN 1-2 (1)
An in-depth study of areas in culinary arts through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisite: Second year standing and divisional approval.
Course Entry Requirement(s): Prerequisite: Second year standing and divisional approval.
Typically Offered: Offer as required
Cyber Security (CYBR)

**CYBR 110, FUNDAMENTALS OF INTERNET OF THINGS (IOT) 4 (6)**
This course covers Internet of Things (IoT) topics, including: architecture; applications; monitoring and utilization; instrumentation; hardware and software connectivity and protocols; deployment strategies; security and cyber risks. Case studies will cover industrial internet of things (IoT), commercial IoT and consumer IoT. Laboratory required. (A special fee will be assessed.)

General Education: IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

**CYBR 220, PYTHON SCRIPTING AND PROGRAM CONCEPTS 3 (4)**
This course offers an introduction to scripting languages with focus on Python. Topics presented in the course will prepare students to automate industry standard security tools using scripting developed in various programming and scripting languages. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**CYBR 231, ETHICAL HACKING AND COUNTERMEASURES 4 (6)**
This course is designed to cover topics required for the Certified Ethical Hacking Exam (CEH). Student will learn hacking methodology, techniques and countermeasures through lecture and hands on activities. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Typically Offered: Fall and Spring Semesters

**CYBR 245, CYBERSECURITY STANDARDS, REGULATIONS AND COMPLIANCE 4 (6)**
This is a capstone course that covers cybersecurity standards, regulations, and compliance. The student will learn how to research, assess, and implement cybersecurity frameworks to ensure organizations are aligned to meet regulatory and compliance standards.

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CYBR 220 and CYBR 231
Typically Offered: Summer, Fall and Spring Semesters

Dance (DANC)

**DANC 151, BALLET I 2 (4)**
An introduction to training in fundamental skills of ballet technique. Emphasis on placement and body alignment. Basic barrowork, beginning steps, center turns and port de bras will be covered. Dance clothing and ballet shoes required.

General Education: IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**DANC 152, BALLET II 2 (4)**
Intermediate ballet. Introduction of double turns, longer and more complicated allegro and adagio combinations. Dance clothing and ballet shoes required.

General Education: IN2, IN5
Course Entry Requirement(s): Prerequisite: DANC 151
Typically Offered: Fall and Spring Semesters

**DANC 161, JAZZ DANCE I 2 (4)**
Beginning course in jazz technique and style. Course of study includes floor stretches, conditioning exercises, isolations and exposes the student to specialized technique for work in theater and television.

General Education: IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**DANC 162, JAZZ DANCE II 2 (4)**
Intermediate/advanced training in jazz style/ technique.

General Education: IN2, IN5
Course Entry Requirement(s): Prerequisite: DANC 161
Typically Offered: Fall and Spring Semesters

**DANC 171, MODERN DANCE I 2 (4)**
Training in recognized modern dance discipline, which explores movement and dance as a physical communication. Class involves work in flexibility, ability, agility, balance, rhythm, strength and endurance. Introduction to walking, jumping, leaping, falling and rising with a steady beat.

General Education: IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**DANC 172, MODERN DANCE II 2 (4)**

General Education: IN2, IN5
Course Entry Requirement(s): Prerequisite: DANC 171
Typically Offered: Fall and Spring Semesters

**DANC 299, INDIVIDUALIZED STUDIES IN DANCE 1-2 (1)**
An in-depth study in the areas of dance presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second-year standing or division approval
Typically Offered: Offer as required

Data Analytics (DATA)

**DATA 130, ETHICAL AND LEGAL FRAMEWORK OF BIG DATA 3 (3)**
This course will cover the ethical and legal issues in society with regard to collecting, processing and utilization of personal data, particularly in large interconnected data sets. An exploration of both the positive benefits and negative consequences will be part of the course.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Fall Semester

**DATA 200, DATA MANAGEMENT IN BIG DATA 3 (4)**
This course is an introduction into what is meant by Big Data and its uses. An overview of the analytical platforms and tools to work with Big Data are discussed in the context of running better businesses and providing better services to customers. Students will learn about the issues of data variability, velocity, volume and data governance. Students will become familiar with the application of the tools Hadoop, HBase, Hive, MapReduce, Yarn and SQL.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: MTHM 168 with a ‘C’ or higher
Typically Offered: Fall Semester
**DATA 210, BIG DATA MANAGEMENT TECHNOLOGIES 3 (4)**
This course will develop the skills with using analysis tools to create information from Big Data sets. Students will discover the power of visualization and graphical tools as an analysis technique using industry standard applications such as R, Spark 1 and 2, Apache SparkR, Spark Graphx. Students will learn to apply machine learning (Spark MLLIB) rules to enhance the integrity and consistency of large data sets.

**General Education:** IN1, IN2

**Course Entry Requirement(s):** Prerequisite: MTHM 168 with a ‘C’ or higher and CISS 143

**Typically Offered:** Spring Semester

**DATA 220, LINUX ADMINISTRATION FOR BIG DATA 3 (3)**
This course provides Linux administration and user skills. Students will utilize the Red Hat version of Linux to develop an understanding of how to install, configure, secure and operate and Linux server platform. The focus of Linux administration and operation will be towards processing data sets, installing data base software and related analysis tools.

**General Education:** IN1, IN2, IN4

**Course Entry Requirement(s):** Prerequisite: CISS 121

**Typically Offered:** Spring Semester

**DATA 230, PREDICTIVE AND VISUAL ANALYTICS 3 (4)**
This course will teach the student how to use the software tool, SPSS, for in depth predictive statistical analysis, reporting and modeling of Big Data sets. Students will learn optimization techniques and how to access data sets from Hadoop data stores. In addition, students will use the I2C visualization tool to discover relationships within large data sets.

**General Education:** IN1, IN2, IN4

**Course Entry Requirement(s):** Prerequisite: MTHM 168 with a ‘C’ or higher and CISS 143

**Typically Offered:** Spring Semester

**DATA 240, DATA ANALYTICS WITH WATSON STUDIO 4 (4)**
This course concentrates on using IBM Watson Studio which is part of the IBM Watson AI suite. Students will explore the difference between machine learning and deep learning as it applies to data analysis. IBM Watson Studio accelerates machine and deep learning required to infuse AI into data analytics. Students will work in teams to develop machine and deep learning models that can be deployed and scaled to large data sets.

**General Education:** IN1, IN2, IN4

**Course Entry Requirement(s):** Prerequisite: MTHM 168 with a ‘C’ or higher and DATA 200 and DATA 210; Concurrent: DATA 230

**Typically Offered:** Spring Semester

**DATA 247, BIG DATA PROJECTS 3 (4)**
Data methodologies implemented by project teams. Include initial feasibility study, data analysis, data design, presentation of results emphasizing data visualizations, and recommendations. Students completing the Data Analytics curriculum will utilize the tools and techniques to analyze data sets from various sources and industries. Students can select a project from their area of interest. Project approval is accomplished through a feasibility study. Using Big Data tools and the IBM Cloud, each student completes their analysis and prepares a presentation of the results and how the analysis was accomplished.

**General Education:** IN1, IN2, IN4

**Course Entry Requirement(s):** Concurrent: DATA 240

**Typically Offered:** Spring Semester

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**Dental Hygiene (DNHY)**

**DNHY 111, HEAD AND NECK ANATOMY/TOOTH MORPHOLOGY 2 (3)**
Study of the nomenclature, anatomical form, function, development, eruption and exfoliation, functional and occlusal relationships, and supporting structure of the human deciduous and permanent dentition. A detailed study of the structures of the cranial, facial, and cervical regions and the relationships of these structures to each other. Emphasis will be on the skull and facial bones, muscles, their origin, insertion, and action, the TMJ, blood vessels, lymphatics, cranial nerves, their locations and innovations, and all visceral organs of the head and neck. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: Formal acceptance into the Dental Hygiene program; Corequisite: DNHY 121 and DNHY 124; Concurrent: BIOG 121 and CHMY 161

**Typically Offered:** Fall Semester

**DNHY 121, DENTAL HYGIENE TECHNIQUES I 4 (8)**
This course is designed to prepare students for the clinical practice of dental hygiene. The history of the profession is studied as a foundation for current concepts. Professional ethics are emphasized throughout this course. Techniques are taught which develop skills necessary in performing oral prophylaxis and related procedures. Clinical practicum and separate laboratory required. (A special fee will be assessed.)

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: Formal acceptance into the dental hygiene program and American Heart Association Healthcare Provider CPR; Corequisite: DNHY 111 and DNHY 124; Concurrent: BIOG 122 and BIOG 251

**Typically Offered:** Fall Semester

**DNHY 122, DENTAL HYGIENE TECHNIQUES II 5 (11)**
This lecture/clinic course is designed as a continued study of techniques and principles for instrumentation. A study of anticariogenic agents and their properties of action are included. Business organization skills related to the dental clinic are incorporated. Clinical laboratory required. (A special fee will be assessed.)

**General Education:** IN4, IN5

**Course Entry Requirement(s):** Prerequisite: DNHY 111, DNHY 121, DNHY 124, BIOG 121 and CHMY 161; Corequisite: DNHY 125 and DNHY 131; Concurrent: BIOG 122 and BIOG 251

**Typically Offered:** Spring Semester

**DNHY 123, DENTAL MATERIALS 2 (3)**
Study of the characteristics and physical properties of dental materials commonly used in the dental office. Laboratory sessions include exercises involving the use of cements, bases, waxes, rubber dam equipment, sealants, and amalgam polishing materials. Additional laboratory sessions include student partner exercises involving the use of impressions materials and fabrication of mouth guards and whitening/bleaching trays. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: DNHY 122, DNHY 125, DNHY 131 BIOL 222 and BIOG 251; Corequisite: 131; Concurrent: BIOG 268

**Typically Offered:** Summer Semester
DNHY 124, DENTAL RADIOLOGY 3 (5)
This course is designed with an emphasis on radiographic theory and technique: history and development of the X-ray, its nature and properties, safety precautions and uses of the X-ray in dentistry. Laboratory experience provides opportunity for practice in digital image receptor/film placement, tube angulation, processing, and image organization. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: DNHY 111 and DNHY 121
Typically Offered: Fall Semester

DNHY 125, PERIODONTICS 2 (2)
A study of periodontal diseases including current concepts pertaining to etiology, pathogenesis, assessment, and treatment. Additional information presented specific to non-surgical treatment of periodontal disease with an emphasis on root debridement and tooth methodolgy. (IN1)
General Education: IN1
Course Entry Requirement(s): Prerequisite: DNHY 111, DNHY 121 and DNHY 124, BIOG 121 and CHMY 161; Corequisite: DNHY 122 and DNHY 131; Concurrent: BIOG 122 and BIOG 251
Typically Offered: Spring Semester

DNHY 131, ORAL PATHOLOGY 2 (3)
A study of the common areas of general pathology affecting the oral/paraoral structures and/or impact the management or the treatment of the dental patient. The student will apply knowledge gained in the didactic portion of the course through simulated case studies. There will also be simulated experiences in recognizing pathology. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: DNHY 111, DNHY 121, DNHY 124, BIOG 121 and CHMY 161; Corequisite: DNHY 122 and DNHY 125; Concurrent: BIOG 122 and BIOG 251
Typically Offered: Spring Semester

DNHY 133, DENTAL HYGIENE TECHNIQUES III 3 (7)
Continued clinical experience with implementation of ultrasonic scaling. Emphasis is placed on the care and treatment for patients requiring root debridement and scaling. Implementation of a preventative oral health program for patients. In-depth examination of medical and dental emergencies. Clinical laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: DNHY 122, DNHY 125, DNHY 131, BIOG 122 and BIOG 251; Corequisite: DNHY 123; Concurrent: BIOG 268
Typically Offered: Summer Semester

DNHY 199, INTRO TO THE WORLD OF WORK - DNHY 1 (1)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.
Course Entry Requirement(s): A student must have completed a minimum of 12 semester credit courses at LCCC (courses transferred are not counted), have earned a minimum 2.0 overall GPA; OR have division approval. (Maximum three '1' credit courses allowed.)

DNHY 221, DENTAL PHARMACOLOGY 2 (2)
Classification of drugs with special emphasis on how drugs affect the dental hygienist's interaction with the patient, as well as those drugs commonly used in dentistry. Various aspects of pharmacology will be addressed including physical and chemical properties, pharmacokinetics, therapeutic effects, and adverse effects associated with each of the drug categories. The course will include a discussion of vasoconstrictors, local anesthetics, medical emergencies, and the dental hygienist's role in those emergencies.
General Education: IN2
Course Entry Requirement(s): Prerequisite: DNHY 123 and DNHY 133; Corequisite: DNHY 224; Concurrent: ENGL 161
Typically Offered: Fall Semester

DNHY 224, DENTAL HYGIENE TECHNIQUES IV 4 (13)
Continued clinical experience with emphasis placed on more advanced auxiliary procedures. Clinical laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN5
Course Entry Requirement(s): Prerequisite: DNHY 123 and DNHY 133; Corequisite: DNHY 221
Typically Offered: Fall Semester

DNHY 231, COMMUNITY/DENTAL HYGIENE TRENDS 2 (3)
Introduction to public health principles as they apply to the Dental Hygiene Profession in a community setting. A community field experience will allow opportunities for the student to plan, implement, and evaluate their own community based project. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN5
Course Entry Requirement(s): Prerequisite: DNHY 221 and DNHY 224, Corequisite: DNHY 235
Typically Offered: Spring Semester

DNHY 235, DENTAL HYGIENE TECHNIQUES V 4 (13)
Mastery of total dental patient care in clinic and at community affiliation sites. Clinical laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: DNHY 221 and DNHY 224; Corequisite: DNHY 231
Typically Offered: Spring Semester

DNHY 236, DENTAL HYGIENE PAIN MANAGEMENT I LECTURE 1 (1)
This dental hygiene course will emphasize instruction in administering local anesthesia. Lecture information will cover theory and psychological aspects of pain control, anatomy, neurophysiology, pharmacology of local anesthetics and vasoconstrictors, systemic complications, medical emergencies, techniques of maxillary and mandibular anesthesia, armamentarium and their preparation, infection control, and legal considerations.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: DNHY 111, 121 and 124; Corequisite: DNHY 122,125 and 131
Typically Offered: Spring Semester
DNHY 237, DENTAL HYGIENE PAIN MANAGEMENT II LAB 1 (2)
This dental hygiene course will emphasize instruction on administration of intraoral block and infiltration local anesthesia. The laboratory experience will provide opportunities for hands-on exercises in preparing armamentarium and in administering different techniques of local anesthesia. Instruction on the administration (initiation, adjustment, monitoring and termination) of nitrous oxide-oxygen minimal sedation. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: DNHY 236 or DNHY 290; Corequisite: DNHY 123 and 133; Concurrent: DNHY 236
Typically Offered: Summer Semester
DNHY 299, INDIVIDUALIZED STUDIES - DNHY 1-2 (1)
An in-depth study of areas in Dental Hygiene through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required

Digital Fabrication (DFAB)

DFAB 111, INTRODUCTION TO PERSONAL FABRICATION 1 (2)
This course is an introduction to personal fabrication in LCCC's Fab Lab. Students will learn to use commercially available technologies to: conceptualize, design, develop, fabricate and test objects. The Lab features advanced computer software and contemporary tools for cutting, milling, electronics, engraving, and other processes of rapid and automated prototyping. Products and processes are typically individualized but can be developed entrepreneurially for commercial production. LCCC's Fab Lab is modeled on Neil Gershenfeld's Fab Labs at MIT and around the world. Its tools are easy to use by anyone with basic computer skills, imagination, and a desire to invent and make new objects using modern technology and cutting-edge processes. The Lab is designed to explore interests in graphic design, visual arts, business, computer-assisted design, physical and natural science, and mathematics, as well as well as engineering and other advanced technologies. General computer skills highly recommended. Laboratory required. (A special fee will be assessed.)
General Education: IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
DFAB 121, DIGITAL FABRICATION I 3 (5)
This course covers programming, setup, and operation of digital fabrication equipment such as computer controlled lasers, routers, and waterjet cutters. Students will apply these digital tools to create items such as prototypes, furniture, and 3D molds. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: DFAB 111
DFAB 211, ADDITIVE MANUFACTURING AND 3D SCANNING 3 (5)
An application oriented course on designing and printing 3D models using additive manufacturing technologies for applications such as prototyping, rapid tooling, and rapid manufacturing. Topics include 3D scanning, designing for additive processes and material limitations, equipment operation, and process troubleshooting. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: CADD 213

DFAB 221, DIGITAL FABRICATION OF ELECTROMECHANICAL SYSTEMS 3 (5)
This course focuses on designing, constructing, and programing embedded circuits. Students will build a variety of microcontroller based systems including a prototype machine. Topics include embedded programming, input and output devices, circuit board design, and networking. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 111 and ELCT 115; Concurrent: ELCT 221

DFAB 231, DIGITAL FABRICATION CAPSTONE 4 (6)
This course integrates the major topics covered in the previous Digital Fabrication related courses. The student will use a variety of digital fabrication tools to plan, design, produce, and program a microcontroller-based device. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: DFAB 121, DFAB 211, DFAB 221 and ELCT 221

Early Childhood Education (ECED)

ECED 111, INTRODUCTION TO EARLY CHILDHOOD EDUCATION 3 (3)
This course addresses the growth and development of young children from birth through age five, including physical, cognitive and social-emotional development. It presents major theories, principles, concepts and current research in child development. It emphasizes the role of play in developmental areas, as well as integration of children with and without disabilities, and family involvement. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
ECED 162, EMERGING LITERACY AND LANGUAGE DEVELOPMENT 3 (3)
This course supports emergent literacy for children in the early childhood years. It explores prereading, reading, printscript, speaking, and listening for optimum language development in an early childhood environment.
General Education: IN2, IN4
Course Entry Requirement(s): Prerequisite: ECED 111
Typically Offered: Spring Semester
ECED 164, CHILD GUIDANCE AND CLASSROOM MANAGEMENT 3 (3)
Students will be introduced to methods of observation and the recording of children’s behavior to meet early childhood goals and to appropriately guide young children in a classroom setting. Emphasis will be placed on fostering a positive self-esteem in children as well as promoting self-discipline.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Concurrent: ECED 111
Typically Offered: Summer, Fall and Spring Semesters
ECED 171, HEALTH, SAFETY AND NUTRITION 2 (2)
Health, Safety, and Nutrition for Early Childhood Education enhances the understanding and implementing of sound health, safety and nutrition habits for preschool age children. It emphasizes the need to provide safe environments to identify and educate the family, day care provider and child about basic nutritional needs and recognition and management of communicable and acute illness. (CTAG)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Concurrent: ECED 111
Typically Offered: Fall and Spring Semesters
ECED 253, INTRODUCTION TO CHILD DEVELOPMENT 3 (3)
This course focuses on the knowledge, skills, attitudes and behaviors associated with optimal growth and development of children aged birth to age eight in all domain areas; social, physical, intellectual, and emotional. Both theoretical and practical aspects of development are presented and examined within a multicultural context. (TAG)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: PSYH 151
Typically Offered: Summer, Fall and Spring Semesters

ECED 255, CREATIVE DEVELOPMENT FOR THE YOUNG CHILD 4 (4)
This course is an integrated approach designed for students to explore both the theoretical and practical aspects of creativity in art, music and movement as it relates to children ages birth to age five. Students will construct knowledge and comprehension of these content areas as well as demonstrate implementation of teaching strategies using the early learning and development content standards as a guide. Students will be required to observe/participate 30 hours in an early childhood setting.
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: ECED 111
Typically Offered: Fall and Spring Semesters

ECED 256, COGNITIVE DEVELOPMENT 4 (4)
This course focuses on the integration of mathematics, science and social studies for children ages three to age five. The math and science concepts correspond to national standards. The social studies provides children the skills necessary to understand how people live, work and get along with others and solve problems in everyday experiences. Students will construct knowledge and comprehension of these content areas as well as demonstrate implementation of teaching strategies using the Ohio Early Learning and Development Standards as a guide. Students will be required to participate/observe 30 hours in an early childhood setting.
General Education: IN1, IN2, IN3, IN4
Typically Offered: Fall and Spring Semesters

ECED 273, FAMILIES, SCHOOLS AND COMMUNITIES 3 (3)
This course explores educational considerations for teachers including the policies, theories, practices, skills, and knowledge of home, school, and community partnerships. Candidates will examine: multiple influences on the whole child; accessibility of community services and support; ethical, practical, and culturally competent decisions to foster family engagement; knowledge and skills to address family structure, socio-cultural and linguistic backgrounds, identities and customs, and advocacy for children and families. (TAG)
General Education: IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ECED 274, INFANT TODDLER PRACTICUM 3 (3)
Participation in an assigned infant/toddler classroom setting with college supervisor to develop effective early care and education practices with children six weeks to age three. A special fee will be assessed. To register obtain ECE Coordinator’s signature.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ECED 272
Typically Offered: Spring Semester

ECED 277, LEADERSHIP IN ADMINISTRATION 3 (3)
This course is designed to provide future or current directors the knowledge and skills to provide leadership in administering a high-quality early care and education program. Topics covered but are not limited to; comprehension of the responsibility and role of a program administrator, program development and evaluation, financial management, curriculum development, family and community collaborations administration and supervision.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ECED 111
Typically Offered: Fall Semester

ECED 278, INFANT AND TODDLER DEVELOPMENT 3 (3)
This course examines current theories of physical, emotional, cognitive, social, and language development for children from birth to age three. Emphasis is on providing a safe and effective program for infants and toddlers as well as establishing partnerships with parents that support best practices. (CTAG)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ECED 111
Typically Offered: Spring Semester

ECED 283, ECED STUDENT TEACHING SEMINAR I 3 (9)
Introduction to current teaching methods and issues pertaining to Early Childhood Education. Supervised experiences conducted in an approved early childhood setting, which allows application of knowledge and skills learned in the classroom. Student will be required to spend a minimum of 105 hours per semester in an assigned school placement. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ECED 111, ECED 164, ECED 171, ECED 253 and ECED 273
Typically Offered: Summer, Fall and Spring Semesters

ECED 285, ECED STUDENT TEACHING SEMINAR II 4 (4)
Supervised student teaching experience with young children of diverse ages, diverse abilities, and cultures. It includes practicum experience in child guidance, teaching strategies, assessment, and the overall operation of an early childhood program. Students must spend a minimum of 120 hours in an assigned school placement. Special fee will be assessed for background check. Student must complete a student teaching application and be given approval by the ECE coordinator before registration.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ECED 111, ECED 171, ECED 162, ECED 164, ECED 255, ECED 256 and ECED 283
Typically Offered: Fall and Spring Semesters

ECED 299, INDIVIDUALIZED STUDIES ECED 1-2 (1)
In-depth study of areas of early childhood education presented by discussion and/or individual research and reading. Topics will vary. (Repeatable up to a total of four credit hours).
Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required
Economics (ECNM)

ECNM 113, PERSONAL FINANCE 3 (3)
An analysis of the consumer’s role in our economic system. Topics covered include: money management, budgeting, saving and borrowing, use of credit, financing long-term purchases, insurance and investments, taxes, and retirement and estate planning. (CTAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ECNM 151, PRINCIPLES OF MACROECONOMICS 3 (3)
This course is an introduction to the language, tools methods and topics of economic analysis. A study of the broad economy including measurement and analysis of economic activity, government and its roles in the market system, the banking system, monetary policy, economic growth and international economics. (OTM, TAG)

General Education: C4, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ECNM 152, PRINCIPLES OF MICROECONOMICS 3 (3)
This course is an introduction to the language, tools, methods and topics of economic analysis. It focuses on the individual components of the economy including households and businesses. Topics include consumer theory, elasticity, profit maximization and general cost analysis. Current domestic economic problems and policies are discussed. (OTM, TAG)

General Education: C4, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ECNM 250, SOCIAL ISSUES IN ECONOMICS 3 (3)
An analysis of the consumer’s role in our economic system. Topics covered include: money management, budgeting, saving and borrowing, use of credit, financing long-term purchases, insurance and investments, taxes, and retirement and estate planning. (CTAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

EDCT 254, INDIVIDUALS WITH EXCEPTIONALITIES 3 (3)
This course is a survey course to prepare all educators to teach diverse learners, including those with exceptionalities. It covers departmental characteristics, assessment methods, intervention strategies, and ethical principles for students in education and community settings. This course offers an opportunity for experiential learning. The course will require four 2.5-hour field experiences in settings which serve exceptional individuals. (TAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

EDCT 261, READING FOR THE CLASSROOM 3 (3)
The purpose of this course is to introduce to the pre-service teacher candidate or paraprofessional aide the teaching and learning processes associated with language and literacy instruction. Emphasis will be placed on the development of a knowledge base needed to make decisions regarding independent reading among children as well as developing those competencies most useful to helping students with special learning needs: teaching techniques, activities and materials. Three 2.5 hour observation experiences are required.

General Education: IN2
Course Entry Requirement(s): None
Typically Offered: Summer Semester

EDCT 262, LANGUAGE ARTS FOR THE CLASSROOM 3 (3)
Language Arts for the Classroom is designed for classroom teachers and paraprofessional aides who wish to strengthen their understanding of the various components of language arts instruction. The course features both a review of language, handwriting, and literature principles. It involves taking a focused look at sound pedagogical approaches for the delivery of instruction to primary and middle school students, particularly for those students who have special needs. The course requires three 2.5 hour sessions of classroom observation experience, covering both the early childhood and middle grade classrooms.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161 and ENGL 162
Typically Offered: Summer Semester

EDCT 264, EDUCATIONAL TECHNOLOGY 3 (3)
The student will learn the principles of educational technology and determine the relative advantage of using technology in the classroom. Lab time will be allocated to practice using software, web-based resources and equipment. Applications include word processing, spreadsheet, database presentation and multimedia software, web quests, blogs and interactive white boards and digital cameras. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

EDCT 275, SOCIAL ISSUES IN EDUCATION 3 (3)
This course emphasizes the historical, philosophical, and socio-cultural context of education as a means of critically exploring the purpose and goals of American education. The impact of legal decisions and concerns for equity in education are thoroughly examined in the course.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161 and one other EDCT course. ENGL 162 is required as a prerequisite or may be taken concurrently
Typically Offered: Fall and Spring Semesters
EDCT 287, WORKBASED LEARNING I - EDCT 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

EDCT 288, WORK BASED LEARNING II - EDCT 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: EDCT 287
Typically Offered: Offer as required

EDCT 299, INDIVIDUALIZED STUDIES IN EDUCATION 1-2 (1)
An in-depth study of areas of education presented by discussions and/or individual research and reading. May include supervised field experience. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required

Electrical Trades Apprenticeship (ELTA)

ELTA 101, NATIONAL ELECTRICAL CODE I: COMMERCIAL AND INDUSTRIAL 1 (1)
This course provides an introduction to the National Electrical Code with an emphasis on commercial and industrial applications. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program.
General Education: IN1
Course Entry Requirement(s): Prerequisite: Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program
Typically Offered: Not offered this year

ELTA 102, NATIONAL ELECTRICAL CODE II: COMMERCIAL AND INDUSTRIAL 3 (3)
This course is the second part of a three part series covering the National Electrical Code with an emphasis on commercial and industrial applications. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program.
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELTA 101
Typically Offered: Not offered this year

ELTA 103, NATIONAL ELECTRICAL CODE III: COMMERCIAL AND INDUSTRIAL 4 (4)
This course is the third part of a three part series covering the National Electrical Code with an emphasis on commercial and industrial applications. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program.
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELTA 102
Typically Offered: Not offered this year

ELTA 111, DC THEORY: COMMERCIAL AND INDUSTRIAL 3 (5)
This course provides a detailed study of DC electrical circuits and related bilateral components. The topics included are electric current; voltage; resistance; series, parallel and series-parallel circuits; as well as circuit theorems, magnetism, generators and motors. The course contains a laboratory section that emphasizes the practical aspects of circuit construction and electrical measurement devices. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program. Laboratory required (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: Student must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program.
Typically Offered: Not offered this year

ELTA 112, AC THEORY: COMMERCIAL AND INDUSTRIAL 5 (7)
This course provides a detailed study of AC electrical circuits and related bilateral components. The concepts of RL, RC, LC, and RLC reactive circuits; resonance, passive filters, three phase power systems, and power factor analysis are also covered. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: ELTA 111
Typically Offered: Not offered this year

ELTA 133, SEMICONDUCTOR THEORY: COMMERCIAL AND INDUSTRIAL 4 (6)
This course is an introduction to the theory, operation, and practical applications of solid state devices. Topics include diodes, transistors, rectification circuits, power supplies, amplifier configurations, oscillators, SCR circuits, optoelectronics, and fiber optics. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELTA 112
Typically Offered: Not offered this year

ELTA 204, MOTORS AND MOTOR CONTROL: COMMERCIAL AND INDUSTRIAL 5 (5)
This course is an introduction to AC and DC motors and motor control devices. Topics include motor protection, single and three-phase motors, AC alternators, motor starters, contactors and relays, control diagrams and drawings, timing devices, AC and DC motor speed controls, and troubleshooting. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program.
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELTA 133
Typically Offered: Not offered this year
ELTA 214, DIGITAL ELECTRONICS: COMMERCIAL AND INDUSTRIAL 2 (4)
The course serves as an introduction to basic digital electronic concepts. Topics included are Boolean Algebra, Basic logic gates, buffer and inverter amplifiers, and debouncing circuits. Students must be enrolled in the IBEW/NECA Electrical Trades Apprenticeship program. Laboratory required. (A special fee will be assessed.)

Course Entry Requirement(s): Prerequisite: ELTA 204
Typically Offered: Not offered this year

ELTA 287, WORK-BASED LEARNING I - ELTA 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Not offered this year

Electrical Utility Tech (ELUT)

ELUT 121, OVERHEAD LINE TECHNOLOGY I 6 (14)
This course shall provide the student with the knowledge and skills to perform work on secondary voltage circuits, focusing primarily on installation of services, street lighting and secondary circuits. Using a digger derrick, the student will also learn to set wooden poles, transformers, and install anchors. Pole framing techniques and quying methods will be learned. An overview of transmission and distribution of electrical systems, Occupational Safety and Health Administration (OSHA) topics, rigging safety awareness and basic electricity are discussed. Safety requirements will be included throughout the course of instruction. Divisional approval required for registration in this course. Laboratory required. (A special fee will be assessed.)

Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Not offered this year

ELUT 122, OVERHEAD LINE TECHNOLOGY II 6 (14)
This course shall provide the student with the knowledge and skills to properly install three phase primary conductors. The student will be instructed in the installation and operation of line fuses, reclosers, transformer power banks, capacitors and line voltage regulators. The student will be able to identify, install and maintain underground residential distribution (URD), secondary equipment, including proper methods of installing box pads, single phase transformers, primary elbows and terminators. Safety requirements will be included throughout the course of instruction. Laboratory required.

Course Entry Requirement(s): Prerequisite: ELUT 121 and division approval
Typically Offered: Not offered this year

ELUT 123, SUBSTATION TECHNOLOGY I 6 (14)
This course provides the student with the knowledge and skills to perform maintenance in electrical substations and switchyards, and to understand and apply the proper techniques for operation of power and hydraulic tools for conduit forming and cable tray layout. The course includes training in the operation of substation ground maintenance vehicles, rigging, and construction of substation and switchyard facilities. Occupation Safety and Health Administration (OSHA) and rigging safety awareness requirements will be included. Laboratory required.

Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Not offered this year

ELUT 124, SUBSTATION TECHNOLOGY II 6 (14)
This course provides the knowledge and skills to safely perform maintenance in electrical substations and switchyards, and to understand and apply the proper techniques for cable pulling, bus work, as well as the installation of substation conductors, switches, and ground connections. The course includes electrical skills training as applied to the operation and installation of batteries, fuses, transformers, regulators/reclosers, circuit breakers, capacitors in the substation. Also included are the proper lockout/tagout principles and techniques. Laboratory required.

Course Entry Requirement(s): Prerequisite: ELUT 123 and division approval
Typically Offered: Not offered this year

ELUT 221, OVERHEAD LINE TECHNOLOGY III 6 (14)
This course provides the student with the knowledge and skill to identify, install and maintain primary underground residential distribution (URD) equipment and different styles of sub-transmission support structures used in the distribution systems. Also covered are the techniques and proper use of hot-line tools to work sub-transmission and distribution structures when laying out conductors and changing various insulators. Various methods of troubleshooting URD primary and secondary circuits are discussed and demonstrated. Students will perform various tasks, while working on an energized three-phase circuit under controlled conditions with applicable safety requirements. Laboratory required. (A special fee will be assessed.)

Course Entry Requirement(s): Prerequisite: ELUT 122 and division approval
Typically Offered: Not offered this year

ELUT 222, OVERHEAD LINE TECHNOLOGY IV 6 (14)
This course provides the student with the knowledge and skill to safely climb transmission support towers and H-structures. While aloft on these pertinent structures, the student will gain basic skills to perform intermediate tasks. The student will learn and gain experience on substation equipment and one line drawing. Emphasis will be placed on recognizing energized equipment, minimum approach distances and substation safety in general. At the conclusion of the course, the student will be qualified to enter a substation. Included in this course are Lockout/Tagout, Master Drive, Topical Safety, Comprehensive Skills Review and a Safety Fair. Laboratory required. (A special fee will be assessed.)

Course Entry Requirement(s): Prerequisite: ELUT 221 and division approval
Typically Offered: Not offered this year
ELUT 224, SUBSTATION TECHNOLOGY III 6 (14)
This course provides intermediate level training in the electrical skills required for the installation and maintenance of batteries, fuses, transformers, and regulators according to Substation Preferred Practices. The course includes the understanding of the electrical safety and skills to safely perform maintenance in electrical substations and switchyards, apply the proper cable pulling and bus work techniques, installation of substation conductors, as well as switching and grounding techniques. An in-depth study and practice of lockout/tagout procedures is included, as well as battery impedance testing. The daily maintenance procedures for substation power transformers are practiced, including TTR testing, TCG/o2 testing and oil dielectric testing DGA sampling.
Course Entry Requirement(s): Prerequisite: ELUT 124 and division approval
Typically Offered: Not offered this year

ELUT 225, SUBSTATION TECHNOLOGY IV 6 (14)
This course provides the advanced knowledge and skills to safely perform high level maintenance in electrical substations and switchyards according to the Substation Preferred Practices. The course includes the understanding and application of the proper cable pulling and bus work techniques, installation of substation conductors, as well as switching and grounding techniques. Advanced electrical skills training as applied to the operation and installation of batteries, fuses, transformers, regulators/reclosers, circuit breakers, and capacitors is included, with an in-depth study of fault-load interrupting equipment. The course covers the inspection of oil circuit breakers, including circuit profilers training, circuit breaker control schemes, circuit breaker time travel and analysis. Laboratory required.
Course Entry Requirement(s): Prerequisite: ELUT 224 and division approval
Typically Offered: Not offered this year

Electronics (ELCT)

ELCT 111, ELECTRICAL CIRCUITS I 3 (5)
This course provides a detailed study of dc electrical circuits and related bilateral components. This course also contains a laboratory section that emphasizes the practical aspects of circuit construction and electrical measurement devices. Laboratory required. (A special fee will be assessed.) (TAG, CTAG, MTAG)
General Education: IN1, IN5
Course Entry Requirement(s): Course placement policy; Satisfactory placement assessment into college level mathematics or concurrent enrollment in MTHM 121.
Typically Offered: Summer, Fall and Spring Semesters

ELCT 112, ELECTRICAL CIRCUITS II 4 (6)
The course is a continuation of Electrical Circuits I, with the emphasis on analog ac electrical networks. The ac circuit analysis techniques that are studied include: Superposition and Thévenin’s & Norton equivalent circuits. The concepts of RC, RL, and RLC reactive circuits; resonance, passive filters, transformers and three-phase power systems are also covered. Laboratory required. (A special fee will be assessed.) (TAG, MTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 111 and MTHM 121 concurrently
Typically Offered: Spring Semester

ELCT 115, FABRICATION PROCESS FOR ELECTRONICS 2 (4)
This course is designed to introduce electronic technicians to the skills and techniques used in the design process, fabrication and packaging of electronic equipment. Topics covered include: safety procedures, simple hand tool usage, parts recognition, printed circuit board layout and fabrication, types of wiring and connectors, soldering and de-soldering of components and documentation used in the electronic industry. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Typically Offered: Fall and Spring Semesters

ELCT 121, DIGITAL ELECTRONICS 4 (6)
The course serves as an introduction to basic digital electronic concepts. Topics include number systems, logic gates, Boolean algebra, combinational logic, flip flops, counters, registers, memories, and an introduction to microprocessors. Laboratory required. (A special fee will be assessed.) (TAG, CTAG, MTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 111 or ELCT 123 or division approval; Concurrent: MTHM 121
Typically Offered: Summer, Fall and Spring Semesters

ELCT 123, INTRODUCTION TO DATA ACQUISITION INSTRUMENTATION 2 (4)
This course provides students with practical, hands-on experience in the application of electronic data acquisition instrumentation including digital multi-meters, digital oscilloscopes, function generators, and various data acquisition equipment. It provides students with an introduction to voltage, current, resistance, and power. The course contains a laboratory section that emphasizes the practical aspects of electrical measurement devices. Laboratory required (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: Satisfactory placement assessment into college level mathematics or concurrent enrollment in MTHM 121.
Typically Offered: Fall Semester

ELCT 124, INDUSTRIAL ELECTRICITY 3 (5)
An introduction to direct current and alternate Current electrical circuits as used within an industrial setting, focusing on the installation, maintenance, and industrial application of electrical equipment and controls.
General Education: IN1
Course Entry Requirement(s): Prerequisite: Satisfactory placement assessment into college level mathematics or concurrent enrollment in MTHM 121.
Typically Offered: Fall Semester

ELCT 211, ELECTRICAL POWER AND DEVICES 4 (6)
This course is an introduction to electrical power and motor control devices, applications and related circuitry. Topics include AC and DC motors with industrial control applications as well as the installation and programming of variable frequency drives. The laboratory includes hands-on construction and trouble shooting of practical motor control circuits. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 111
Typically Offered: Spring Semester
ELCT 221, MICROCONTROLLERS 4 (6)
Topics in this course include microprocessor/microcontroller architecture, instruction sets, software development, interrupt handling, interfacing techniques and hardware used in control applications designed with microprocessor/microcontrollers. Laboratory required. (A special fee will be assessed.) (TAG, MTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 121
Typically Offered: Fall Semester

ELCT 222, ADVANCE MICROCONTROLLER APPLICATION 4 (6)
Topics in this course include a short review of microcontroller architecture and instruction sets. Software development using C, a high level language is applied to interrupt handling, interfacing techniques and driver development for hardware used in microcomputer applications. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 221
Typically Offered: Not offered this year

ELCT 223, ELECTRICAL BLUEPRINT READING 2 (2)
This course is an introduction to the skills required to read and understand electrical blueprints and schematic diagrams. The reading of blueprints is emphasized rather than the drawing of blueprints. (MTAG)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Spring Semester

ELCT 224, INDUSTRIAL ELECTRONICS 4 (6)
This course is an introduction to the theory, devices, circuits, and systems used to monitor, measure, and control industrial processes. Topics include the performance characteristics and application of DC motors, three phase motors and transformers, auxiliary motor devices, and power factor. Specification and characteristics of power switching devices including, rectifiers, transistors, thyristors, opto-isolators, regulated power supplies and applicable safety standards. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 211
Typically Offered: Spring Semester

ELCT 227, NATIONAL ELECTRIC CODE 2 (2)
This course covers a major subset of the knowledge and skills required for a technician working in the field of electrical power distribution, including the National Electrical Code with an emphasis on commercial and industrial applications.
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 111
Typically Offered: Not offered this year

ELCT 228, SWITCHGEAR, TRANSFORMERS & CONTROLS 3 (5)
This course covers a major subset of the knowledge and skills required for a technician working in the field of electrical power distribution, including: theory and operation of low and high voltage circuit breakers and switch gear; transformers; transformer connection methods; ladder logic; wiring diagrams, and input and output control devices. The laboratory includes hands-on construction and trouble shooting of practical industrial control circuits. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 112
Typically Offered: Not offered this year

ELCT 229, TRANSMISSION AND DISTRIBUTION OF ELECTRICAL POWER 3 (5)
This course covers a major subset of the knowledge and skills required for a technician working in the field of electrical power distribution, including: theory, operation, and analysis of power transmission systems, power distribution systems, and the components used in these systems. The laboratory includes field trips to appropriate electrical installations, as well as problem solving sessions. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 112
Typically Offered: Not offered this year

ELCT 233, ELECTRONIC DEVICES I 4 (6)
This course is an introduction to the theory, operation, and practical applications of solid state devices. Topics include diodes, bipolar junction transistors, amplifiers, field effect transistors, frequency response, thyristors, operational amplifiers, oscillators, and voltage regulators. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 111; Concurrent: MTHM 121
Typically Offered: Fall Semester

ELCT 234, ELECTRONIC DEVICES II 4 (6)
This course is a continuation of ELCT 233 Electronic Devices I. Topics include diodes, bipolar junction transistors, amplifiers, field effect transistors, frequency response, thyristors, operational amplifiers, oscillators and voltage regulators. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 233
Typically Offered: Spring Semester

ELCT 241, COMMUNICATIONS ELECTRONICS 4 (6)
The course presents the basic principles, circuits, and building blocks used in electronic communication systems. Topics include: noise, AM & FM modulation, radio receivers, transmitters, wave propagation, transmission lines, antennas, microwave concepts and satellite communications. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: ELCT 233
Typically Offered: Spring Semester

ELCT 287, WORK-BASED LEARNING I - ELCT 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a minimum GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required
ELCT 288, WORK-BASED LEARNING II - ELCT 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ELCT 287
Typically Offered: Offer as required

ELCT 289, WORK-BASED LEARNING III - ELCT 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ELCT 288
Typically Offered: Offer as required

ELCT 299, INDIVIDUALIZED STUDIES/ELECTRONICS 1-2 (1)
An in-depth study in the area of electronics engineering technology presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisites: Second-year standing and divisional approval.

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Emergency Medical Technical Basic (EMSB)

EMSB 101, EMERGENCY MEDICAL TECHNICIAN 8 (10)
This course instructs a student to the level of Emergency Medical Technician-Basic. Includes all skills necessary for the individual to provide emergency medical care at a basic life support level. The course will include medical emergencies, trauma, patient assessment, and infant and children emergencies. College lab and clinical included. (A special fee will be assessed.) (CTAG, MTAG)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: High school graduate or equivalent or 17 years of age and in the last year of high school, valid driver’s license.
Typically Offered: Summer, Fall and Spring Semesters

Emergency Medical Technician-Paramedic (EMSP)

EMSP 126, BODY SYSTEMS AND TERMINOLOGY FOR THE PARAMEDIC 3 (3)
This course introduces the anatomy, physiology, and medical terminology pertaining to body systems and how they relate to the assessment and treatment by the Emergency Medical Service (EMS) professional. This course covers cell structure and function, blood components and the different body systems as well as correct medical terminology that applies to each system or organ. (CTAG)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: State of Ohio Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT) Certification. Prerequisite: EMSP 126
Typically Offered: Fall and Spring Semesters

EMSP 127, PARAMEDIC PRACTICE - CONCEPTS I 1 (3)
This course is intended to provide supplemental education to increase the student's chance of success in the emergency medical field. (CTAG)

General Education: IN1, IN4, IN5
Course Entry Requirement(s): Concurrent: EMSP 126
Typically Offered: Fall and Spring Semesters

EMSP 128, PARAMEDIC PRACTICE - CONCEPTS II 3 (8)
This course focuses on case studies that require critical thinking skills. Clinicals comprised of specialty rotations including Trauma Center, Labor and Delivery, Behavioral Health, etc. Procedural knowledge included in this course are medication administration, advanced airway management, cardiac monitoring and electrotherapy. (CTAG)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: EMSP 127
Typically Offered: Summer and Spring Semesters

EMSP 131, PARAMEDIC PRACTICE - FUNDAMENTALS 3 (4)
This is an introductory course to the paramedic profession. Topics include EMS system overview, roles and responsibilities, welfare of the Emergency Medical System (EMS) professional, legal and ethical issues, communication and documentation, incident response and pathophysiology of traumatic and medical emergencies and shock. (CTAG)

General Education: IN1, IN2, IN3, IN4, IN5
Typically Offered: Fall and Spring Semesters

EMSP 132, PARAMEDIC PRACTICE - PROCEDURES 3 (4)
This course focuses on the patient assessment and treatment techniques performed by the Emergency Medical System (EMS) professional. Topics include patient assessment, airway management, medication administration, immobilization and lifting and moving. (CTAG)

General Education: IN1, IN4, IN5
Course Entry Requirement(s): Concurrent: EMSP 131
Typically Offered: Fall and Spring Semesters

EMSP 133, PARAMEDIC PRACTICE - CARDIAC EMERGENCIES 4 (8)
This course focuses on the assessment and advanced treatment of patients experiencing a cardiovascular emergency. Topics include cardiac electrocardiogram rhythm identification and assessment of and treatment for cardiac disorders. (CTAG)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: EMSP 132
Typically Offered: Summer and Fall Semesters
EMSP 134, PARAMEDIC PRACTICE - MEDICAL EMERGENCIES 3 (7)
This course focuses on the assessment and advanced treatment of patients experiencing a medical emergency. Topics include assessment and treatment for disorders pertaining to the following body systems: pulmonary, neurologic, endocrine, urologic, and gastrointestinal. (CTAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Concurrent: EMSP 133
Typically Offered: Summer and Fall Semesters

EMSP 135, PARAMEDIC PRACTICE - TRAUMA EMERGENCIES 4 (8.5)
This course focuses on the assessment and advanced treatment of patients experiencing a traumatic emergency. Topics include trauma systems, mechanism of injury, and assessment and treatment for patients suffering from a traumatic or environmental emergency. (CTAG)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Concurrent: EMSP 134
Typically Offered: Fall and Spring Semesters

EMSP 136, PARAMEDIC PRACTICE - SPECIALTY POPULATIONS 4 (7.5)
This course focuses on assessment and treatment of pediatric, geriatric, obstetric patients and those with behavioral and psychiatric disorders. Topics include pediatric and geriatric trauma and medical emergencies, reproductive system disorders, complications during pregnancy, child birth and neonatal care. (CTAG)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: EMSP 135
Typically Offered: Fall and Spring Semesters

EMSP 137, PARAMEDIC PRACTICE - CAPSTONE 2 (11)
This course allows the student to function in the prehospital setting as a team leader. The student will attend clinicals at fire departments and Emergency Medical Service (EMS) agencies and interact with staff and patients in a lead role. The end of program exams will be taken during this course. (CTAG)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: EMSP 136
Typically Offered: Fall and Spring Semesters

EMSP 299, INDIVIDUALIZED STUDIES IN EMERGENCY MEDICAL TECH PARAMEDIC 1-2 (1)
An in-depth study in the area of emergency medical technician paramedic presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Engineering Mechanics (EMCH)

EMCH 111, STATICS FOR TECHNOLOGY 3 (5)
Principles of statics, conditions for equilibrium concepts and analysis of force systems acting on rigid bodies in two-dimensional applications and basic analysis of forces on members of trusses, frames, and machines are studied. Frictional forces in limiting equilibrium, applications of concurrent force systems in space (3D), centroid and moment of inertia of plain areas are covered. Laboratory required. (A special fee will be assessed.) (TAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: MTHM 121
Typically Offered: Fall and Spring Semesters

EMCH 112, ENGINEERING MATERIALS 3 (4)
This course covers the properties, structure, and technical information that a technician needs to know to select appropriate materials and treatment processes that could be used in engineering applications. Also covered are the limitations and production processes of plastics, metals, ceramics, composites, cemented carbides, and other materials and variety of testing methods used for selection and specifying design specifications. Laboratory required. (A special fee will be assessed.) This course is cross-listed as EMCH 112 and BMKR 113. (TAG)
General Education: IN1
Course Entry Requirement(s): Course placement policy. Grade of C or higher in MTHM 033 or satisfactory placement assessment score in mathematics
Typically Offered: Spring Semester

EMCH 211, STRENGTH OF MATERIALS 4 (6)
Analysis of physical properties, strength characteristics, stress development, deformations and failure limits of engineering materials used in different types of loading and support conditions in engineering applications. Commercial catalogs and standard specifications will be used in lab settings. Laboratory required. (A special fee will be assessed.) (TAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: EMCH 111 and previous or concurrent enrollment in MTHM 122
Typically Offered: Fall and Spring Semesters

EMCH 221, MACHINE DESIGN 3 (5)
Mechanical design analysis and selection of machine components such as couplings, shafts, gears, bearings, springs, belts, etc. for power transmission assemblies using standard specifications and manufacturer's catalogs is covered. Computer software programs may be used in design labs. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: EMCH 211; Concurrent: PHYC 150
Typically Offered: Spring Semester

EMCH 231, ENGINEERING STATICS 3 (3)
This course covers the vector mechanics applications in 2D and 3D, and analysis of static forces and force systems to maintain equilibrium of solid objects, structures, cables, and beams in real engineering applications. Also covered are applications frictional forces, internal reactions, shear and bending moments, centroids and moment of inertia. (TAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: MTHM 182 and PHYC 151
Typically Offered: Spring Semester
Engineering Technologies (ENGR)

ENGR 120, INTRODUCTION TO ENGINEERING 1 (2)
An introductory course designed to promote students’ academic, social, and career skills by studying the practice of engineering and engineering technology in the modern world. Profiles of real engineers and technicians practicing in the field, their job tasks, life styles, and career growth are discussed. How to succeed in the classroom through open-ended problem solving activities, how to gain hands-on experience through lab exercises and work-based learning, and how to function on a team in an academic environment are discussed while touring the engineering technology laboratories. Laboratory required. (A special fee will be assessed.) (TAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ENGR 199, INTRODUCTION TO THE WORLD OF WORK - ENGR 1 (1)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.

Course Entry Requirement(s): A student must have completed a minimum of 12 semester credit courses at LCCC (courses transferred are not counted), have earned minimum 2.0 overall GPA; OR have division approval.

ENGR 268, ENGINEERING STATISTICS 3 (3)
This course introduces the student to the areas of probability theory and statistical inferences as they relate to the engineering profession. Topics include: sample spaces, the concept of random variable distributions, functions of random variables, transformation of variables, moment generating functions, sampling and estimation theory, T, F, Chi-Square distribution. (TAG)

General Education: IN1
Course Entry Requirement(s): Prerequisite: MTHM 281
Typically Offered: Fall and Spring Semesters

ENGR 299, INDIVIDUALIZED STUDIES IN ENGINEERING 1-2 (1)
An in-depth study of areas of engineering through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

English (ENGL)

ENGL 012, WRITING REVIEW 3 (3)
This course is designed to help students improve academic writing and reading prior to enrolling in required English courses. Emphasizes organization and development of short essays. Includes a review of selected topics in grammar and usage. May not be taken concurrently with Fundamentals of Writing or English Composition I. Prerequisites: Placement assessment or ENGL 011; and, if required, RDST 021 or RDST 022 or concurrently.

General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in ENGL 011 and RDST 021 or RDST 022 if required or satisfactory placement score in reading or English
Typically Offered: Not offered this year

ENGL 061, ACCELERATED WRITING REVIEW 2 (2)
Provides intensive instruction and practice in writing coherent paragraphs and essays for specific audiences; includes the drafting, revision, and editing processes as well as instruction in grammar, mechanics, and usage. Must be taken concurrently with ENGL 161. The course may not be taken concurrently with ENGL 012 or ENGL 011.

General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in ENGL 011 or satisfactory placement score in English. Must be taken at the same time as ENGL 161.
Typically Offered: Summer, Fall and Spring Semesters

ENGL 161, COLLEGE COMPOSITION I 3 (3)
An introduction to fundamental college-level skills in academic reading and writing. Summary, analysis, synthesis, and research documentation are emphasized, along with critical thinking and collaborative learning. English Core Course. (OTM)

General Education: C1, IN1
Course Entry Requirement(s): Course placement policy: Placement on the LCCC assessment or ENGL 012
Typically Offered: Summer, Fall and Spring Semesters

ENGL 162, COLLEGE COMPOSITION II 3 (3)
A writing course continuing the practice of skills introduced in ENGL 161, as well as strategies of argumentation and secondary research leading to a research paper. English Core Course. (OTM)

General Education: C1, IN1
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

ENGL 163, COLLEGE COMPOSITION II/SPECIAL TOPICS 3 (3)
A writing course, equivalent to English 162, that continues the practice of skills introduced in ENGL 161, as well as strategies of argumentation and secondary research leading to a research paper. The course readings will focus upon a specific topic to be determined by individual instructors. (OTM)

General Education: C1, IN1
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Spring Semester

ENGL 164, COLLEGE COMPOSITION II WITH TECHNICAL TOPICS 3 (3)
A writing course alternate to English 162, that continues the practice of skills introduced in ENGL 161, as well as strategies of argumentation and research. Students will practice writing informal and analytical reports to varied audiences in the medical, scientific or technical fields. An oral presentation/proposal may be required. (OTM)

General Education: C1, IN1
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall and Spring Semesters
ENGL 165, CREATIVE WRITING 3 (3)
Techniques and principles of creative writing; in particular, the writing of poetry and short fiction. Workshop sessions center on student writing.
General Education: IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ENGL 166, WRITING FICTION 3 (3)
Training and practice in the principles of fiction writing, through a study of contemporary stories and workshop discussion of student work.
General Education: IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ENGL 167, WRITING POETRY 3 (3)
Training and practice in the principles of poetry writing, through a study of contemporary poetry and workshop discussion of student work.
General Education: IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ENGL 168, PLAYWRITING FOR STAGE & SCREEN 3 (3)
Writing scripts for performance on stage and for television and film. Also adapting other works for fiction and non-fiction for performance. Workshop sessions center on student writing. THTR168 and ENGL 168 are cross-listed with each other.
General Education: IN3
Course Entry Requirement(s): None
Typically Offered: Spring Semester

ENGL 169, CREATIVE NONFICTION 3 (3)
An introductory exploration of the genre of Creative Non-Fiction focusing on the writing of memoir, autobiography, biography and personal essays.
General Education: IN1, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Not offered this year

ENGL 251, AMERICAN LITERATURE I 3 (3)
An historical survey of written and oral literature from the pre-colonial era of North America to the United States of 1865. Studies include a broad range of literary materials, figures and influences with emphasis upon the multicultural canon of American literature. Humanities Core Course. (OTM, TAG)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall Semester

ENGL 252, AMERICAN LITERATURE II 3 (3)
An historical survey of written and oral literature of the United States from 1865 to the present. Studies include a broad range of literary materials, figures and influences with emphasis upon the multicultural canon of American literature. Humanities Core Course. (OTM, TAG)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall Semester

ENGL 253G, INTRODUCTION TO WORLD LITERATURE 3 (3)
A survey of selected works in English and in translation from great literatures of the world. Readings include a broad range of genres, themes, and historical periods, from ancient to modern. Humanities Core Course. (OTM)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall and Spring Semesters

ENGL 254G, INTRODUCTION TO HISPANIC LITERATURE 3 (3)
An introduction to the literature of Spain and Spanish America. Significant works representing Spanish language poetry, drama, fiction, and essays (non-fiction) are studied in a broad historical and cultural context. (OTM)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall and Spring Semesters

ENGL 255G, INTRODUCTION TO FICTION 3 (3)
Study of short stories and novels to acquaint the general student with important themes and critical perspectives applicable to fiction. Humanities Core Course. (OTM)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

ENGL 256G, MASTERPIECES OF BRITISH LITERATURE I 3 (3)
The study of representative works of British literature from the beginning of 1798; emphasis on the literature as the expression of the time in which it first appeared. Humanities Core Course. (OTM, TAG)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall Semester

ENGL 257G, INTRODUCTION TO POETRY 3 (3)
Designed to help students understand and appreciate poetry through intensive study of representative poems. Humanities Core Course. (OTM)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

ENGL 258, INTRODUCTION TO DRAMA 3 (3)
A critical study of selected plays and dramatic movements designed to clarify the nature and significance of Western dramatic literature. Humanities core course. (OTM)
General Education: C5, IN1, IN2, IN3
Typically Offered: Fall Semester

ENGL 259G, INTRODUCTION TO DRAMA 3 (3)
A critical study of selected plays and dramatic movements designed to clarify the nature and significance of Western dramatic literature. Humanities core course. (OTM)
General Education: C5, IN1, IN2, IN3
Typically Offered: Fall Semester

ENGL 264, WOMEN'S LITERATURE 3 (3)
An introduction to the study of literature for, by, and about women. Significant works of women's literature representing a range of literary genres are studied within a wide range of historical, social, literary, and cultural contexts. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Spring Semester

ENGL 266G, AFRICAN AMERICAN LITERATURE 3 (3)
The course focuses on works from the significant body of literature that portrays African-American life and experience. Of particular interest will be those themes, situations, and character models which are rooted in African-American life and socio-political experience. The literature will be examined in terms of a cultural, historical and aesthetic heritage. Humanities Core Course. (OTM)
General Education: C5, IN1, IN2, IN3
Typically Offered: Summer, Fall and Spring Semesters
ENGL 267G, CHILDREN’S LITERATURE 3 (3)
Designed to help students understand, appreciate, and evaluate children’s literature through the study of selected novels, chapter books, picture books, poems, folktales and fairytales. Emphasis on recurring themes and techniques employed in children's literature. Humanities Core Course. (OTM)
General Education: C5, IN1, IN2, IN3
Typically Offered: Fall and Spring Semesters

ENGL 269G, INTRODUCTION TO SHAKESPEARE 3 (3)
A critical and appreciative study of selected plays from the comedies, histories and tragedies. Humanities Core Course. (OTM)
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall Semester

ENGL 271, INTRODUCTION TO LANGUAGE AND LINGUISTICS 3 (3)
This course provides a survey of the properties of human languages and their systematic study in the field of linguistics. We will examine language as a structured system of form and meaning and how language interacts with various aspects of society. This course provides the groundwork for future studies of language and communication in a broad range of disciplines: modern languages, communication, education, artificial intelligence, health, speech therapy, business, philosophy, sociology, anthropology and many other disciplines. No prior course work or exposure to linguistics is necessary. We will begin with the basic assumptions that are shared by those who study language from a variety of perspectives.
General Education: C5, IN1, IN2, IN3, IN4, IN5
Typically Offered: Fall and Spring Semesters

ENGL 299, INDIVIDUALIZED STUDIES IN ENGLISH 1-2 (1)
This is an in-depth study of areas in composition, literature and/or linguistics presented by discussion and/or individual research and reading. Topics may vary. Repeatable up to four (4) credit hours. Prerequisite: Second-year standing or divisional approval.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required

English as a Second Language (ESLG)

ESLG 011, ESL GRAMMAR BEGINNING LEVEL 4 (4)
English for non-native speakers. This course is designed for students who need extensive work at an introductory level. It includes study of basic verb tenses, parts of speech, subject-verb agreement, basic sentence patterns and spelling rules.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment by ESL assessment examination. To be taken concurrently with ESLG 012 and 013 or with division approval
Typically Offered: Fall and Spring Semesters

ESLG 012, READING/CULTURE BEGINNING LEVEL 4 (4)
In this course students improve introductory reading skills. They become acquainted with and react to American culture through readings and comparisons with their own culture. Students learn to discriminate between main ideas and supporting details. They improve comprehension by expanding their vocabulary and increasing their knowledge of idioms.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment by ESL assessment examination. To be taken concurrently with ESLG 011 and 013 or with division approval.
Typically Offered: Fall and Spring Semesters

ESLG 013, LISTENING/SPEAKING BEGINNING LEVEL 4 (4)
In this course students practice speaking idiomatic English and using standard American pronunciation. They also expand their listening comprehension skills. Students improve their ability to communicate more accurately and effectively by practicing dialogues and conversations dealing with daily life.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy: Satisfactory placement by ESL assessment examination. To be taken concurrently with ESLG 011 and 012 or with division approval.
Typically Offered: Fall and Spring Semesters

ESLG 014, ESL WRITING BEGINNING LEVEL 4 (4)
English for non-native speakers. This course is designed for students who have limited knowledge of both spoken and written English. It includes intensive instruction and practice in sentence structure, paragraph organization and development, storytelling and writing as well as targeted grammar practice and usage. The focus of the course is to help students become more confident in expressing themselves in written and spoken English.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment by ESL assessment examination. Concurrent enrollment in ESL grammar, reading/culture, listening/speaking, beginning level or with division approval
Typically Offered: Spring Semester

ESLG 021, ESL WRITING/GRAMMAR INTERMEDIATE LEVEL 4 (4)
English for non-native speakers. This course is designed to improve skills in writing paragraphs using a variety of organizational patterns. It includes further study of verb tenses, sentence combining, gerunds, and modals. Emphasis is placed on writing effective one-paragraph essays using correct grammar and mechanics.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment by ESL assessment examination. ESLG 011 or division approval, to be taken concurrently with ESLG 022 and ESLG 023
Typically Offered: Fall and Spring Semesters

ESLG 022, READING/CULTURE INTERMEDIATE LEVEL 4 (4)
In this course students further improve reading comprehension, develop greater awareness of cross-cultural communication patterns and explore the history and geography of the United States. Simplified literature is also introduced.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Course placement policy: Satisfactory placement by ESL assessment examination. ESLG 012 or division approval, to be taken concurrently with ESLG 021 and ESLG 023
Typically Offered: Fall and Spring Semesters

ESLG 023, LISTENING/SPEAKING INTERMEDIATE LEVEL 4 (4)
This course focuses on pronunciation and listening comprehension at an intermediate level. Students learn to organize and deliver oral presentations. They also increase their knowledge of English grammar essential to oral communication.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy: Satisfactory placement by ESL assessment examination. ESLG 013 or division approval to be taken concurrently with ESLG 021 and ESLG 022
Typically Offered: Fall and Spring Semesters
ESLG 041, WRITING WORKSHOP FOR NON-NATIVE SPEAKERS 4 (4)
This workshop is designed to help students succeed in academic writing courses. Emphasis is given to research paper writing and grammar trouble spots.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy. ESLG 031 or division approval
Typically Offered: Not offered this year

ESLG 115, VOCABULARY DEVELOPMENT FOR IMPROVED COMMUNICATION 2 (2)
This English for non-native speakers course is designed to help ESL students succeed academically by expanding their knowledge of academic vocabulary. The study of vocabulary from the Academic Word List is a crucial component to improving listening, speaking, and reading comprehension and an essential preparatory step for ESL students toward understanding college texts.
General Education: IN2
Course Entry Requirement(s): Course placement policy. Satisfactory placement assessment by ESL assessment examination and previous or concurrent enrollment in intermediate or advanced ESL classes
Typically Offered: Spring Semester

ESLG 116, ESL IMPROVING COMPREHENSION THROUGH IDIOMS 2 (2)
This course of English for non-native speakers is designed to improve the communication skills of English as a Second Language Students by helping them develop a working knowledge of the most commonly used American idioms and phrasal verbs.
General Education: IN2
Course Entry Requirement(s): Course placement policy. Satisfactory placement assessment by ESL assessment examination and previous or concurrent enrollment in intermediate or advanced ESL classes.
Typically Offered: Spring Semester

ESLG 131, ESL WRITING/GRAMMAR ADVANCED LEVEL 4 (4)
English for non-native speakers. This course emphasizes expository writing through multiple essays, written summaries and a research paper. Particular attention is given to improving unity and coherence, using transitions, and mastering complex grammatical structures. Students also learn how to proofread and edit their own writing.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy. Satisfactory placement assessment by ESL assessment examination and grade of C or higher in ESLG 023 or division approval. To be taken concurrently with ESLG 131 and ESLG 132 or division approval
Typically Offered: Fall and Spring Semesters

ESLG 132, READING/CULTURE ADVANCED LEVEL 4 (4)
In this course students develop strategies for comprehending college textbook chapters, newspapers and magazines. They read and interpret material on current American culture topics. Students work on preparing oral and written summaries and learn how to think critically about their readings.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Course placement policy. Satisfactory placement assessment by ESL assessment examination and grade of C or higher in ESLG 022 or division approval. To be taken concurrently with ESLG 131 and ESLG 133 or division approval
Typically Offered: Fall and Spring Semesters

ESLG 133, LISTENING/SPEAKING ADVANCED LEVEL 4 (4)
This course enables students to strengthen their public speaking skills by delivering several speeches. Students refine their pronunciation skills and at the same time learn how to use complex idioms and advanced vocabulary. They also hone their listening comprehension skills and learn how to take notes on academic lectures.
General Education: IN1, IN2
Course Entry Requirement(s): Course placement policy. Satisfactory placement assessment by ESL assessment examination and a grade of C or higher in ESLG 023 or division approval. To be taken concurrently with ESLG 131 and ESLG 132 or division approval
Typically Offered: Fall and Spring Semesters

ESLG 151, ESL - ENGLISH ACQUISITION THROUGH ORAL COMMUNICATION 4 (4)
English language acquisition through the introduction to Oral Communication. This course is designed to provide students with the fundamental knowledge and skills to become better overall communicators. Students will gain a foundation in interpersonal and small group communication, as well as public speaking. Course topics include such areas as self-concepts, perception, language and communication, listening, developing relationships, conflict negotiation, small group dynamics, and leadership, in addition to speech construction and delivery. Throughout the course, emphasis will be placed on the application of communication theory to real life experience. This course is an alternative to CMMC 151 for ESL students.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Corequisite: ESLG 131 or ESLG 132 or ESLG 133 or division approval
Typically Offered: Fall and Spring Semesters

ESLG 181, ESL - ENGLISH ACQUISITION THROUGH ACTING 4 (5)
English language acquisition through the introduction to the basic principles of acting. Students participate in improvisation, acting out scenes from selected plays, and interpretation of dramatic literature. This course is an alternative to THTR 181 for ESL students. Laboratory required.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: ESLG 131 or ESLG 132 or ESLG 133 or division approval; Course placement policy: ESLG 021 or ESLG 022 or ESLG 023 or division approval
Typically Offered: Fall and Spring Semesters

Entrepreneurship (ENTR)

ENTR 200, ENTREPRENEURSHIP 3 (3)
An in-depth examination of the many facets of starting and managing a small business with an emphasis on the entrepreneurial skills necessary to be successful. This course contains an opportunity for Experiential Learning with an applied project requirement. (CTAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

ENTR 201, ENTREPRENEURIAL FINANCE 3 (3)
The course will provide the students with an understanding of the financing of entrepreneurial ventures. Students will develop a financial plan for a new or existing venture.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: ACTG 151; Concurrent: ECNM 151
Typically Offered: Fall and Spring Semesters
ENTR 202, ENTREPRENEURIAL MARKETING 3 (3)
Marketing for entrepreneurship will provide entrepreneurs with the marketing information designed for them. Issues such as opportunities for new ventures, pricing and distribution for entrepreneurial firms and integrating entrepreneurship and marketing research will be discussed in the class. Students will develop marketing plans for their new venture.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

ENTR 203, ENTREPRENEURIAL MANAGEMENT 3 (3)
Introduction to major points of entrepreneurial management. Topics include the role of major business, how to plan and organize a business, how to market goods and services, how to organize the business, how to operate the business, basic financial planning and control, providing security for the business.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

ENTR 204, ENTREPRENEURIAL APPLICATIONS PRACTICUM 3 (15)
Entrepreneurial Applications Practicum is a capstone course that will allow the students to apply various acquired skills to an entrepreneurial setting. The instructor will conduct sessions with the students to review journals, share experience, and offer guidance to the students as they apply their learned skills to entrepreneurial companies and, or simulations, in a variety of formats.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENTR 200, ENTR 201, ENTR 202 and ENTR 203; Concurrent: ENTR 205 or division approval
Typically Offered: Fall and Spring Semesters

ENTR 205, NEW VENTURE CREATION 3 (3)
This course builds on the entrepreneurship course. It explores entrepreneurship in detail. It provides an opportunity to create a new venture and develop a business plan.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENTR 200
Typically Offered: Spring Semester

ENTR 287, WORK-BASED LEARNING I - ENTR 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

Environmental Science (ENVS)

ENVS 120, HAZARDOUS WASTE OPERATIONS & EMERGENCY RESPONSE (HAZWOPER) 3 (4)
This class is designed to provide students with theoretical and hands-on instruction in hazardous waste operations and emergency response (HAZWOPER) as it relates to chemical and physical exposures in industrial and field settings. This course satisfies the requirement for generalized employee training under OSHA (1910.120).

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Not offered this year

ENVS 286, INTERNSHIPS IN INDUSTRIAL HYGIENE 1 (10)
The overall goal of this class is to further develop and refine the students laboratory and analytical skills within the restrictions of a real-world environmental/industrial hygiene laboratory setting. This course will provide students with unique opportunities to gain hands-on experience with employers. Throughout the class, the students will work in specific duties assigned in positions developed around the needs of the laboratory. Students will gain valuable experience in sample collection, sample analysis, data analysis and reporting.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CHMY 274 and second year standing and/or division approval.
Typically Offered: Offer as required

Finance (FNCE)

FNCE 111, REAL ESTATE PRINCIPLES & PRACTICES 3 (3)
This course familiarizes each student with the principles and practices of the real estate business through study of the nature, importance, and character of land; the real estate market; financing; property ownership; stages in the real estate transaction and appraisal, escrow, and title work. Special attention will be given to fair housing, civil rights and ethics. This course partially fulfills the Ohio Department of Real Estate’s requirements to sit for the sales examination.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

FNCE 112, REAL ESTATE LAW 3 (3)
This course provides the foundation for understanding the legal implications embodied in real estate transactions, contracts, and other relationships. Ohio (local, municipal, and state) real estate law, as well as federal civil rights laws are studied. Land ownership, its components, rights, responsibilities, transfer, and limitations are reviewed within the context of the sales transaction along with the contracts, deeds, and closing the title for the property. Specific attention is given to case law pertaining to housing discrimination, segregation issues, and eliminating the effects of prior discrimination. Course also covers agency law and landlord tenant arrangements. Course partially fulfills the Ohio Department of Real Estate’s requirements to sit for the sales examination.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
FNCE 115, REAL ESTATE FINANCE 1 (1.75)
The institutions, methods, instruments, and procedures involved in the financing of real estate, the nature and characteristics of mortgage loans, government influence on real estate finance, and the nature of the mortgage market. Course partially fulfills the Ohio Department of Real Estate's requirements to sit for the sales examination.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

FNCE 118, REAL ESTATE APPRAISAL 1 (1.75)
Appraisal as it applies to single and double family dwellings. Studies the factors in a property appraisal, which affect value. Approaches to property valuation are covered with emphasis on the market data approach and replacement cost approach. Use of appraisal techniques to construct an appraisal report. Course fulfills part of the requirements of the Ohio Department of Real Estate requirements to sit for the sales examination.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

FNCE 251, BUSINESS FINANCE 3 (3)
An introductory course covering the basic principles of business finance with an emphasis on analysis of financial decisions, valuation concepts, and sources and uses of capital.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): ACTG 152, ECNM 151 and ECNM152
Typically Offered: Summer, Fall and Spring Semesters

FNCE 287, WORK-BASED LEARNING I - FNCE 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval
Typically Offered: Offer as required

FNCE 288, WORK-BASED LEARNING II - FINANCE 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: FNCE 287
Typically Offered: Offer as required

FNCE 289, WORK-BASED LEARNING III - FNCE 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: FNCE 288
Typically Offered: Offer as required

FNCE 299, INDIVIDUALIZED STUDIES/FINANCE 1-2 (1)
An in-depth study of areas in finance. Thorough discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Offer as required

Fire Science (FIRE)

FIRE 111, INTRODUCTION TO FIRE SERVICE 3 (3)
Basic introduction to fire protection, including the role, history, development and organization of the Fire Service. Topics include fire equipment, apparatus, fire ground operations, fire prevention and career opportunities. (TAG)

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

FIRE 112, BUILDING DESIGN AND CONSTRUCTION 3 (3)
Introduction to the elements of building design, construction techniques, and building materials. Emphasis is on the firefighting tactics that are deployed to control fire in various types of construction. (TAG)

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

FIRE 120, FIRE INVESTIGATION I 3 (3)
This course is designed to provide the student with the knowledge of basic fire chemistry, fire scene analysis, evidence collection, arson investigation and documentation for preparation of arson litigation. The role of the arson investigation in relation to the legal system will be included as well.

General Education: IN1
Course Entry Requirement(s):Prerequisite: FIRE 111, FIRE 112 and FIRE 125
Typically Offered: Fall and Spring Semesters

FIRE 123, BUILDING DESIGN AND CONSTRUCTION II 1 (1)
Introduction to the elements of building design, construction techniques, and building materials. Emphasis is on the firefighting tactics that are deployed to control fire in various types of construction.

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer and Fall Semesters

FIRE 125, FIRE BEHAVIOR AND COMBUSTION 2 (2)
Course covers the theories and fundamentals of how and why fires start, spread, and are controlled. (TAG)

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall Semester
FIRE 127, FIREFIGHTER ORIENTATION 1 (2)
This course is an introduction to the basic concepts of firefighting. Topics include fire behavior, personal protective equipment, ventilation, tools, ladders, water supply and overhaul. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

FIRE 130, EMERGENCY SERVICES SAFETY AND SURVIVAL 2 (2)
This course introduces the basic principles and history related to the national firefighter life safety initiatives. It will focus on the need for the cultural and behavioral change throughout the emergency services. (TAG)
General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

FIRE 131, FIREFIGHTING LEVEL I 2 (3.5)
This course introduces the student to the role of the Firefighter I. Topics include fire department communications, fire ground operations, fire prevention and preparedness, preventive maintenance and apparatus driving and operation. Laboratory required. A special fee will be assessed.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: High school diploma or equivalent
Typically Offered: Summer, Fall and Spring Semesters

FIRE 132, FIREFIGHTING LEVEL II 2 (3.5)
This course covers the advanced role of the Firefighter II. Topics include fire department communications, advanced fire ground operations and command, fire prevention and preparedness and preventive maintenance. Laboratory required. Special fees will be assessed.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: FIRE 131, Concurrent: FIRE 111 and FIRE 127
Typically Offered: Summer, Fall and Spring Semesters

FIRE 134, FIREFIGHTING HYDRAULICS AND WATER SUPPLY 2 (2)
This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principals in analyze and to solve water supply problems.
General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

FIRE 136, STRATEGY AND TACTICS 3 (3)
Principles of fire ground control through the utilization of personnel, equipment and extinguishing agents.
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 111
Typically Offered: Fall Semester

FIRE 210, HAZARDOUS MATERIALS CHEMISTRY 2 (2)
This course covers various techniques that are deployed to address different types of fires and the importance of effective water supply/hydraulics in deploying those tactics. Topics include building construction, supplementary fire suppression systems, and water relay systems. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 111
Typically Offered: Fall Semester

FIRE 214, FIREFIGHTING TACTICS & WATER SUPPLY I 1 (1.75)
This course covers various techniques that are deployed to address different types of fires and the importance of effective water supply/hydraulics in deploying those tactics. Topics include building construction, supplementary fire suppression systems, and water relay systems. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 214
Typically Offered: Fall Semester

FIRE 215, FIREFIGHTING TACTICS AND WATER SUPPLY II 2 (2)
This course will engage the student with the principles of national incident command systems (i.e. NIMS) and the specific responsibilities associated with each position within the command and general staff. Incident command management will be applied to large conflagrations, mass casualty incidents, hazardous material incidents, wildland fires, weapons of mass destruction, and everyday operations.
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 214
Typically Offered: Fall Semester

FIRE 216, COMMAND AND LINE SUPERVISION I 1 (1)
This course will engage the student with the principles of national incident command systems (i.e. NIMS) and the specific responsibilities associated with each position within the command and general staff. Incident command management will be applied to large conflagrations, mass casualty incidents, hazardous material incidents, wildland fires, weapons of mass destruction, and everyday operations.
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 214
Typically Offered: Fall Semester

FIRE 217, COMMAND AND LINE SUPERVISION II 2 (2)
This course will engage the student with the principles of national incident command systems (i.e. NIMS) and the specific responsibilities associated with each position within the command and general staff. Incident command management will be applied to large conflagrations, mass casualty incidents, hazardous material incidents, wildland fires, weapons of mass destruction, and everyday operations.
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 214
Typically Offered: Fall Semester

FIRE 218, HAZARDOUS MATERIALS OPERATIONS 1 (2)
This course emphasizes the concepts of basic chemistry in order to identify the hazards encountered by emergency responders when responding to hazardous materials incidents.
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Spring Semester

FIRE 224, LEGAL CONCEPTS FOR EMERGENCY SRVCS 3 (3)
The student will be introduced to Federal, State, and local laws that apply to today's emergency services, Fire, EMS and Police, the national standards that can influence emergency services, standard of care, tort, liability and a review of pertinent court cases that have an effect on the Fire Service.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: FIRE 111, FIRE 120 and FIRE 212, None
Typically Offered: Fall and Spring Semesters
FIRE 227, FIRE PREVENTION 3 (3)
Course addresses the principles of fire prevention including role of the fire prevention bureau, application of codes and standards, inspections, investigations, and fire and life safety education. National Fire Protection Association (NFPA), Ohio Fire Code, and municipal code standards also discussed. (TAG)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

FIRE 228, FIRE AND EMERGENCY SERVICE ADMINISTRATION 2 (2)
Course examines the administrative functions of fire departments. Topics include business management, personnel management, labor relations, personnel training, fire command and budget.
General Education: IN1
Course Entry Requirement(s): Prerequisite: FIRE 111
Typically Offered: Spring Semester

FIRE 229, FIRE PROTECTION SYSTEMS 2 (2)
Course addresses the principles of building inspection and fire code enforcement. Emphasis is on the legal requirements and liability policies as identified in National Fire Protection Association (NPFA), Ohio Fire Code and municipal code standards. (TAG)
General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

FIRE 240, EMERGENCY SERVICES OCCUPATIONAL HEALTH AND SAFETY 2 (2)
Course introduces the basic concepts of occupational health and safety for emergency services including risk and hazard evaluation and control procedures for emergency services.
General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

FIRE 299, INDIVIDUALIZED STUDIES IN FIRE 1-2 (1)
An in-depth study of areas in Fire Science presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

French (FRNH)

FRNH 151G, ELEMENTARY FRENCH I 4 (5)
An introduction to the language and cultures of the French-speaking world. Development of creative communication skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

FRNH 152G, ELEMENTARY FRENCH II 4 (5)
Continuation of Elementary French I. Further study of the language and cultures of the French-speaking world. Continued development of creative communication skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies. (IN1, IN2, IN3)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: FRNH 151G
Typically Offered: Spring Semester

FRNH 251G, INTERMEDIATE FRENCH I 3 (4)
Review of the fundamental structures and introduction of more complex grammatical structures and communication skills with a balanced emphasis on speaking, listening, reading and writing. Exploration of the civilization, culture, and customs of French-speaking people. Laboratory practice using various technologies.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: FRNH 152G
Typically Offered: Summer and Fall Semesters

FRNH 252G, INTERMEDIATE FRENCH II 3 (4)
Continuation of Intermediate French I. Further refinement of the structures and communicative skills with a balanced emphasis on speaking, listening, reading and writing. Continued exploration of the civilization, culture and customs of French-speaking people. Laboratory practice using various technologies.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: FRNH 251G
Typically Offered: Summer and Spring Semesters

FRNH 299G, INDIVIDUALIZED STUDIES IN FRENCH 1-2 (1)
This is an in-depth study of selected/varied topics in French language or literature. Emphasis on historical, cultural and literary movements and on life and institutions of contemporary France. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Geography (GPHY)

GPHY 111, INTRODUCTION TO CARTOGRAPHY 3 (4)
This course introduces the student to the cartographic principles of map production and interpretation. Topics covered are the history of map making, symbolic standards, layout aesthetics, geographic coordinates and projections, map scales, map accuracy, and computer assisted mapping. Students will create hand drawn maps and digital maps in geographic information systems (GIS).
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Spring Semester

GPHY 151G, HUMAN GEOGRAPHY 3 (3)
Study of the relationship of man to his geographic environment in the major regions of the world. Includes the study of climate, land forms and people as related to various cultures throughout the world. (OTM, TAG)
General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

GPHY 152, GEOGRAPHY OF UNITED STATES/CANADA 3 (3)
A survey of North American geography emphasizing the interrelationship of physical, social and cultural systems, their sources and consequences. Intensive study of smaller regions included. Social Sciences Core Course. (OTM)
General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

GPHY 501, PHYSICAL GEOGRAPHY 3 (3)
To be used to transfer in course sharing classes for OGTP.
Typically Offered: Offer as required
HPHY 502, WORLD REGIONAL GEOGRAPHY 3 (3)
To be used to transfer in course sharing classes for OGTP.
Typically Offered: Offer as required
HPHY 503, MAP COMMUNICATION & ANALYSIS 3 (3)
To be used to transfer in course sharing classes for OGTP.
Typically Offered: Offer as required
HPHY 504, INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS 3 (3)
To be used to transfer in course sharing classes for OGTP.
Typically Offered: Offer as required

German (GRMN)

GRMN 151G, ELEMENTARY GERMAN I 4 (5)
An introduction to the language and cultures of the German-speaking world. Development of creative communicative skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Not offered this year
GRMN 152G, ELEMENTARY GERMAN II 4 (5)
Continuation of Elementary German I. Further study of the language and cultures of the German-speaking world. Continued development of creative communicative skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: GRMN 151G
Typically Offered: Not offered this year
GRMN 251G, INTERMEDIATE GERMAN I 3 (4)
This course, conducted in German, is designed to review and develop skills in speaking, understanding, reading, and writing by using authentic German texts as a basis for practice and discussion. As students build vocabulary, they will learn to express opinions on various topics related to contemporary culture, history and geography.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: GRMN 152G
Typically Offered: Not offered this year
GRMN 252G, INTERMEDIATE GERMAN II 3 (4)
Continuation of Intermediate German I. Conducted in German. Increase language proficiency by using German texts as a basis for discussion and writing. Offer opinions on a variety of topics related to contemporary cultural and social issues. Learn new, relevant vocabulary and practice grammatical structures. (IN1, IN2, IN3)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: GRMN 251G
Typically Offered: Not offered this year

Health Education (HLED)

HLED 125, INTRODUCTION TO HEALTH AND WELLNESS COACHING 1 (1)
This course is designed to provide an introduction to health and wellness coaching/promotion career job task analysis. Topics and or content include roles and responsibilities of a health and wellness coach, coaching structure, coaching process i.e. coaching relationship/communication techniques, health and wellness concepts, ethics/legal responsibilities and creating a professional portfolio.
General Education: IN2, IN4, IN5
Typically Offered: Summer, Fall and Spring Semesters

HLED 150, DRUGS ALCOHOL AND TOBACCO 3 (3)
Drugs Alcohol and Tobacco: An introduction to issues of alcohol and substance abuse. Historical points, risk factors, basic pharmacology of drug actions, prevention and the potential consequences of substance abuse and misuse will be included along with discussion of treatment plans.
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HLED 151, PERSONAL HEALTH 2 (2)
Course explores the attitudes and practices that are necessary for more healthful living by examining today's health issues and contemporary approaches to maintaining good health and ways to modify behaviors to enhance one's quality of life.
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HLED 152, COMMUNITY HEALTH 2 (2)
This class encompasses knowledge and understanding of major health problems in communicable and non-communicable disease control, safety, consumer and environmental health. Course requires a volunteer community service learning project.
General Education: IN3, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HLED 153, FIRST AID AND SAFETY 2 (3)
This two part course includes the American Heart Association Health Care Provider CPR and the American Red Cross Responding to Emergencies First Aid. The course incorporates hands on training to provide the citizen responder with the knowledge and skills necessary to perform in emergency situations to help sustain life, reduce pain and minimize the consequences of injury or sudden illness until professional medical help arrives. Red Cross Responding to Emergencies and American Heart Association Health Care Provider certificates will be awarded upon instructor's recommendation and student successful. (A special fee will be assessed.)
General Education: IN1, IN3, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HLED 154, CARDIO-PULMONARY RESUSCITATION CPR 1 (1)
Identification of warning signs and application of life-saving techniques for individuals experiencing medical emergencies (e.g. respiratory distress/arrest, airway obstruction and cardiac arrest). Course taught according to American Heart Association (AHA) guidelines for Health Care Providers, other professionals, and the layperson. An American Heart Association Health Care Provider certificate will be awarded upon successful completion of the AHA - Basic Life Support (BLS) examination (a score of 84% or higher) and all core BLS skills. This course may be repeated up to three (3) times for credit, but can satisfy only one (1) credit for academic program requirement. Non-credit options are available. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HLED 156, HEALTH AND WELLNESS 2 (2.5)
This course emphasizes the adaptation of a wellness lifestyle through behavior modification in the following areas: physical fitness, nutrition, weight management, stress management, cardiovascular health, and the reduction of at risk lifestyle behaviors. The student will engage in a variety of health-related and physical fitness labs, service learning activity and critical thinking exercises. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HLED 157, WOMEN'S HEALTH 3 (3)
The Women's Health course explores intrapersonal, interpersonal and social factors that affect a woman's health and well-being. Interactive discussions include preventing chronic diseases, personal sexuality, diversity issues, and the latest trends and research to promote and protect the health, safety and the quality of life for women throughout their lifetime.

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HLED 159, WILDERNESS AND REMOTE FIRST AID 2 (3)
Wilderess First Aid: Comprised of lecture, demonstration and application of survival first aid skills, this course equips the student to use common sense and critical thinking skills when addressing medical emergencies in the wilderness or remote areas. Training will include victim assessment and application of improvised first aid skills to address a variety of medical conditions along with appropriate measures for survival. Red cross Wilderness and Remote First Aid certificate will be awarded upon instructor's recommendation. (A special fee will be assessed to cover equipment and certification costs.)

General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: Participants must be 16 years of age or older when the course begins.
Typically Offered: Summer, Fall and Spring Semesters

HLED 160, MODULAR EDUCATION PROGRAM FOR ACTIVITY PROFESSIONALS (MEPAP) I 8 (13)
This course is offered by the federal and state government, as well as the National Certification Council of Activity Professionals (NCCAP), as the Modular Education Program for Activity Professionals (MEPAP) course. This class provides an overview of the activities profession, knowledge of human development in the later adult years and the relationship to activity programming, an understanding of how illness and disability impact the elderly and an understanding of standards of practice, including regulations and experiential learning through off-site practicum hours.

General Education: IN1, IN4, IN5

HLED 162, MODULAR EDUCATION PROGRAM FOR ACTIVITY PROFESSIONALS (MEPAP) II 8 (13)
This course is one of the two MEPAP classes required to sit for the National Certification Council for Activity Professionals (NCCAP) exam. The class explores activity care planning for improved quality of life in long-term care and methods of service delivery in the activity profession. Topics include documentation, program planning, working with volunteers, team members, activity analysis, and experiential learning through off-site practicum hours.

General Education: IN1, IN2, IN3, IN4, IN5

HLED 164, CPR RENEWAL CERTIFICATION AHA/BLS/HCP 1 (1)
This course is for individuals seeking to renew American Heart Association (AHA) Basic Life Support for Healthcare Provider status. Prior to attending the on-campus class session, students will be required to complete all reading assignments and skills practice to prepare for knowledge and skill assessments by reading the AHA textbook, completing assignments using the LCCC online course management system and practicing CPR skills. AHA Healthcare Provider Certificate will be awarded upon successful completion of the AHA standardized skill assessment and written exam. This course may be repeated up to three (3) times for credit, but can only be applied for one (1) credit for academic program requirement. (A special fee is required.)

General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: Current American Heart Association BLS for Healthcare Providers certification required (card to be verified prior to registering for class).
Typically Offered: Summer, Fall and Spring Semesters

HLED 165, MENTAL HEALTH FIRST AID AND SAFETY 3 (4)
This course includes the National Council for Behavioral Health Mental Health First Aid USA. American Heart Association Heart Saver First Aid and Basic Life Support CPR/AED. The course includes real world scenarios, activities and hands on training to develop skills to help someone who is developing a mental health problem or experiencing a mental health crisis. It also, provide the lay responder skills necessary to perform in emergency situations minimize the consequences of injury or sudden illness until professional medical help arrives. Mental Health First Aid USA, and American Heart Association Heart Saver First Aid and Basic Life Support CPR/AED certificates will be awarded upon instructor's recommendation and successful completion of competencies. This course may be repeated up to four (4) times for credit, but can only be applied for three (3) credits for academic program requirement. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Typically Offered: Offer as required

HLED 166, NUTRITION AND WEIGHT MANAGEMENT STRATEGIES 2 (2.5)
This course is designed as an introduction to dietary reference intakes, daily food intakes, food label interpretation, carbohydrates, fats, protein, vitamins, minerals, water, and how the body responds to physical activity. An exercise component is incorporated into the course. Healthy living topics will be addressed. A portion of the lab fee will pay for the curriculum based Providing Dietary Guidance Specialty Certificate online exam administered at the conclusion of the course.

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

HLED 221, HEALTH PROMOTION AND BEHAVIOR CHANGE 3 (3)
This course will introduce the learner to the foundations of research on health and physical activity behaviors and diseases associated with physically inactive lifestyles. Theory-based physical activity interventions, tools for measuring motivational readiness for behavior change will be explored. The learner will design health promotion intervention programs for individuals and groups at work site and community settings. Service Learning is a component in this course. Students pursuing an Allied Health major may have pre-requisites waived. A portion of the lab fee will pay for the curriculum based Coaching Healthy Behaviors Specialty Certificate online exam administered at the conclusion of the course. (A special fee will be assessed.)

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: HLED 151 or HLED 156
Typically Offered: Spring Semester
Typically Offered: SDEV 111 and SDEV 112

General Education: Legal responsibilities.

Course Entry Requirement(s): Communication techniques, health and wellness concepts and ethics/communication techniques, health and wellness concepts and ethics.

Typically Offered: Summer, Fall and Spring Semesters

**Health and Physical Education (HPED)**

**HPED 120, SENIOR FITNESS ASSESSMENT 1 (2)**
This course will focus on identifying the functional fitness parameters of the older population. The students learn to administer and interpret the results of the senior fitness assessment to design an appropriate fitness program for the older population. Experiential learning will be a component of the course through practical experiences.

General Education: IN1, IN5

Typically Offered: Fall Semester

**HPED 152, APPLICATION OF ACTIVITIES ACROSS A LIFESPAN 3 (4)**
This course includes an investigation of the characteristics and movement needs across a lifespan. Students will acquire practical experience in teaching group and individual wellness activities, locomotor, non-locomotor and manipulative skills. Emphasis is placed on the selection, adoption, and teaching of appropriate activities, and modifications to meet the needs of all special populations.

General Education: IN1, IN2, IN3, IN4, IN5

Typically Offered: Fall Semester

**HPED 155, SPORT HISTORY 3 (3)**
This course is designed to examine the role of sport in American history. The development of sport in the United States, including philosophy, institutions, principles and individuals that influenced sport will be examined.

General Education: IN1, IN2, IN3, IN5

Typically Offered: Summer Semester

**HPED 160, INTRODUCTION TO SPORT STUDIES 3 (3)**
This course is designed to provide an overview of sport management, marketing, finance, sociology, law, history, and their relationship to sport studies. Focus will also be placed on possible career options within the sport industry.

General Education: IN1, IN2, IN3, IN5

Typically Offered: Summer Semester

**HPED 164, INTRODUCTION TO ATHLETIC COACHING 3 (3)**
This course is designed to introduce students to the theory and practice of effective coaching strategies. Topics covered will include sport history, sport performance, sport programming, legal aspects of sport, and care and prevention of injuries. This course may be taken for Continuing Education Unit (CEU) Continuing Education Credit (CEC) by coaches and higher education professionals. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5

Course Entry Requirement(s): None

Typically Offered: Summer Semester

**HPED 165, INTRODUCTION TO EXERCISE SCIENCE 3 (3)**
This course provides an introduction to exercise science and the related sub-disciplines. Information concerning choosing a career, national certifications, professional organizations, and legal issues will be addressed. Students will explore professional goals, potential careers, and the essential competencies required to be successful in the field of exercise science and sport and fitness management. (CTAG)

General Education: IN2, IN4, IN5

Course Entry Requirement(s): None

Typically Offered: Fall and Spring Semesters

**HPED 166, GROUP EXERCISE INSTRUCTOR PREP 3 (4)**
This course is designed for the individual who is interested in becoming a group exercise instructor. The focus of this class is to develop instructional techniques such as cueing, choreography, and how to safely modify classes to meet the needs of both healthy individuals and special populations for all formats of group exercise classes. (A special fee will be assessed.)

General Education: IN5

Course Entry Requirement(s): None

Typically Offered: Spring Semester

**HPED 172, EXERCISE MANAGEMENT FOR SPECIAL POPULATIONS 2 (2)**
This course provides an overview of health considerations and exercise programming for special populations through identification of medications, modification of testing procedures, equipment adjustments and exercise prescriptions. This course is intended for current professionals or those pursuing a career in the health and fitness industry. A portion of the lab fee will pay for the curriculum based Health Conditions and Exercise Speciality Certificate online exam administered at the conclusion of the course. (A special fee will be assessed.)

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Summer and Spring Semesters

**HPED 173, BIOMECHANICS OF RESISTANCE TRAINING 3 (4)**
This course focuses on analyzing a variety of trunk, upper and lower body resistance training exercises and techniques. Safe techniques of resistance training will be emphasized based on the biomechanics of the human body. Basic skeleton and muscular systems will be reviewed to efficiently instruct resistance training utilizing a variety of resistance tools. Resistance training program design will be taught. Lab activities will include hands-on-training and teaching experiences for the trunk, upper and lower body exercises.

General Education: IN1, IN2, IN5

Course Entry Requirement(s): None

Typically Offered: Summer and Spring Semesters

**HPED 222, FUNDAMENTALS OF STRENGTH AND CONDITIONING PROGRAMMING 3 (4)**
This course is designed to provide a theoretical and practical knowledge of the physiological, biomechanical, and administrative aspects of designing and supervising strength and conditioning programs for various populations. Proper selection and administration of performance testing will be implemented. Resultant data will be used to construct safe and effective strength and conditioning programs.

General Education: IN1, IN5

Course Entry Requirement(s): Prerequisite: HPED 173, HPED 261, HPED 272 and HPED 274

Typically Offered: Fall Semester
HPED 261, EXERCISE PHYSIOLOGY FOUNDATIONS 3 (4)
This course is an introduction to the foundations of fitness, health and related topics including energy balance, lifestyle choices and exercise testing and prescription. Individual fitness assessment, evaluation and programming will be emphasized. Attention will be given to the research that supports the professional guidelines for fitness and health. (CTAG)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: BIOG 121 and previous or concurrent enrollment in BIOG 122
Typically Offered: Summer and Spring Semesters

HPED 265, PREVENTION AND CARE OF SPORT INJURIES FOR THE SPORTS PROFESSIONAL 3 (4)
This course combines instruction to both the basic knowledge for the prevention and care of sport injuries, stages of healing, mechanism of injury, recognition of common athletic injuries, as well as the development of an emergency plan and application of taping, wrapping, and bracing for extremities will be taught. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: HLED 153 and BIOG 122
Typically Offered: Fall Semester

HPED 272, EXERCISE PHYSIOLOGY II 3 (4)
This course is designed for students seeking a career as a health and fitness professional. Focus is on the principles and practices of the physiological response and the adaptations of the human body to physical performance. Instruction will provide a basis to prepare the student for health and fitness assessment and exercise program design. Laboratory experiences will reinforce cognitive learning, conduct health and fitness assessments and develop individual exercise prescriptions.
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: HPED 261
Typically Offered: Fall Semester

HPED 275, KINESIOLOGY 3 (4)
Includes the study of joints, ligaments, muscles and nerves as it relates to movements of the body. Lab activities include recognition of muscle origins and insertions. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: BIOG 121, HPED 173, HPED 261 and previous or concurrent enrollment in HPED 272
Typically Offered: Fall Semester

HPED 277, MEASUREMENT AND EVALUATION IN EXERCISE, SPORT AND PHYSICAL EDUCATION 3 (3)
An introduction of both the theoretical and practical aspects of testing, measurement and evaluation of physical activity. Proper construction, administration, selection and interpretation of performance tests and resultant data will also be emphasized.
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: MTHM 151; Concurrent: HPED 272
Typically Offered: Spring Semester

HPED 278, SPORT AND FITNESS CERTIFICATION PREPARATION 3 (3)
This course is designed for students enrolled in the Sport and Fitness Management degree or related program. The course will evaluate the students' integrated knowledge and ability to successfully pass a national certification examination. National certifications and employment options will be explored. This course will also reassess fitness assessment and practical skills and increase an individual's marketability in the workplace.
General Education: IN1, IN2, IN3, IN4, IN5
Typically Offered: Summer Semester

HPED 285, PRACTICUM SEMINAR SPORTS AND FITNESS PROFESSIONAL 2 (8.5)
Student interns will apply practical skills by engaging in 105 hours in the field of health, physical education and fitness through on campus and off site experiences. Seminar component will address topics relevant to through experiential learning, case studies, exercise programming, legal and safety concerns. A professional Program Portfolio will be completed and submitted as part of the course requirements.
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Fall and Spring Semesters

HPED 287, WORK-BASED LEARNING I - HPED 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

History (HSTR)

HSTR 151G, CIVILIZATION I 3 (3)
The development of the historical, political, economical, cultural, religious, and institutional patterns of society from ancient civilizations through 1500. Social Sciences Core Course. (OTM, TAG)
General Education: C4, IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HSTR 152G, CIVILIZATION II 3 (3)
The development of the historical, political, economic, cultural, religious, and institutional patterns of society from 1500 to the present. Social Sciences Core Course. (OTM, TAG)
General Education: C4, IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HSTR 161, UNITED STATES I 3 (3)
A study of the origin and growth of American civilization from the discovery of the Western Hemisphere to the end of the Reconstruction. Social Sciences Core Courses. (OTM, TAG)
General Education: C4, IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HSTR 162, UNITED STATES II 3 (3)
A political, economic, diplomatic, social, cultural, and intellectual survey of the United States from the end of Reconstruction to the present. Social Science Core Course. (OTM, TAG)
General Education: C4, IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HSTR 171G, THE WORLD SINCE 1900 3 (3)
Survey of major political, economic, diplomatic, social and intellectual developments in the world since 1900. (OTM)
General Education: C4, IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

HSTR 176, OHIO HISTORY 3 (3)
To provide an overview of the settlement and development of Ohio from the pre-Columbian era to the present. The evolution of political, cultural and economic life from a rural setting to the creation of a multicultural agrarian/industrial combination.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer and Fall Semesters

HSTR 299, INDIVIDUALIZED STUDIES IN HISTORY 1-2 (1)
An in-depth study of areas in history through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing, one year of history and division approval
Typically Offered: Offer as required

Human Services (HMSR)

HMSR 111, PRINCIPLES OF INTERVIEW/COUNSELING 3 (3)
An introduction to the components of interviewing and counseling within the helping professions. Identification of interviewer and counselor characteristics which have proven to be successful. Involves role play, video analysis, audio and video taping of student interviews.
General Education: IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

HMSR 121, INTRODUCTION TO GERONTOLOGY 3 (3)
Historical perspectives and cross cultural attitudes on aging are examined. Myths and facts about older adults are presented, as are various theories about aging and other macro issues that provide a broad context for introducing the student to gerontology. Other topics include social policies, housing, transportation, health care programs and policies.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Not offered this year

HMSR 131, DIVERSE POPULATIONS/HUMAN SERVICES 3 (3)
This course addresses the dynamics of working with diverse populations. The focus is on groups that have been discriminated due to social, physical and/or behavioral characteristics. Groups to be studied include persons with physical or mental disabilities, the gay and lesbian population, children with AIDS and ethnic minorities. The relevant psychological and/or sociopolitical considerations relevant to working with these groups, the advocacy role and service strategies will be discussed.
An overview of the American with Disabilities Act and other legal issues are covered in this course.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Not offered this year

HMSR 132, ADDICTION COUNSELING I 3 (3)
This course is designed to provide students with knowledge of how to identify and assess individuals with addictions. Goals, principals, and methods of effective treatment will be examined as well as the process of recovery and problems that can arise during recovery. Neurological, physiological, psychological and/or sociopolitical considerations relevant to working with these groups, the advocacy role and service strategies will be discussed.
An overview of the American with Disabilities Act and other legal issues are covered in this course.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Concurrent: PSYH 151, HMSR 111 and ENGL 161

HMSR 141, INTRODUCTION TO CHEMICAL DEPENDENCY 3 (3)
Students learn about the causes and symptoms of addiction and treatment strategies used with drug and alcohol-addicted individuals. Impact on the family is addressed, as are special groups and issues in chemical dependency. Prevention strategies are discussed.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: PSYH 151 or divisional approval
Typically Offered: Fall and Spring Semesters
HMSR 161, FAMILY AND INTIMATE VIOLENCE 3 (3)
This course addresses the dynamics of emotional, physical and sexual violence among family members and other intimate relationships. Special emphasis is given to child abuse, sexual assault, spouse abuse, dating violence, and elder abuse. Students learn about legal options and the role of the helping professional.

**General Education:** IN1, IN3

**Course Entry Requirement(s):** Prerequisite: SOCY 151 or divisional approval

**Typically Offered:** Fall and Spring Semesters

HMSR 211, CRISIS INTERVENTION 3 (3)
This course introduces students to the interpersonal dynamics of various crisis situations faced by social service workers. Crisis intervention strategies used by social service workers are discussed and demonstrated. Students are required to participate in role plays and to analyze case studies utilizing techniques learned in class. Students identify and demonstrate effective techniques for intervention in potential suicide, victimization, family bereavements situations and determine conditions where referral is more appropriate.

**General Education:** IN1, IN2, IN3

**Course Entry Requirement(s):** Prerequisite: HMSR 111

**Typically Offered:** Fall Semester

HMSR 212, CASE MANAGEMENT 3 (3)
Introduction to case management principles and practices. Learn assessment skills, treatment planning, intervention strategies and community resources.

**General Education:** IN1, IN2, IN3

**Course Entry Requirement(s):** Prerequisite: HMSR 111 or CRMJ 110 or divisional approval

**Typically Offered:** Fall Semester

HMSR 213, GROUP WORK IN HUMAN SERVICES 3 (3)
In this course students are introduced to the complexities of the group process. Students learn about different types of groups, stages of the group process, role of the facilitator, participant roles and influences, and group counseling techniques. Role plays and case studies are integral activities of this course by which students learn group dynamics through practice and observation.

**General Education:** IN1, IN2, IN3

**Course Entry Requirement(s):** Prerequisite: HMSR 111

**Typically Offered:** Fall and Spring Semesters

HMSR 232, ADDICTION COUNSELING II 3 (3)
This course builds on HMSR 132 Addictions Counseling I with a focus on the treatment process. Students will gain a broad background of the tools used in the treatment of addiction. Ethical and legal issues for the substance abuse counselor will be identified. A primary theme in this course will be the explanation of the Twelve Core Functions of a Substance Abuse Counselor. Emphasis will be placed on developing and practicing substance abuse counseling skills with individuals and groups. Special populations, dual diagnosis, ethics, gambling, and other addictions associated with addiction counseling will be investigated.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: ENGL 161, HMSR 111, HMSR 132, PSYH 151 or division approval

**Typically Offered:** Fall and Spring Semesters

HMSR 233, ADDICTION COUNSELING PRACTICUM 4 (4)
This course offers the student enrolled in the Addiction Counseling Certificate program 300 clock hours of onsite field work experience in an approved addiction treatment facility. This on-the-job placement will involve learning agency policies and procedures, observing agency personnel in the provision of client services, and applying addiction counseling skills and knowledge. Supervision will be provided by licensed agency personnel and by the course instructor who visits the site and maintains ongoing contact with the staff supervisor. Students will participate in an on-campus seminar where the focus will be on experiences encountered in the Addiction Counseling Practicum. Application of professional skills and knowledge of ethical behavior in addictions counseling will be emphasized. Student must successfully complete the interview and application process and criminal background check and all prerequisites with a C or higher. Student must have Human Services Coordinator’s signature before registering for this course.

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: ENGL 161, HMSR 111, HMSR 132, PSYH 151 or divisional approval

**Typically Offered:** Fall and Spring Semesters

HMSR 234, MENTAL HEALTH COUNSELING FOR SOCIAL WORKERS 3 (3)
This course equips students with knowledge of mental health and illness, its impact on individuals and families, social workers roles and interventions in mental health service delivery, and community rehabilitation and integration. The major focus of this course is to familiarize social work and human service students with the major mental disorders. Since mental health issues are ubiquitous in social work settings and practice, it is appropriate that workers, regardless of area of interest, be acquainted with the language, conceptualizations, models, and developments in the study of mental health. Specific attention will be given to the interface of the assessment and diagnostic process, the socio-cultural context of individuals, use of support networks and an understanding of basic psychopharmacology within a developmental and humanistic framework.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: PSYH 151, HMSR 111, SOWK 151, ENGL 161 with a C or higher

**Typically Offered:** Fall and Spring Semesters

HMSR 285, HUMAN SERVICES PRACTICUM AND SEMINAR 4 (22)
Students are required to complete a minimum of 300 clock hours of agency practicum experience. This on-the-job placement will involve learning agency policies and procedures, observing agency personnel in the provision of client services and applying social service skills and knowledge. Supervision will be provided by licensed agency personnel and appropriate college representative. One hour of classroom instruction will focus on experiences encountered in the agency practicum. Application of professional skills, knowledge of ethical behavior within a social service agency will be emphasized. Students are required to maintain a journal of all activities. This course contains an opportunity for experiential learning.

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: HMSR 111, 211, 212, 213 SOWK 151 252 w/ a C or higher. Student must have human services coordinator’s signature before registering.

**Typically Offered:** Spring Semester
HMSR 287, WORK BASED LEARNING I - HMSR 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

HMSR 299, INDIVIDUALIZED STUDIES IN HUMAN SERVICES 1-2 (2)
An in-depth study of areas of human services tailored to individual student need and interest. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required

Humanities (HUMS)

HUMS 151G, INTRODUCTION TO HUMANITIES 3 (3)
An introduction to the arts and humanities through study of significant historic eras in Western culture. Areas of study include philosophy, literature, painting, sculpture, photography, film, architecture and music. Humanities Core Course. (OTM)

General Education: C5, IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

HUMS 271G, INTRODUCTION TO MYTHOLOGY 3 (3)
A survey of major figures, motifs, and themes of mythology with attention to theories of myth and to modern literature using myths. Humanities Core Course. (OTM)

General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

HUMS 274, FILM APPRECIATION 3 (3)
Designed to introduce the student to cinema as an art form. Lectures and discussion dealing with standards for evaluation and interpretation. Viewing of selected films. Humanities Core Course. (OTM)

General Education: C5, IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HUMS 264G, INTRODUCTION TO ASIAN CULTURES AND LITERATURES 3 (3)
This course will study and analyze the racial, historical, linguistic, religious, social and cultural reality of the Puerto Rican diaspora focusing on pertinent themes in Puerto Rican history, culture, literature, contemporary society, and politics. We will use a multidisciplinary approach to the study of the Puerto Rican experience in the United States with an exploration of the impact of United States economic policies on the island of Puerto Rico and the causes of Puerto Rican migration to Ohio and other places on the mainland.

General Education: C5, IN1, IN3
Typically Offered: Fall Semester

HUMS 261G, INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE 3 (3)
A study of great works from the ancient world to the Renaissance, including works in philosophy, literature, religion, and the social sciences. Instruction will follow the Socratic example of generating discussion through dialectical inquiry. Readings may change from semester to semester. Humanities Core Course. (OTM)

General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Not offered this year

HUMS 262G, INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY 3 (3)
A study of great works from the early modern period to the 20th Century, including works in philosophy, literature, religion, and the social sciences. Instruction will follow the Socratic example of generating discussion through dialectical inquiry. Readings may change from semester to semester. Humanities Core Course. (OTM)

General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Spring Semester

HUMS 263, INTRODUCTION TO FOLKLORE 3 (3)
An introduction to the study of folklore from the traditional (Brothers Grimm) to the modern (urban legends). The main focus of the course will be to examine how specific folklore themes and motifs express an understanding of the human experience. Humanities Core Course. (OTM)

General Education: C5, IN1
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Spring Semester

HUMS 264G, INTRODUCTION TO ASIAN CULTURES AND LITERATURES 3 (3)
This is an introductory course in Asian cultures, religious philosophies and literatures which include traditional poems, modern fictions and films. Asian arts and music also will be briefly examined. Readings will be English translations of the original texts. Humanities Core Course. (OTM)

General Education: C5, IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Spring Semester

HUMS 271G, INTRODUCTION TO MYTHOLOGY 3 (3)
A survey of major figures, motifs, and themes of mythology with attention to theories of myth and to modern literature using myths. Humanities Core Course. (OTM)

General Education: C5, IN1, IN3
Course Entry Requirement(s): Concurrent: ENGL 161
Typically Offered: Summer, Fall and Spring Semesters

HUMS 274, FILM APPRECIATION 3 (3)
Designed to introduce the student to cinema as an art form. Lectures and discussion dealing with standards for evaluation and interpretation. Viewing of selected films. Humanities Core Course. (OTM)

General Education: C5, IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
HUMS 281, INTRODUCTION TO AMERICAN CINEMA 3 (3)
American Cinema brings Hollywood filmmaking into clear focus as an art form, as an economic force, and as a system of representation and communication. The course explores how Hollywood films work technically, artistically and culturally to reinforce and challenge America's national self-image. (OTM)

General Education: C5, IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

HUMS 299, INDIVIDUALIZED STUDIES-HUMANITIES 1-2 (1)
An in-depth study of specialized areas in humanities tailored to individual student need and interest. Topics will vary each semester. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Offer as required

International Studies (INTL)

INTL 151G, PRINCIPLES/INTERNATIONAL STUDIES I 3 (3)
This course examines regional and international interactions, and the consequences of such interactions. A major purpose of the course is to introduce students to the various people and cultures of the world. It is designed to promote global awareness and to prepare students for the changing, interdependent world. Topics examined will include the importance of studying world politics, international prospects for competition and cooperation, the evolving world system, nationalism, fundamentals of international law, transnational religion, debt, diseases, underdevelopment, and global security.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Fall Semester

INTL 152G, PRINCIPLES/INTERNATIONAL STUDIES II 3 (3)
This course will challenge students to investigate and interpret global issues from a variety of perspectives. A significant emphasis of the course focuses on issues on the world agenda. Topics on the environment, globalization, trade, finance, and international institutions will prepare the students to analyze the world around them. Thus, students will learn more about international issues that often seem remote but may have profound consequences for our nation. A combination of academic and experiential learning is encouraged, especially participation in study abroad and international internships.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Spring Semester

INTL 299G, INDIVIDUALIZED STUDIES IN INTERNATIONAL STUDIES 1-2 (1)
An in-depth examination of areas in individualized studies through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Typically Offered: Offer as required

Italian (ITLN)

ITLN 151G, ELEMENTARY ITALIAN I 4 (5)
An introduction to the language and cultures of the Italian-speaking world. Development of creative communicative skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.

General Education: IN1, IN2, IN3
Typically Offered: Fall and Spring Semesters

ITLN 152G, ELEMENTARY ITALIAN II 4 (5)
Continuation of Elementary Italian I. Further study of the language and cultures of the Italian-speaking world. Continued development of creative communicative skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.

General Education: IN1, IN2, IN5
Typically Offered: Spring Semester

Journalism (JRNM)

JRNM 151, JOURNALISM I 3 (3)
General survey of the nature of news, its methods of processing through both print and broadcast media, journalistic style, canons of ethics, libel laws. Study of career opportunities.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

JRNM 152, JOURNALISM II 3 (3)
Principles of and practice in the development of complex story types, government, politics, in-depth enterprise stories, features, narrative writing, columns and opinion pieces, business, education, science and religion. Continued emphasis on interviewing style and structure and development of sources.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: JRNM 151 or equivalent and ENGL 161 or division approval
Typically Offered: Spring Semester

JRNM 153, PRINCIPLES OF PUBLIC RELATIONS 3 (3)
Introduction to the concept of public relations, the role of public relations practitioners in for-profit and non-profit organizations, research, crisis management, image building in local and international market, promotional campaigns, community relations, dealing with the media, writing speeches, news releases and publishable articles. Ability to type is recommended.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Concurrent: JRNM 151 or division approval.
Typically Offered: Spring Semester

JRNM 221, INTRODUCTION TO PHOTOJOURNALISM 3 (3)
An introduction to visual journalism including fundamentals of photography for newspapers, magazines, online publications and other media, the legal ethical and artistic issues related to visual journalism and the effective melding of words and pictures. Course includes desktop publishing and computer image processing elements. (TAG, MTAG)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: JRNM 151 or equivalent and
Typically Offered: Spring Semester

JRNM 222, NEWSPAPER EDITING AND DESIGN 3 (4)
This course is geared toward aspiring copy editors. It covers copy editing and pagination using InDesign and Photoshop software. The course focuses on hands-on training to produce visually aesthetic professional newspapers, magazines and other printed materials.

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: JRNM 151 or division approval
Typically Offered: Fall and Spring Semesters
JRN M 223, SOCIAL MEDIA FOR THE NEWSROOM 4 (5)
This course introduces journalists and journalism students to social media tools, particularly online videos, online social networking and blogging. In addition, students will learn to tape, edit and upload videos of interviews and campus events.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: JRN M 151
Typically Offered: Fall Semester
JRN M 285, STAFF PRACTICE/NEWSPAPER 1 (2)
Practical Journalism laboratory experience in writing, editing, taking photographs and production of college student newspaper. Regular assignment and analysis meetings. Supervised experience using facilities and equipment in production. Repeatable up to four semesters.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: JRN M 151, ENGL 161 and/or division approval
Typically Offered: Offer as required
JRN M 286, JOURNALISM INTERNSHIP 1 (7)
Supervised experience tailored to individual student interest at cooperating newspapers, magazines, public relations firms, companies and organizations. Students will work regularly with a media/business professional and provide written reports to a faculty supervisor. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: JRN M 151, 152 and division approval. Minimum grade point average 2.5.
Typically Offered: Offer as required
JRN M 299, INDIVIDUAL STUDIES IN JOURNALISM 1-2 (1)
An in-depth study of specialized concepts or skills in journalism tailored to individual student need and interest. Topics will vary with each semester. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

Marketing (MKRG)

MKRG 113, PRINCIPLES OF SELLING 3 (3)
A study of sales techniques and strategies for creating customer relationships. Topics include buyer/seller relationships; the sales process; sales presentations; objections; negotiations; and intercultural diversity.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
MKRG 211, APPLIED MARKETING ESSENTIALS 3 (3)
An exploration of the marketing process, including the basic elements of a marketing mix; product, pricing, distribution and promotion. Target markets, market segmentation and market research are also discussed.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall Semester
MKRG 221, CONSUMER BEHAVIOR 3 (3)
An examination of the consumer decision-making process and the psychological, sociological and cultural factors influencing this process. The course will examine human behavior in general and how it relates to consumer behavior. The marketing manager's need to understand this process will be emphasized.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 211 or MKRG 251
Typically Offered: Fall and Spring Semesters
MKRG 245, SOCIAL MEDIA MARKETING 3 (3)
An examination of social media marketing strategies as an extension of an organization's marketing efforts. The macro environment's effect on social media also will be explored. Topics include social networking, blogging, online multimedia and various technologies such as Facebook, YouTube and Twitter. Focus is placed on the capabilities and opportunities associated with this form of marketing. Students will develop the skills to use these technologies effectively as part of an organization's marketing strategy.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
MKRG 247, SERVICES MARKETING 3 (3)
A study of the marketing issues, practices and strategies specifically for service businesses. The importance of understanding customer behavior, expectations and perceptions in the service industry, as well as the development of effective service marketing strategies to create customer relationships in a competitive marketplace are explored.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 211 or MKRG 251
Typically Offered: Fall and Spring Semesters
MKRG 251, PRINCIPLES OF MARKETING 3 (3)
An examination of the marketing process, focusing on the basic elements of a marketing strategy: product, pricing, distribution and promotion. Market segmentation, behavior of consumers and business markets, environmental analysis, market research and international marketing are also examined. (TAG)
General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: ECNM 152 and previous or concurrent enrollment in ECNM 151
Typically Offered: Summer, Fall and Spring Semesters
MKRG 255, ADVERTISING & PROMOTION MANAGEMENT 3 (3)
An exploration of advertising and sales promotion which are part of the promotion mix and how they relate to the 4Ps of the marketing mix. Topics include integrated marketing communication, the communication process, budgeting, media selection, forms of advertising and sales promotion, regulation, and the ethical, social and economic aspects. (TAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 251 or MKRG 211
Typically Offered: Fall and Spring Semesters
MKRG 256, RETAIL MANAGEMENT 3 (3)
An examination of the principles and practices of modern retailing; organization, management and operations; the buying function; building and maintaining clientele; retail information systems, functions and controls.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 251 or MKRG 211
Typically Offered: Fall and Spring Semesters
MKRG 258, ADVANCED SALES TECHNIQUES 3 (4)
A study of advanced selling techniques and strategies for creating, maintaining and improving customer relationships. Topics include relationship management, negotiations, persuasion and account management. Course involves field visitations and role playing in a sales setting.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 113
Typically Offered: Spring Semester
MKRG 287, WORK-BASED LEARNING I - MKRG 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

MKRG 288, WORK-BASED LEARNING II - MKRG 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 287
Typically Offered: Offer as required

MKRG 289, WORK-BASED LEARNING III - MKRG 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 288
Typically Offered: Offer as required

MKRG 299, INDIV STUDIES IN MARKETING 1-2 (1)
An in-depth study in areas of marketing presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisite: Second-year standing and divisional approval.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required

MASN - Masonry Technology

MASN 101, BRICK LAYING I 6 (10)
This course covers basic concepts of masonry bricklaying concepts including labor history, construction management organization training, OSHA10 training, tools and equipment, mortar manipulation, mixing mortar.
General Education: IN1, IN2, IN5
Typically Offered: Summer, Fall and Spring Semesters

MASN 111, TILE SETTING AND FINISHING I 6 (10)
This course covers basic masonry tile installation and finishing topics, including tile installation tools, grouting installation tools, tile dimensioning, tile cutting, safety, waterproof membrane selection and installation, mortar setting, installation of mortar beds, use of adhesives, adhesive types, layouts, and shower flooring.
General Education: IN1, IN3, IN5
Typically Offered: Summer, Fall and Spring Semesters

MASN 121, RESTORATION I 6 (10)
This course covers basic masonry restoration topics, including pointing, OSHA10 Certification, swing stage, fall projection, safety, and aerial lift.
General Education: IN1, IN2, IN5
Typically Offered: Summer, Fall and Spring Semesters

MASN 131, CEMENT FINISHING I 6 (10)
This course covers basic concrete technology, safety basics, review of masonry related mathematical applications, water to cement ratio, cement properties, screening methods and technologies, placing tools, spreading tools and techniques, concrete mixing, and sub-grade reparation and reinforcement.
General Education: IN1, IN2, IN5
Typically Offered: Summer, Fall and Spring Semesters

MASN 201, BRICK LAYING II 6 (10)
This course covers intermediate masonry concepts and skills, including wall system components, penetration openings, flashing certification, reinforced masonry, grout certification, angled walls, and blueprint reading.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 101
Typically Offered: Summer, Fall and Spring Semesters

MASN 202, BRICK LAYING III 6 (10)
This course covers advanced masonry techniques, including installing radius walls, blueprint reading, elevation layout, masonry professions skill set requirements, battering brickwork, arches layout, building styles, and advanced arch layout and building.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 201
Typically Offered: Summer, Fall and Spring Semesters

MASN 211, TILE SETTING AND FINISHING II 6 (10)
This course covers intermediate tile installing and finishing topics, including tile laying, saws, mixers, lasers, mortar tools, other tools, cement product types, crack isolation methods, types of backer boards, caulking types and tools, demolition and tile removal, and adhesive mixing.
General Education: IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 201
Typically Offered: Summer, Fall and Spring Semesters

MASN 212, TILE SETTING AND FINISHING III 6 (10)
This course covers advanced masonry tile installing and finishing topics, including cleaning and sealing titles, foreman and supervision training, project layout details, water-proofing projects, floor and wall preparation, and safety applications.
General Education: IN1, IN2, IN5
Typically Offered: Summer, Fall and Spring Semesters

MASN 221, RESTORATION II 0 (0)
This course covers intermediate masonry restoration topics, including caulking preparation, types of caulk, safety, striking, material and surface preparation, lintel replacement and flashing, building with brick, brick replacement.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 121
Typically Offered: Summer, Fall and Spring Semesters
MASN 222, RESTORATION III 6 (10)
This course covers advanced masonry restoration topics, including history of masonry, masonry preservation, project assessment and reporting, infection control and risk assessment, patching and pointing mortars, Dutchman patching, terracotta and concrete repair.

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 221
Typically Offered: Summer, Fall and Spring Semesters

MASN 231, CEMENT FINISHING II 6 (10)
This course covers intermediate masonry cement finishing topics, including concrete forming, joint cutting, concrete edging, and safety procedures.

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 231
Typically Offered: Summer, Fall and Spring Semesters

MASN 232, CEMENT FINISHING III 6 (10)
This course covers advanced masonry cement finishing topics, including joint location and types, joint control isolation and construction, floor flatness and levelness, curb tools, curb instructions, box curb, and roll curb.

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 232
Typically Offered: Summer, Fall and Spring Semesters

MASN 245, MASONRY CROSS-TRAINING AND CAPSTONE PROJECT 6 (10)
This course provides cross-training for all masonry trades and a capstone experience. Topics covered include welding, foremen and supervisor training, repair mortar certification, concrete stamping, concrete flat broom finishing, steel troweling, and smooth finishing.

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: MASN 202 or MASN 212 or MASN 222 or MASN 232
Typically Offered: Summer, Fall and Spring Semesters

Mathematics (MTHM)

MTHM 024, GEOMETRY 2 (2)
This course is for students who need an extensive background in geometry. Topics include angles, triangles, parallel lines, quadrilaterals, congruence, similarity, polygons, circles, area and volume.

General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 061 or satisfactory placement assessment in mathematics; may be taken concurrently with MTHM 081 or MTHM 095
Typically Offered: Offer as required

MTHM 031, MATH APPLICATIONS 4 (4)
This course presents the basic concepts of negative and positive numbers applied to fractions, decimals, percents, and percent applications. Expressions with algebraic exponents as well as linear equations and applications will also be studied. In depth work on business applications will be studied. (A special fee will be assessed.)

MTHM 033, INTRODUCTION TO TECHNICAL MATHEMATICS 3 (3)
This course is intended for the student in an apprenticeship program needing an introduction to technical mathematics in preparation for college-level technical mathematics. The topics studies include units of measure, approximate numbers, equations, inequalities, systems of equations, factoring, rational expressions, exponents, and radicals.

General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 041 or satisfactory placement assessment in mathematics
Typically Offered: Not offered this year

MTHM 041, PREALGEBRA 2 (2)
This course is intended to prepare a student for algebra. Operations with signed numbers and fractions will be reviewed. Variable expressions and linear equations in one variable and their applications will be studied. The course will include an introduction to different types of graphs including the Cartesian Coordinate System, line and bar graphs.

Course Entry Requirement(s): Course placement policy: Grade of S in NMTH 180 or satisfactory placement assessment in mathematics
Typically Offered: Not offered this year

MTHM 051, BEGINNING ALGEBRA PART I 2 (2)
The beginning topics in algebra will be studied, including linear equations and inequalities, graphing and equations of lines, and linear systems.

Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 041 or satisfactory placement assessment in mathematics
Typically Offered: Not offered this year

MTHM 057, QUANTITATIVE REASONING CO-REQUISITE 2 (2)
This course provides an intense review of the algebra topics required for MTHM 158 Quantitative Reasoning. The course focuses on building quantitative reasoning and problem solving skills. Topics include percentages, unit conversions, linear equations in one and two-variables, exponents, functions and radicals. Students must concurrently enrolled in MTHM 158.

Course Entry Requirement(s): Prerequisite: Placement assessment; Corequisite: MTHM 158
Typically Offered: Summer, Fall and Spring Semesters

MTHM 061, BEGINNING ALGEBRA PART II 2 (2)
This course continues the beginning topics in algebra. The topics that will be studied include polynomials and exponents, factoring, and rational expressions and equations. Application problems such as variation will also be included.

Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 051 or satisfactory placement assessment in mathematics
Typically Offered: Not offered this year

MTHM 068, STATISTICS CO-REQUISITE 2 (2)
This course is taken in conjunction with MTHM 168 - Statistics. Students must concurrently enroll in MTHM 168. The course reviews prerequisite concepts necessary for understanding topics covered in MTHM 168. The course focuses on building the skills needed for success in MTHM 168. The topics include order of operations, proportions and percentages, numerical rounding, scientific notation, basic understanding of probability, equation of a line and technology use.

Course Entry Requirement(s): Course Placement Policy: Satisfactory score in the placement assessment; Concurrent: MTHM 168
Typically Offered: Summer, Fall and Spring Semesters
MTHM 071, INTERMEDIATE ALGEBRA PART I 2 (2)
This course studies the beginning topics in intermediate algebra. These topics include functions, compound inequalities, absolute value equations and inequalities in one variable, and roots and radicals.

Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 061 or satisfactory placement assessment in mathematics

Typically Offered: Not offered this year

MTHM 081, INTERMEDIATE ALGEBRA PART II 2 (2)
This course continues the topics in Intermediate Algebra. The topics studied include complex numbers, quadratic equations and graphs, exponential and logarithmic functions, and inverse functions. Polynomial and rational inequalities will also be included.

Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 071 or satisfactory placement assessment in mathematics

Typically Offered: Not offered this year

MTHM 121, TECHNICAL MATHEMATICS I 4 (4)
A technical mathematics course which includes intermediate algebra (simplifying algebraic expressions, functions, basic graphing, systems of linear equations, matrices, linear and quadratic equations, logarithmic and exponential functions and equations, radicals and complex numbers) and basic trigonometry (right-angle trigonometry, radian measure, Law of Sines, Law of Cosines, sine and cosine graphs and vectors). Emphasis is on technical applications and problem-solving skills including the appropriate use of technology. Graphing calculator required. Mathematics Core Course.

General Education: C2, IN1

Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment in mathematics

Typically Offered: Summer, Fall and Spring Semesters

MTHM 122, TECHNICAL MATHEMATICS II 3 (3)
A continuation of Technical Mathematics I which includes Algebra (systems of non-linear equations, non-linear inequalities, roots of polynomials, geometric series and the Binomial Theorem), basic statistics, empirical curve-fitting, analytic trigonometry (identities, equations and graphs) and analytic geometry (conic sections, parametric equations and polar coordinates). Emphasis is on technical applications and problem-solving skills including the appropriate use of technology. Graphing calculator required. Mathematics Core Course.

General Education: C2, IN1

Course Entry Requirement(s): Prerequisite: MTHM 121 or division approval

Typically Offered: Summer, Fall and Spring Semesters

MTHM 150, THE ART OF MATHEMATICAL THINKING 3 (3)
A course designed primarily for the Liberal Arts major. Topics include number theory, sets, infinity, geometry, topology, graph theory, dimensions, fractals, and proofs. Mathematics Core Course.

General Education: C2, IN1

Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment in mathematics

Typically Offered: Fall and Spring Semesters

MTHM 151, COLLEGE MATHEMATICS 3 (3)
A course designed primarily for the Business and Liberal Arts major. Topics include algebraic functions, exponential and logarithmic functions, mathematics of finance, systems of linear equations, matrix algebra, linear programming, and probability. Mathematics Core Course.

General Education: C2, IN1

Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 081 or MTHM 095 or satisfactory placement assessment in mathematics

Typically Offered: Not offered this year

MTHM 158, QUANTITATIVE REASONING 3 (3)
This course is designed for students in majors that do not require College Algebra, Precalculus, or Calculus. It focuses on using real world applications to build quantitative reasoning and problem solving skills. Topics include logic, analysis of growth, linear and exponential change, and personal finance.

General Education: C2, IN1

Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment in mathematics or concurrent enrollment in MTHM 057.

Typically Offered: Summer, Fall and Spring Semesters

MTHM 161, MATHEMATICS FOR ELEMENTARY TEACHERS I 3 (3)
Focuses on foundational concepts of number theory, arithmetic, and algebra that underlie the elementary school mathematics curriculum. Emphasizes problem-solving and the historical development of numeration systems and other mathematical concepts.

General Education: C2, IN1

Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment in mathematics.

Typically Offered: Summer, Fall and Spring Semesters

MTHM 162, MATHEMATICS FOR ELEMENTARY TEACHERS II 3 (3)
A continuation of the concepts and ideas basic to elementary school mathematics with particular emphasis on the development of geometry. Topics include: an introduction of probability and statistics; congruence and similarity of triangles; properties of polygons; geometric constructions; perimeter, area and volume; coordinate geometry; and motion geometry. Computer software will be used by the student as a vehicle to explore geometric properties and relationships.

General Education: C2, IN1

Course Entry Requirement(s): Prerequisite: MTHM 161

Typically Offered: Summer, Fall and Spring Semesters

MTHM 168, STATISTICS 3 (3)
This course provides a non-calculus based introduction to statistical thinking and statistical methods. The topics discussed in the course include: data collection, data description, basic probability, sampling distributions, probability distributions, confidence intervals and hypothesis tests. An emphasis is placed on using technology to solve problems involving real data and hands-on projects are used throughout the course.

General Education: C2, IN1

Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment in mathematics or concurrent enrollment in MTHM 068.

Typically Offered: Summer, Fall and Spring Semesters
MTHM 171, COLLEGE ALGEBRA 4 (4)
Study of algebraic functions, equations, systems of equations, inequalities, matrices, partial fractions, exponential and logarithmic functions. Designed primarily for the calculus-bound student. Not to be taken if credit for MTHM 175 has been earned. Graphing calculator required. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Course placement policy. Grade of C or higher in MTHM 081 or MTHM 095 or satisfactory placement assessment in mathematics
Typically Offered: Summer, Fall and Spring Semesters

MTHM 172, PRECALCULUS 3 (3)
For the calculus-bound student. A study of trigonometric functions and their graphs; trigonometric identities and equations; conic sections; polar and parametric equations; mathematical induction; and the Binomial Theorem. Not to be taken if credit for MTHM 175 has been earned. Graphing calculator required. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: Grade of C or better in MTHM 171 or 3 1/2 years high school college-preparatory mathematics and satisfactory placement assessment score or division approval.
Typically Offered: Summer, Fall and Spring Semesters

MTHM 175, COLLEGE ALGEBRA AND PRECALCULUS 5 (5)
An accelerated course designed primarily for the calculus-bound student. Algebraic functions, equations, systems of equations, matrices, partial fractions, exponential and logarithmic functions, trigonometric functions and their graphs, trigonometric identities and equations, conic sections, mathematical induction and the Binomial Theorem. Not to be taken if credit for either MTHM 171 or 172 has been earned. Graphing calculator required. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: Four years of high school college-preparatory mathematics and a satisfactory placement assessment score or division approval.

MTHM 178, BUSINESS CALCULUS 4 (4)
A calculus course designed for the non-science major. Topics include: algebra review, limits, continuity, applications of differentiation, curve sketching, and applications of integration, all of which use polynomial, rational, algebraic, exponential and logarithmic functions. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: A grade of C or better in MTHM 171 or MTHM 175 or division approval
Typically Offered: Summer, Fall and Spring Semesters

MTHM 181, CALCULUS 1 5 (5)
Differential and integral calculus of one variable, including limits, continuity, differentiation, applications of derivatives, and transcendental functions. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: A grade of C or better in MTHM 172 or MTHM 175 or four years of high school college-preparatory mathematics including trigonometry and a satisfactory placement assessment score or division approval.
Typically Offered: Summer, Fall and Spring Semesters

MTHM 182, CALCULUS II 5 (5)
Continuation of Calculus I. Applications of integration, techniques of integration, numerical integration, indeterminate forms, improper integrals, infinite series, plane curves and polar coordinates. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: A grade of C or better in MTHM 181 or division approval
Typically Offered: Summer, Fall and Spring Semesters

MTHM 221, TECHNICAL CALCULUS 3 (3)
An advanced technical mathematics course designed for the Engineering Technology student. Introduction to differential and integral calculus on algebraic, trigonometric and transcendental functions with an emphasis on technical applications. Graphing calculator required. Mathematics Core Course. Prerequisite: MTHM 122 or MTHM 172 or divisional approval.
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: MTHM 122 or MTHM 172 or division approval
Typically Offered: Fall and Spring Semesters

MTHM 222, ADVANCED TECHNICAL CALCULUS 3 (3)
A continuation of Technical Calculus which includes techniques of integration, L'Hospital's Rule, infinite series (Maclaurin, Taylor and Fourier) and an introduction to ordinary differential equations. Emphasis is on technical applications. Graphing calculator required. Mathematics Core Course. Prerequisite: MTHM 221 (or MTHM 181 with divisional approval).
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: MTHM 221 or MTHM 181 with division approval
Typically Offered: Fall and Spring Semesters

MTHM 270, DISCRETE MATHEMATICS 3 (3)
An introduction to the mathematics and discrete structures used in computer science to develop software including proof techniques, Boolean logic, graphs, trees, recurrence relations and functions. Mathematics Core Course. (OTM)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: MTHM 182 and PHLY 171 or division approval
Typically Offered: Fall and Spring Semesters

MTHM 280, LINEAR ALGEBRA 4 (4)
A study of linear equations, matrices, vector spaces, linear transformations, eigenvalues and eigenvectors, and elementary numerical methods. Mathematics Core Course. (OTM, TAG)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: MTHM 181 and 182 or MTHM 221 and 222 or division approval
Typically Offered: Summer, Fall and Spring Semesters

MTHM 281, MULTIVARIABLE CALCULUS 4 (4)
A third-semester calculus course which includes an in-depth study of vector-valued functions and space curves, functions of several variables, partial differentiation, multiple integration and vector calculus. Mathematics Core Course. (OTM, TAG)
General Education: C2, IN1
Course Entry Requirement(s): Prerequisite: MTHM 182 or division approval
Typically Offered: Fall and Spring Semesters
MTHM 283, DIFFERENTIAL EQUATIONS 3 (3)
An introductory course which includes first-order and second-order differential equations, applications to physical models, series solutions, Laplace transforms, first-order systems and elementary numerical methods. Mathematical Core Course. (OTM, TAG)

General Education: C2, I1

Course Entry Requirement(s): Prerequisite: MTHM 281 and previous or concurrent enrollment in MTHM 280 or division approval

Typically Offered: Summer, Fall and Spring Semesters

MTHM 299, INDIVIDUALIZED STUDIES/MATHEMATICS 1-2 (1)
An in-depth study of areas in Mathematics presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second year standing and division approval

Typically Offered: Offer as required

Medical Assisting (MDAS)

MDAS 101, FUNDAMENTAL PROCEDURES IN THE MEDICAL OFFICE 3 (4)
This course is an orientation to medical assisting and the role of the medical assistant. Instruction in the skills necessary to work in the medical field as an assistant to the physician. Emphasis is on aseptic technique, infection control and sterilization. In addition, first aid and CPR training are covered. Laboratory required. (A special fee will be assessed.) (CTAG)

General Education: IN1, IN2, IN3, IN4, IN5

Course Entry Requirement(s): Prerequisite: Acceptance into the Medical Assistance Program; Concurrent: ALHN 110, BIOG 115, MDAS 102, MDAS 103, MDAS 104

Typically Offered: Fall Semester

MDAS 102, INSURANCE AND CODING IN THE MEDICAL OFFICE 3 (4.5)
Introduction to Medical Insurance including Workers’ Compensation and Disability Compensation Programs. Provides a comprehensive overview of CPT-2019 and ICD-10CM coding. (CTAG)

General Education: IN1, IN2, IN4

Course Entry Requirement(s): Prerequisite: Acceptance into the Medical Assisting Program; Concurrent: ALHN 110, BIOG 115, MDAS 101, MDAS 103, MDAS 104

Typically Offered: Fall Semester

MDAS 103, BASIC ADMINISTRATIVE MEDICAL ASSISTING FUNCTIONS 1 (1.5)
Introduction to the skills necessary for work in the medical field as an assistant to the physician. Includes basic administrative skills such as scheduling appointments, inpatient and outpatient procedures and organizing and filing medical records. Laboratory required. (CTAG)

General Education: IN1, IN2, IN5

Course Entry Requirement(s): Prerequisite: Acceptance into the Medical Assisting Program; Concurrent: ALHN 110, BIOG 115, MDAS 101, MDAS 102, MDAS 104

Typically Offered: Fall Semester

MDAS 104, BOOKKEEPING FUNCTIONS IN THE MEDICAL OFFICE 2 (3)
Continuation of the skills necessary for work in the medical field as an assistant to the physician. Emphasis is on bookkeeping skills necessary in a medical office. Laboratory required. (CTAG)

General Education: IN1, IN2, IN4, IN5

Course Entry Requirement(s): Prerequisite: Acceptance into the Medical Assisting Program and MDAS 103; Concurrent: ALHN 110, BIOG 115, MDAS 101, MDAS 102

Typically Offered: Fall Semester

MDAS 105, DIAGNOSTIC TESTING IN THE MEDICAL OFFICE 2 (3)
Introduction to Diagnostic Testing in the Medical Office. Laboratory required. (A special fee will be assessed). (CTAG)

General Education: IN1, IN2, IN5

Course Entry Requirement(s): Prerequisite: C or higher in ALHN 110, BIOG 115, MDAS 101, MDAS 102, MDAS 103, MDAS 104; Concurrent: MDAS 106, MDAS 107

Typically Offered: Spring Semester

MDAS 106, SPECIMEN COLLECTION IN THE MEDICAL OFFICE 2 (3)
Introduction to specimen collection and processing in the physician’s office. Laboratory required. (CTAG)

General Education: IN1, IN2, IN3, IN5

Course Entry Requirement(s): Prerequisite: C or higher in ALHN 110, BIOG 115, MDAS 101, MDAS 102, MDAS 103, MDAS 104; Concurrent: MDAS 105, MDAS 107

Typically Offered: Spring Semester

MDAS 107, PATIENT CARE IN THE MEDICAL OFFICE 5 (6)
Introduction to various procedures performed in the physician’s office. Includes taking TPR and BP and learning how to assist the doctor with minor surgery, application of dressings and bandages and the administration of oral and injectable medications. Laboratory required. (A special fee will be assessed). (CTAG)

General Education: IN1, IN2, IN3, IN4, IN5

Course Entry Requirement(s): Prerequisite: C or higher in ALHN 110, BIOG 115, MDAS 101, MDAS 102, MDAS 103, MDAS 104; Concurrent: MDAS 105, MDAS 106

Typically Offered: Spring Semester

MDAS 108, MEDICAL ASSISTING PRACTICUM 1 (15)
Medical Assisting Practicum places the student in the medical office, working with the office staff and patients as a capstone to the Medical Assisting Program. The CMA exam can be taken after the completion of this course. (A special fee will be assessed).

General Education: IN1, IN2, IN3, IN4, IN5

Course Entry Requirement(s): Prerequisite: C or higher in MDAS 101, MDAS 102, MDAS 103, MDAS 104, MDAS 105, MDAS 106, MDAS 107 and BIOG 115; Concurrent: SDEV 101, CISS 121, ENGL 161 and PSYH 151

Typically Offered: Spring Semester

Micro-Electromechanical Systems (MEMS)

MEMS 122, INTRODUCTION TO MICRO-ELECTROMECHANICAL SYSTEMS (MEMS) 4 (6)
The course presents the theory construction methods, terminology and application of this emerging field. Micro-Electro-Mechanical Systems (MEMS) is the integration of mechanical elements, sensors, actuators, and electronics on a very small scale. Topics include: MEMS applications in sensing physical phenomena, applications to biological processes, and DMDS-Digital Mirror Devices used in communications and internet applications. Lab required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): None

Typically Offered: Fall Semester
MEMS 132, MEMS PACKAGING 3 (4)
The course focuses on microelectronic mechanical systems (MEMS) packaging including micro-enabled systems and how these devices are integrated with electronic circuits and product interfaces. The student will be introduced to common packaging techniques used in the industry such as die attach, wirebonding and reliability testing. Lab required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: MEMS 122
Typically Offered: Spring Semester

MEMS 211, MICRO-FABRICATION PROCESSING 3 (4)
The course focuses on microelectronic mechanical systems (MEMS) surface and bulk fabrication processes including photolithography, wet and dry anisotropic and isotropic etch, thin film deposition methods, and process interaction with materials. An introduction to fabrication process control, characterization and development principles with design of experiments and metrology theory will also be covered. Lab required. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: MTHM 121 and MEMS 132
Typically Offered: Fall Semester

MEMS 221, MICRO-SYSTEM CAPSTONE PROJECT 3 (4)
This course is a capstone project built upon the previous MEMS classes. The student will design a device which will then be packaged and reproduced within the MEMS cleanroom demonstrating the student’s ability to manufacture two identical fully functional circuits with starting components, devices, and final circuit requirements chosen by the instructor. Lab required. (A special fee will be assessed.)

General Education: IN1
Course Entry Requirement(s): Prerequisite: MEMS 211 and ELCT 111
Typically Offered: Spring Semester

MEMS 287, WORK-BASED LEARNING I - MEMS 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required, Offer as required

MEMS 288, WORK-BASED LEARNING II - MEMS 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MEMS 287
Typically Offered: Offer as required

MEMS 289, WORK BASED LEARNING III - MEMS 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MEMS 288
Typically Offered: Offer as required

MEMS 299, INDIVIDUALIZED STUDIES IN MICRO-ELECTROMECHANICAL SYSTEMS 1-2 (1)
An in-depth study in areas of micro-electromechanical systems presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisites: Second-year standing and divisional approval.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required

MEMS 311, PCB AND FLEX DESIGN 3 (5)
This course introduces the student to the fundamental concepts of Printed Circuit Board (PCB) construction and design using typical PCB design, simulation and implementation software. Topics include design based in general rigid fiberglass based PCB materials, flexible substrate PCB materials, circuit schematic implementation, revision documentation, bill of materials (BOM) generation with cost-control, layout with comparison of electronic design vs. physical design, multilayer auto-router, GBR file generation and time management for purchase. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: TECN 111; Concurrent: CADD 111 and MEMS 122
Typically Offered: Fall Semester

MEMS 321, PCB ASSEMBLY 3 (4)
The course focuses on the training in the operation and programming of automated high-volume equipment used in the manufacturing of printed circuit board (PCB) and surface mount technology (SMT) electronic assembly. Student will be required to read and understand documentation on the standards of electronic assembly related to SMT process engineering while training on high-volume SMT electronic assembly as an operator. Equipment operation includes stencil printers for solder paste dispense, programmable SMT pick & place, belt driven convection reflow ovens, ESD preventative tools and stereo microscope or lens-based inspection equipment. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: MEMS 311; Concurrent: ELCT 115 and MEMS 221
Typically Offered: Spring Semester
MEMS 387, WORK-BASED LEARNING - MEMS 1-3 (1)
Building on prior Work Based Learning experience(s), this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: MEMS 287, Prerequisite: MEMS 287 or division approval

**Typically Offered:** Offer as required

MEMS 388, WORK BASED LEARNING - MEMS 1-3 (1)
Building on prior Work Based Learning experience(s), this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: MEMS 287 or division approval

**Typically Offered:** Offer as required

MEMS 411, PCB INSPECTION & REWORK 3 (4)
The course focuses on the training in the operation and programming of equipment used in quality inspection and failure analysis of manufactured printed circuit boards (PCB) and surface mount technology (SMT). Students will be required to read and understand documentation on the standards of PCB testing and inspection related to SMT process engineering while training on PCB test & inspection equipment to identify, report on, and repair/rewrite PCB. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: MEMS 321

**Typically Offered:** Fall Semester

MEMS 421, ELECTRONIC ASSEMBLY - SENIOR DESIGN 3 (4)
The course will require a student to work in a pre-determined team with the purpose of manufacturing a batch of identical printed circuit boards (PCB). Student teams will program equipment, create manufacturing documentation for assembly, verify multiple working PCB both by inspection and demonstrated test, and write a quality report verifying green-light ready for volume manufacturing. During the class, the student will take and pass the Surface Mount Technology Association (SMTA) Process Engineering Certification Exam. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1, IN2

**Course Entry Requirement(s):** Prerequisite: MEMS 411

**Typically Offered:** Spring Semester

MEMS 487, WORK BASED LEARNING MEMS 1-3 (1)
Building on prior Work Based Learning experience(s), this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: MEMS 387

**Typically Offered:** Offer as required

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**Millwright (MWRT)**

MWRT 111, MILLWRIGHT TOOLS AND EQUIPMENT 2 (3)
This course covers the use of measuring instruments (micrometers, calipers, gauges, pressure gauges, and other instruments); the selection and use of rigging tools; metrics, fiber and wire ropes, tackle block, and slingchains in moving and installing machinery; principles of equilibrium in 3D space; and the selection and use of wood and metal working tools used by millwrights. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Course placement policy. Grade of C or higher in MTHM 033 or satisfactory placement assessment in mathematics

MWRT 114, PLANT LAYOUT AND INSTALLATION 2 (3)
This course covers plant layout print reading, machinery, aligning, and balancing using rigging tools and equipment such as hoists, catwalks, platforms, suspended scaffolds, and cranes. Installation of pumps and wall-mounted equipment will also be covered. Selection and use of structural materials, millwright tools, and equipment in accordance with OSHA regulations will be studied. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Course placement policy. Grade of C or higher in MTHM 033 or satisfactory placement assessment in mathematics

MWRT 211, MECHANICAL POWER TRANSMISSION SYS 2 (3)
This course covers the fundamental principles, operational practices, installation procedures, and maintenance scheduling of mechanical power transmission systems used in industry. Laboratory exercises include selection of mechanical power units, drive components, shaftings, and structural materials from manufacturer's catalogs and standard specifications. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: MWRT 111

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**Music (MUSC)**

MUSC 101, CIVIC CHORALE 1 (2)
Study and performance of representative choral works of all periods. Repeatable up to a maximum of four (4) credit hours. (TAG)

**General Education:** IN1, IN3, IN5

**Typically Offered:** Fall and Spring Semesters

MUSC 102, CIVIC CONCERT BAND 1 (2)
A large instrumental ensemble consisting of woodwinds, brass, and percussion for the purpose of performing standard concert band literature at concerts and other musical events as specified by the schedule and needs of the institution. Course may be repeated for a maximum of four (4) credit hours. (TAG, MTAG)

**General Education:** IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: Prior experience in instrumental performance

**Typically Offered:** Fall and Spring Semesters

MUSC 103, CIVIC ORCHESTRA 1 (2)
Study and performance of representative orchestra work of all periods. Repeatable up to a maximum of four (4) credit hours. Laboratory required. (TAG)

**General Education:** IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: Audition or division approval

**Typically Offered:** Fall and Spring Semesters
MUSC 111, COLLEGIATE CHORALE 1 (3)
Study and performance of representative choral works of all periods. Admission to the Chorale open to all students. Voice placement will be administered during the first week of class. Students may repeat the course for a maximum of four (4) credits. (TAG)
General Education: IN1, IN3, IN5
Typically Offered: Fall and Spring Semesters

MUSC 153, FUNDAMENTALS OF MUSIC 3 (3)
Basic music theory, ear training, learning to read by note, writing down simple melodies and chords. Keyboard understanding and recorder playing experience. The materials are intended to meet the needs of elementary education majors, other interested students, and prospective Music Majors who must correct deficiencies in theory background as determined by placement test. Credit not applicable toward music degree.
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

MUSC 155, ELEMENTARY CLASS PIANO I 2 (3)
Introduction to basic piano for students with no previous experience wishing to learn rudimentary skills. (TAG)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

MUSC 156, ELEMENTARY CLASS PIANO II 2 (3)
Sequential; continuation of Elementary Class Piano I. (TAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 155 or division approval
Typically Offered: Fall and Spring Semesters

MUSC 165, VOCAL ENSEMBLE 1 (2)
Study and performance of accompanied and a cappella music for various sized groups and voice combinations. Open only to students, by audition, who are concurrently registered for Collegiate Chorale. Course may be repeated for a maximum of four (4) credit hours. (TAG)
General Education: IN1, IN3, IN5
Course Entry Requirement(s): Prerequisite: Audition or division approval; Corequisite: MUSC 111 or division approval
Typically Offered: Fall and Spring Semesters

MUSC 166, INSTRUMENTAL JAZZ ENSEMBLE 1 (2)
Study and performance of a wide range of jazz literature for, percussion, brass, and woodwind combinations. Open only to students by audition. Course may be repeated for a maximum of four (4) credit hours. Prerequisite: Prior experience in instrument performance.
General Education: IN1, IN3, IN5
Course Entry Requirement(s): Prerequisite: Prior experience in instrument performance
Typically Offered: Fall and Spring Semesters

MUSC 171, MUSIC THEORY I 3 (4)
Study and introduction to tonal harmony, form and analysis. Ought to be taken concurrently with MUSC 181.
General Education: IN1
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Fall Semester

MUSC 172, MUSIC THEORY II 3 (4)
Continuation of tonal harmony form and analysis. Ought to be taken with MUSC 182.
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 171 or division approval
Typically Offered: Spring Semester

MUSC 181, SIGHT SINGING AND EAR TRAINING I 1 (3)
A continuation of Sight-Singing and Ear Training I. Ought to be taken concurrently with MUSC 172.
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 181. Should be taken concurrently with MUSC 172
Typically Offered: Spring Semester

MUSC 182, SIGHT SINGING AND EAR TRAINING II 1 (3)
A continuation of Sight-Singing and Ear Training I. Ought to be taken concurrently with MUSC 172.
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 181. Should be taken concurrently with MUSC 172
Typically Offered: Spring Semester

MUSC 251G, MUSIC HISTORY I 3 (3)
Sequential. Familiarization of the student with a large body of musical material from all branches of musical writing; vocal, instrumental, symphonic and choral literature. Special attention given to style, form and structural procedures of principal composers. Historical survey from early music through the 18th century.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval; Concurrent: ENGL 161
Typically Offered: Fall Semester

MUSC 252G, MUSIC HISTORY II 3 (3)
Sequential. Historical survey of music literature from the Middle 18th century through the 20th century; from Classicism to Minimalism.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: MUSC 251 or division approval; Concurrent: ENGL 161
Typically Offered: Spring Semester

MUSC 256G, MUSIC APPRECIATION 3 (3)
A general survey of music and its composers, with extensive listening in order to develop intelligent understanding and appreciation of the world’s great music. Humanities Core Course. (OTM)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

MUSC 262G, MUSIC AS A WORLD PHENOMENON 3 (3)
A general survey of music of the world’s cultures focusing on the music of jazz musicians, popular musicians, traditional and folk musicians, Native Americans, Africans, African-Americans, peasant cultures of Eastern Europe, Japanese, Indians, Indonesians, Latin Americans, Chinese, and other related cultures. This course is open to all students. (OTM)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
MUSC 271, MUSIC THEORY III 3 (4)
Introduction to chromatic tonal harmony, form, and analysis. Ought to be taken with MUSC 281.
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 172 or division approval
Typically Offered: Fall Semester
MUSC 272, MUSIC THEORY IV 3 (4)
Concentration on advanced aspects of tonal harmony, form, analysis, and 20th century non-tonal developments. Ought to be taken concurrently with MUSC 282. (IN1)
Course Entry Requirement(s): Prerequisite: MUSC 271 or division approval
Typically Offered: Spring Semester
MUSC 273, CRAFT OF COMPOSITION 3 (3)
This course will address in a general sense various approaches to musical composition. Through specific exercises, students will gain a grasp of different aspects of musical creativity with the goal of becoming more literate and comfortable with a variety of musical styles in a hands-on manner. It is primarily for non-majors but open to students who want to explore their creativity through music. Repeatable indefinitely.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Fall and Spring Semesters
MUSC 274G, BLACK CLASSICAL COMPOSERS IN AMERICA 3 (3)
This course will address the varied socio musical experiences of Black American Classical composers. Discussions will cover the degree to which music by these composers has found its way into the 'canon' or 'standard repertoire' of concert performance. In a larger context, we will investigate the issue of Black self-definition.
General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Not offered this year
MUSC 281, SIGHT SINGING AND EAR TRAINING III 1 (2)
A continuation of Sight Singing and Ear Training II. Ought to be taken concurrently with MUSC 271.
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 182 or division approval
Typically Offered: Fall Semester
MUSC 282, SIGHT SINGING AND EAR TRAINING IV 1 (2)
A continuation of Sight Singing and Ear Training III. Ought to be taken concurrently with MUSC 272. (IN1)
General Education: IN1
Course Entry Requirement(s): Prerequisite: MUSC 281 or division approval
Typically Offered: Spring Semester
MUSC 299, INDIVIDUALIZED STUDIES IN MUSIC 1-2 (1)
An in-depth study of specialized concepts or skills in music tailored to individual student need and interest. Topics will vary each semester. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval
Typically Offered: Offer as required

Music / Applied (MUSA)

MUSA 151, APPLIED BRASS FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to play a brass instrument. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. Music faculty may contact student during the first week of the semester. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters

MUSA 152, APPLIED GUITAR FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to play a guitar. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters

MUSA 153, APPLIED PIANO FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to play a piano or keyboard. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters

MUSA 154, APPLIED PERCUSSION FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to play a percussion instrument. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters
MUSA 155, APPLIED STRINGS FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to play a string instrument. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester. (TAG)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters

MUSA 156, APPLIED VOICE FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to develop a healthy singing voice. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters

MUSA 157, APPLIED WOODWINDS FOR NON-MUSIC MAJORS 1-2 (1)
Competency-based, individualized music instruction for the Non-Music Major student who desires to learn how to play a woodwind instrument. Instruction is designed for, but not limited to, those with limited musical background who wish to engage in private music instruction for personal enrichment and/or elective credit. Not to be counted for credit in any Music Major program of study. Repeatable indefinitely. Music faculty will contact student during the first week of the semester. (A special fee will be assessed.)

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
Typically Offered: Summer, Fall and Spring Semesters

MUSA 161, APPLIED MUSIC: BRASS 1-2 (1)
For the brass student with performance skills expected for credit at music major level or above. Repeatable up to a maximum total of eight (8) credit hours in applied music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 162, APPLIED MUSIC: GUITAR 1-2 (1)
For the guitar student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student during the first week of semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 163, APPLIED MUSIC: KEYBOARD 1-2 (1)
For the student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student during the first week the semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 164, APPLIED MUSIC: PERCUSSION 1-2 (1)
For the percussion student with performance skills expected for credit at the Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 165, APPLIED MUSIC: STRINGS 1-2 (1)
For the string student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student the first week of the semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 166, APPLIED MUSIC - VOICE 1-2 (1)
For the voice student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 167, APPLIED MUSIC: WOODWINDS 1-2 (1)
For the woodwind student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester. (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Summer, Fall and Spring Semesters

MUSA 168, APPLIED MUSIC: COMPOSITION 1-2 (1)
Instruction is designed for those with musical background who wish to engage in private music composition instruction for personal enrichment, portfolio development and/or elective credit. Repeatable indefinitely. Audition required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Division Approval
Typically Offered: Summer, Fall and Spring Semesters
MUSA 169, APPLIED MUSIC: CONDUCTING 1-2 (1)
Instruction is designed for those with musical background who wish to engage in private music instruction of conducting skills. Repeatable indefinitely. Audition required. (A special fee will be assessed.)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division Approval
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 261, APPLIED MUSIC: BRASS 1-2 (1)
For the Brass student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of semester. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval. Music faculty will contact student during the first week of the semester.
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 262, APPLIED MUSIC: GUITAR 1-2 (1)
For the student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of semester. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 263, APPLIED MUSIC: KEYBOARD 1-2 (1)
For the keyboarding student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student during the first week of the semester. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 264, APPLIED MUSIC: PERCUSSION 1-2 (1)
For the student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of semester. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 265, APPLIED MUSIC: STRINGS 1-2 (1)
For the student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of semester. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 266, APPLIED MUSIC: VOICE 1-2 (1)
For the student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of the semester. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 267, APPLIED MUSIC: WOODWINDS 1-2 (1)
For the student with performance skills expected for credit at Music Major level or above. Repeatable up to a maximum total of eight (8) credit hours in Applied Music. Audition required. Can be repeated indefinitely for audit. (A special fee will be assessed.) Music faculty will contact student first week of class. (TAG)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval.
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 268, APPLIED MUSIC: COMPOSITION 1-2 (1)
Instruction is designed for those with musical background who wish to engage in private music composition instruction for personal enrichment, portfolio development and/or elective credit. Repeatable indefinitely. Audition required. (A special fee will be assessed.)
**General Education:** IN1, IN2
**Course Entry Requirement(s):** Prerequisite: Division approval.
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 269, APPLIED MUSIC: CONDUCTING 1-2 (1)
Instruction is designed for those with musical background who wish to engage in private music instruction of conducting skills. Repeatable indefinitely. Audition required. (A special fee will be assessed.)
**General Education:** IN1, IN2
**Typically Offered:** Summer, Fall and Spring Semesters

MUSA 299, INDIVIDUALIZED STUDIES IN MUSA 1-2 (1)
This is an in-depth study of areas in composition, literature and/or linguistics presented by discussion and/or individual research and reading. Topics may vary. Repeatable up to four (4) credit hours.
**Course Entry Requirement(s):** Prerequisite: Second-year standing or division approval.
**Typically Offered:** Offer as required

**Associate Degree Nursing (NURS)**

NURS 101, ADVANCED PLACEMENT LPN TO RN 3 (5.5)
This course is designed to support advanced placement nursing students in defining their personal goals and practices that will assist in their successful transition from licensed practical nurse to registered nurse. The student will incorporate principles of adult learning to develop teaching-learning strategies, professional behaviors, interpersonal communication, and math calculation skills. Students will prioritize patient needs and include evidence based practice principles to develop a holistic patient centered plan of care. Students will demonstrate effective time management and organizational skills and explore principles associated with legal-ethical nursing practice. Technology will be utilized to enhance personal and patient learning, gather data, and communicate effectively with the healthcare team. Laboratory and clinical required. (A special fee will be assessed.)
**General Education:** IN1, IN2, IN4, IN5
**Course Entry Requirement(s):** Prerequisite: Admission into the Nursing program and BIOG 121, PSYH 151 and MTHM 168 with a grade of ‘C’ or better. Current unrestricted LPN licensure.
**Typically Offered:** Fall and Spring Semesters
NURS 116, MATERNAL-NEWBORN NURSING 2 (4)
This course introduces the student to the role of the nurse in providing safe, patient and family-centered care for perinatal, intrapartum, and neonatal patients and their families in simulation lab and a variety of clinical settings. The focus of this course is on human growth and development, health promotion for the perinatal client families and the incorporation of evidence-based practices in the formulation of coordinated nursing care. This course continues to build on the concepts of oxygenation, mobility, perfusion, metabolism, nutrition, immunity, tissue integrity, sensory perception, cognition, and legal issues as they relate to the antepartum, intrapartum, postpartum, and neonatal patient and their families. Application of the nursing process with consideration for perinatal and neonatal patients and their families are included in this course. Clinical and lab required. (A special fee will be assessed)(CTAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: BIOG 122, NURS 120 and NURS 123; Concurrent: PSYH 251
Typically Offered: Fall and Spring Semesters

NURS 119, CONCEPTS IN PEDIATRIC NURSING 1 (1)
This course focuses on the basic concepts of safe patient-centered care associated with pediatric patients and their families in the community with an emphasis on the promotion of health and illness prevention. These concepts include: mobility, nutrition, reproduction/sexuality, immunity, cognition, coping and stress, comfort, leadership, healthcare delivery and legal issues. Common health concerns are also discussed and evidence-based nursing approaches are integrated with a team approach to support nursing judgment and planning for care of the pediatric patient and family. Clinical experiences in a community setting is required. Clinical required. (Special fees will be assessed).
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BIOG 122, NURS 120, NURS 123; Concurrent: NURS 116 and PSYH 251
Typically Offered: Fall and Spring Semesters

NURS 120, NURSING CONCEPTS I 8 (14)
This course introduces the core organizers of the ADN program framework which include: patient-centered care, teamwork and collaboration, evidence-based practice, safety and quality, informatics, and professional identity. Selected core concepts are introduced and built upon during the semester: sensory/perception, elimination, oxygenation, mobility, perfusion, metabolism, nutrition, tissue integrity, stress/coping, comfort, communication, leadership, health care delivery, legal, reproduction/sexuality, cognition and immunity. These concepts with consideration of scope of practice and regulatory/financial implications in various health care settings will then be integrated throughout the nursing program of study. Basic health assessment and development of basic psychomotor skills to safely provide care in laboratory and clinical practice settings is a focus. The student will utilize the nursing process to identify nursing interventions for meeting basic human needs. Lab and clinical required. (A special fee will be assessed)(CTAG)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: Admission into the nursing program; Concurrent: NURS 123
Typically Offered: Fall and Spring Semesters

NURS 122, NURSING CONCEPTS II 4 (7)
This course emphasizes nursing considerations with respect to selected core concepts in providing safe, complex care for patients with acute and chronic health problems within a family and community context. This course further builds upon the concepts of elimination, oxygenation, mobility, perfusion, metabolism, nutrition, immunity, tissue integrity, sensory perception, cognition, stress and coping, communication, leadership, economics, and legal issues. Content focuses on the continued application of the nursing process and the role of the nurse related to prioritization of assessment data and coordination of care, including delegation, supervision, and assignment principles. Lab and clinical required. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BIOG 122, NURS 120 and NURS 123; Corequisite: NURS 124; Concurrent: PSYH 251
Typically Offered: Fall and Spring Semesters

NURS 123, PHARMACOLOGY I 2 (3)
This course will introduce the student to basic pharmacologic concepts including drug classifications, safety, dosage calculation utilizing dimensional analysis, and methods of medication administration. Lab required. (A special fee will be assessed)(CTAG)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Admission into the Associate Degree Nursing Program; Corequisite: NURS 120; Concurrent: ALHN 113, BIOG 122
Typically Offered: Fall and Spring Semesters

NURS 124, PHARMACOLOGY II 1 (1.5)
This course identifies concepts and clinical aspects of drug therapy which emphasize the nurses’ role in pharmacological administration and safety. The focus is on parenteral therapies that include SQ, IM IV and piggyback, medication calculations and the classifications of commonly prescribed medications, as well as selected complementary and alternative drugs. Within each classification, a few drugs are selected for study in terms of their mechanism of action, therapeutic use, and side and adverse effects. Lab and clinical required. (A special fee will be assessed).
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: NURS 123; Corequisite: NURS 122; Concurrent: NURS 116, NURS 118 and PSYH 251
Typically Offered: Fall and Spring Semesters

NURS 130, ADVANCED PLACEMENT CERTIFIED PARAMEDIC TO RN 3 (5.5)
This course is designed to enable the student to explore integrative concepts in Nursing and to assist the student in the transition from paramedic to registered nurse. The course will focus on safe patient care and medication administration, methods of professional communication, health assessment, cultural competence, and the use of technology in health care. Laboratory and clinical required. (A special fee will be assessed).
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: Completion of EMT-P program, BIOG 121, PSYH 151, MTHM 168 all with grade of C or better, Current Paramedic national certification with 2 years of work experience as a certified paramedic
Typically Offered: Summer Semester
NURS 122, CONCEPTS IN NURSING FOR THE PARAMEDIC TO RN 4 (8.5)
This course emphasizes nursing considerations with respect to selected core concepts in providing safe, complex care for patients across the lifespan with acute and chronic health problems. It also allows the student to apply nursing knowledge in the provision of safe, quality care to patients with complex health problems resulting in unpredictable outcomes. This course further builds upon the concepts of elimination, oxygenation, mobility, perfusion, metabolism, nutrition, immunity, tissue integrity, sensory perception, cognition, stress and coping, communication, leadership, economics, and legal issues. Content focuses on the continued application of the nursing process and the role of the nurse related to prioritization of assessment data and coordination of care, including delegation, supervision and assignment principles. Prioritization while providing care for two to three patients in acute practice settings will be emphasized. Lab and clinical required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BLOG 122 and NURS 130; Corequisite: NURS 133
Typically Offered: Fall Semester

NURS 133, PHARMACOLOGY FOR THE PARAMEDIC TO RN 2 (3)
This course integrates the development of a comprehensive approach to the clinical aspects of drug therapy and emphasizes the nurses’ role in pharmacological administration and safety to patients across the lifespan. The focus is on parenteral therapies that include SQ, IM, and IV piggyback, advanced medication calculations, including heparin therapy, and the classifications of commonly prescribed medications, as well as selected complementary and alternative drugs. Within each classification, a few drugs are selected for study in terms of their mechanism of action, therapeutic use, and side and adverse effects. Psychiatric medications with be highlighted. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: NURS 130; Concurrent: NURS 132
Typically Offered: Fall Semester

NURS 138, MATERNAL-PEDIATRIC NURSING 3 (3.3)
This blended course assists the student in applying the role of the nurse in providing safe, patient and family-centered care for perinatal, neonatal, and pediatric patients and their families in a simulated lab setting. The focus of this course is on human growth and development, health promotion for the perinatal and child-rearing families and the incorporation of evidence-based practices in the formulation of coordinated nursing care. This course continues to build on the concepts of elimination, oxygenation, mobility, metabolism, nutrition, reproduction/sexuality, immunity, sensory perception, cognition, and legal issues as they relate to the perinatal, neonatal and pediatric patient and their families. Application of the nursing process with consideration for perinatal/neonatal and pediatric patients and their families is included in this course. Lab simulation required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: NURS 101
Typically Offered: Summer Semester

NURS 210, COMPREHENSIVE ADULT NURSING II 8 (15.5)
This course will focus on the role of provider of nursing care to promote, maintain or restore the optimal health of the client in an acute care facility. Concepts of medical surgical nursing will be applied via the nursing process to the care of the adult client with acute and/or chronic problems. Content presented is organized via functional health patterns and focuses on cardiovascular, hematological, endocrine, renal and respiratory concepts. In addition, roles of manager of care and member of the profession will be addressed. This course will allow the student to continue developing skills related to client/family education, communication and clinical reasoning in the practice setting. Laboratory and clinical required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: NURS 129, NURS 126, NURS 128, NURS 136, NURS 145
Typically Offered: Fall and Spring Semesters

NURS 221, NURSING CONCEPTS III 4 (7)
This course allows the student to apply nursing knowledge in the provision of safe, quality care to patients with complex health problems resulting in unpredictable outcomes. The student will continue to build on previously acquired knowledge of selected core concepts, nursing skills and the development of nursing judgment to formulate a collaborative plan of care. The course builds upon the concepts of elimination, oxygenation, mobility, perfusion, metabolism, nutrition, reproduction/sexuality, cognition, health care delivery and legal. Prioritization while providing care to two to three patients in acute and community based practice settings will be emphasized. Clinical required. (A special fee will be assessed.)

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: NURS 122 and NURS 124; Corequisite: NURS 223; Concurrent: CHMY 161
Typically Offered: Fall and Spring Semesters

NURS 222, NURSING CONCEPTS IV 4 (7)
The focus of this last semester clinical course integrates human responses to complex acute and chronic health care concerns within both the physical and psychosocial context of family and community. Clinical judgment and reasoning skills are further developed within complex health care systems. Emphasis is placed on application and evaluation of safety, evidence-based practice, and collaboration within the interdisciplinary team as related to selected core concepts. This course further builds on the core concepts of elimination, oxygenation, perfusion, metabolism, reproduction/sexuality, immunity and tissue integrity. Clinical required. (Special fees will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CHMY 161, NURS 221 and NURS 223; Concurrent: BLOG 251
Typically Offered: Fall and Spring Semesters

NURS 223, PHARMACOLOGY III 1 (1.5)
This course integrates the development of a comprehensive approach to the clinical aspects of drug therapy and the nurses’ role. The focus is on advanced medication calculations, including heparin therapy, and on classifications on commonly prescribed medications as well as selected complementary and alternative drugs. Within each classification, a few drugs are selected for study in terms of their mechanism of action, therapeutic use, and side and adverse effects. Psychiatric medications with be highlighted. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: NURS 124; Corequisite: NURS 221; Concurrent: CHMY 161
Typically Offered: Fall and Spring Semesters
NURS 224, BEHAVIORAL HEALTH NURSING 3 (5)
This course focuses on providing safe, evidence-based and best practice
nursing care, in a variety of settings, for patients with acute and chronic
behavioral health issues. Building on previously learned therapeutic
relationship and communication skills, the students will address their
collaborative role with patients and with the multi-discipline treatment
team in planning and evaluating patient care. Pertinent legal-ethical
issues relative to behavioral health will be addressed as students further
develop their professional identity. Clinical required. (A special fee will be
assessed).

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: BIOG 122, NURS 120 and
NURS 123
Typically Offered: Fall and Spring Semesters

NURS 225, MANAGER OF CARE/CAPSTONE 4 (8)
This last semester course will assist students in the integration of
theory and practice as they approach the completion of the nursing
program and transition into the role of professional nurse. This course
completes integration and advanced application of the core concepts:
communication, leadership, health care delivery, economics, and
legal implications of nursing practice. The focus is on leadership and the
associated skills and knowledge to practice as a contemporary
professional nurse. The theory and clinical emphasis additionally
assimilates the core organizers of the curriculum: patient centered
care, safety and quality improvement, evidence based practice/nursing
judgment, informatics, professional identity, teamwork and collaboration
which culminates in the senior capstone experience. Clinical required. (A
special fee will be assessed)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: CHMY 161, NURS 222;
Corequisite: NURS 226; Concurrent: BIOG 251
Typically Offered: Fall and Spring Semesters

NURS 226, NURSING CONCEPTS SYNTHESIS 1 (1.5)
This course focuses on review of concepts required for licensure
and entry into the practice of professional nursing. This course
completes integration and advanced application of the core concepts:
communication, leadership, health care delivery, economics, and legal
implications of nursing practice. Content includes review of the National
Council Licensure Examination for Registered Nurses (NCLEX-RN) test
plan, assessment of individual readiness, and remediation. A variety of
assessment tools are used to review for the NCLEX-RN licensure exam.
Seminar required. (A special fee will be assessed)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: NURS 222; Corequisite:
NURS 225; Concurrent: BIOG 251
Typically Offered: Fall and Spring Semesters

NURS 287, WORK-BASED LEARNING I - NURS 1-3 (1)
This course provides supervised work experience building on experience
in Work-Based Learning I with approved employer(s) in an area related
to the student’s program. Emphasis is placed on integrating classroom
learning with work experience. Students will be able to evaluate career
selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. Activities are coordinated and evaluated by
college personnel. Course will be graded on the S/U basis.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: NURS 287
Typically Offered: Offer as required

NURS 288, WORK-BASED LEARNING II - NURS 1-3 (1)
This course provides supervised work experience building on experience
in Work-Based Learning I with approved employer(s) in an area related
to the student’s program. Emphasis is placed on integrating classroom
learning with work experience. Students will be able to evaluate career
selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. Activities are coordinated and evaluated by
college personnel. Course will be graded on the S/U basis.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: NURS 287
Typically Offered: Offer as required

Occupational Therapy Assistant (OCTA)

OCTA 102, ACTIVITY ANALYSIS 2 (2)
This course presents the Occupational Therapy (OT) Practice Framework
(OFTP) which serves as a basis for understanding OT interventions.
This course is one of the core courses that the students use throughout
the OTA Program. Understanding how to breakdown activities/
occupations is basic to how OT practitioners treat, to the development
of intervention plans, and to the modification of activities/occupations
during interventions. Students use information about the framework and
activity analysis in all their subsequent semesters in the OTA Program. (A
special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: Admission into the
Occupational Therapy Assistant program and ALHN 120; Concurrent:
OCTA 111, OCTA 113, BIOG 122, PSYH 251, ALHN 112
Typically Offered: Fall Semester

OCTA 110, PSYCHOSOCIAL LEVEL I FIELDWORK 1 (1)
In non-traditional Occupational Therapy (OT) settings, students
participate in observations and interactions with clients with
psychosocial diagnoses under the supervision of OTA faculty. This
course relates to the curriculum design as it is taken concurrent with the
mental health intervention track. During this course students are able
to apply the skills of gathering data through interview, therapeutic use
of self, intervention planning and implementation and documentation
as it pertains to mental health. This course has an experiential learning
component.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: OCTA 112, OCTA 120,
OCTA 125 and PSYH 257; Corequisite: OCTA 115; Concurrent: OCTA 121
Typically Offered: Summer Semester
OCTA 111, THERAPY CONCEPTS 3 (3)
This required course in the occupational therapy assistant curriculum provides the basis for communication as a health care professional, as well as, theories and foundations of occupational therapy (OT). This overview of Occupational Therapy provides an introduction to the basic concepts that are interwoven throughout the program. Basic OT skills for activities of daily living and transfers introduced. Course will cover OT’s role in various treatment settings, reimbursement, and introduce models of practice and frames of reference for practice. Course also provides activities to gain experience and develop skills of interpersonal relationships necessary for therapeutic interactions. Through a series of planned activities and self-assessments, the student will improve in communication in a confident manner. Twenty hours of service learning in a community setting is required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: ALHN 120 and admission to the Occupational Therapy Assistant Program; Concurrent: OCTA 102, OCTA 113, BIOG 122 and ALHN 112

Typically Offered: Fall Semester

OCTA 112, PEDIATRIC I FIELDWORK 1 (1)
In traditional and non-traditional Occupational Therapy (OT) settings, students will be given the opportunity to apply the knowledge and skills being learned concurrently in OTA courses, in-class discussion, and through documentation. This course relates to the curriculum design as it taken concurrent with the pediatric intervention track. During this course students are able to apply the skills of gathering data through interview, intervention planning and implementation, documentation, and therapeutic use of self as it pertains to the pediatric population. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 102, OCTA 111 OCTA 113, BIOG 122 and ALHN 112 and OCTA 120 and PSYH 257; Concurrent: OCTA 110 and OCTA 115

Typically Offered: Spring Semester

OCTA 113, OT DOCUMENTATION 1 (1)
This course provides occupational therapy assistant (OTA) students the skills to document accurately and effectively in today’s health care whether the Occupational Therapy (OT) practitioner is completing documentation by hand or electronically. This course provides a framework for completing daily documentation and progress notes. Reporting objective data, use of abbreviations, and use of terminology with written and electronic documentation is explored. This course relates to the curriculum design as documentation is used in all assessment and intervention classes. Learning the foundations of documentation is an important building block and can be adapted for use in any intervention area of practice.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: ALHN 120 and admission into the OTA program; Concurrent: OCTA 111, OCTA 102, BIOG 122, PSYH 251 and ALHN 112

Typically Offered: Fall Semester

OCTA 115, MENTAL HEALTH OT 4 (4)
This course, for occupational therapy (OT) assistant students provides a review of psychosocial / mental health conditions frequently treated and the theory and interventions used in traditional and non-traditional settings. Students will gain an understanding that patients may have dual diagnoses. Students will have the opportunity to practice basic assessments and interventions current to occupational therapy (OT) practice during required lab component. Mental health, historically, is at the center of the OT profession. Students learn to treat the whole person: body, mind, and spirit. This course of study focuses on evidence based practice, emerging areas of practice and encourages lifelong learning. A special fee will be assessed.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 112, OCTA 120, OCTA 125, and PSYH 257; Corequisite: OCTA 110; Concurrent: OCTA 121

Typically Offered: Summer Semester

OCTA 120, NEUROMUSCULAR APPLICATIONS 3 (3)
This class will provide the developing occupational therapy (OT) assistant a deeper understanding of learned neurological and kinesiology principles as they relate to patient/client occupational performance and for use as a foundation for intervention. This course relates to the curriculum design as it reviews and enhances understanding of the musculoskeletal and neurological systems as they relate to OT. Information from this foundational course is expanded on in all intervention classes.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 102, OCTA 111, OCTA 113, BIOG 122, ALHN 112, PSYH 251; Concurrent: OCTA 112, OCTA 125, and PSYH 257

Typically Offered: Spring Semester

OCTA 121, OT IN GERIATRICS 1 (1)
This course explores issues related to occupational therapy and geriatrics with emphasis on health and wellness, death and dying, and dementia. This course relates to the curriculum design by bringing together aspects of development, physical rehab and mental health; applying these to an area of contemporary practice: geriatrics.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 112, OCTA 120, OCTA 125 and PSYH 257; Concurrent: OCTA 110 and OCTA 115

Typically Offered: Summer Semester

OCTA 125, PEDIATRIC OCCUPATIONAL THERAPY 5 (5)
This course explores typical childhood development and pediatric health conditions typically seen in Occupational Therapy and the effects of the interaction of these on the occupation of childhood and adolescence. The class relates to the curriculum design as being one of the three intervention classes which trains students through lecture and lab in theory and techniques of intervention with the pediatric population through the use of frame of reference, the use of evidence based practice, documentation, and occupation. A special fee will be assessed.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 102, OCTA 111, OCTA 113, PSYH 251, BIOG 122, ALHN 112; Corequisite: OCTA 112; Concurrent: OCTA 120 and PSYH 257

Typically Offered: Spring Semester
OCTA 205, LEVEL II FIELDWORK 6 (42)
This course relates to the curriculum design as the final class in the OTA curriculum which brings together all prior classes, moving towards guided practice. Students are able to take their understanding of occupation and evidence based practice out of the classroom. These final fieldwork assignments will be provided under the supervision of licensed Occupational Therapy (OT) practitioners and in preparation for entry-level practice. Students will be assigned to two 8-week full-time clinical fieldwork placements in order to apply principles and techniques acquired throughout curriculum. Students must participate in on-line discussions and hand in all paperwork to successfully pass class. Grading for this course is Pass/Fail. Course includes an experiential learning component.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 206, OCTA 207, OCTA 208, OCTA 210 and ALHN 121
Typically Offered: Spring Semester

OCTA 206, ASSISTIVE TECHNOLOGY 2 (2)
This class explores access, implementation, and funding of adaptive sensory, physical, cognitive, virtual, mobility, transportation, environmental, communication, and daily living supports current in occupational therapy (OT) intervention. This course is related to the curriculum design by having students become aware of assistive technology with both low and high technology. The course relates to interventions from pediatrics to geriatrics.

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 110, OCTA 115 and OCTA 121; Concurrent: OCTA 207, OCTA 208, OCTA 210 and ALHN 121
Typically Offered: Fall Semester

OCTA 207, PHYSICAL DYSFUNCTION LEVEL I FIELDWORK 1 (1)
In traditional Occupational Therapy (OT) settings, students participate in observational and interactive experiences in physical rehab setting. Students will be given opportunities to apply knowledge and skills being learned concurrently in OT courses, in-class discussions, and through documentation. This course relates to the curriculum design as it is taken concurrent with the physical rehab track. During this course students are able to apply the skills of intervention and documentation as it pertains to physical rehab. Course includes an experiential learning component. A special fee will be assessed.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 110, OCTA 115. OCTA 121; Corequisite: OCTA 210; Concurrent: OCTA 206, OCTA 208, ALHN 121
Typically Offered: Fall Semester

OCTA 208, OCCUPATIONAL THERAPY ISSUES 1 (1)
This blended course is designed to augment the OTA’s professional skills for management and functions of rehabilitation/OT departments. Students will be able to build resumes for upcoming job searches. Active discussions and activities related to current legislation and practice will be pursued. The course expects the soon to be practitioners to have an understanding of professionalism as they begin to enter the field of occupational therapy. This course relates to the curriculum design as it brings together many of the issues discussed in foundational and intervention classes.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 110, OCTA 115, OCTA 121; Concurrent: OCTA 206, OCTA 207, OCTA 210, ALHN 121
Typically Offered: Fall Semester

OCTA 210, PHYSICAL REHAB OT 6 (6)
This course relates to the curriculum design as being one of the three intervention classes which trains students through lecture and lab in theory and techniques of intervention with physical rehab through the use of frame of reference, evidence based practice, documentation, and occupation. A special fee will be assessed.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: C or higher in OCTA 110, OCTA 115, OCTA 121, BIOG 122; Corequisite: OCTA 207; Concurrent: OCTA 206, OCTA 208, ALHN 121
Typically Offered: Fall Semester

Philosophy (PHLY)

PHLY 151G, INTRODUCTION TO PHILOSOPHY 3 (3)
This course is an introduction to philosophy. An investigation of life’s big questions: What’s real (God, soul, free will)? What’s worthwhile (helping others, pursuing our own pleasure)? And what can we know (especially about what is real and worthwhile)? Humanities core course. (OTM)
General Education: C5, IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PHLY 161, INTRODUCTION TO ETHICS 3 (3)
A study of traditional and contemporary moral theories, focusing on the question of what is the criteria of moral goodness and moral rightness. Contemporary moral, social and political issues are discussed against the background of these theories. Humanities core course. (OTM, TAG)
General Education: C5, IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PHLY 165, BIOETHICS 3 (3)
Examination and discussion of ethical issues in medicine and health care, viewed from the perspective of contemporary moral theories. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PHLY 171, INTRODUCTION TO LOGIC 3 (3)
An introductory investigation of principles of sound thinking through a study of basic rules and systems of formal logic. Mathematics core course. (OTM, TAG)
General Education: C2, IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in high school geometry or satisfactory placement assessment in mathematics.
Typically Offered: Summer, Fall and Spring Semesters

PHLY 174, CRITICAL THINKING 3 (3)
Introduction to logical concepts and skills needed for practical reasoning and decision-making and the evaluation of appeals and arguments encountered in everyday life. Emphasis on informal fallacies, rhetorical appeals, inductive reasoning and moral reasoning. Humanities core course. (OTM, TAG)
General Education: C5, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
PHLY 262G, INTRODUCTION TO EASTERN PHILOSOPHY 3 (3)
This course is an introduction survey to Eastern philosophies including India, China and Japan. The course will make use of primary texts, in translation, to explore the cosmology, ontology and epistemology of Hinduism, Buddhism, Daoism, and Confucianism in their various manifestations through history. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall Semester

PHLY 270G, RELIGION AND SCIENCE 3 (3)
This course explores the intersections and interactions of religion and science. By introducing critical methods in the study of religion and science, the course considers the issues such as the place of religion in a scientific age and the relationship between faith and reason. (OTM)
General Education: C5, IN1, IN3, IN4
Typically Offered: Spring Semester

PHLY 271G, SOCIAL AND POLITICAL PHILOSOPHY 3 (3)
This course considers the philosophic foundations of the modern, liberal democracy; critiques of liberal political philosophy; and applications of these ideas to contemporary social and political issues including topics like privacy rights, welfare, just war theory, and terrorism. Humanities Core Course. (OTM)
General Education: C5, IN1, IN4
Typically Offered: Spring Semester

PHLY 281G, PHILOSOPHY OF RELIGION 3 (3)
An introduction to the major topics in the philosophy of religion including the nature and existence of God, the problem of evil, the significance of religious experience, and the nature of religious truth. This course is cross-listed with RELG 281. Humanities Core Course. (OTM)
General Education: C5, IN1, IN4
Typically Offered: Spring Semester

PHLY 299, INDIVIDUALIZED STUDIES IN PHILOSOPHY 1-2 (1)
An in-depth study of specialized concepts, major figures or movements in Philosophy tailored to individual student need and interest. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Phlebotomy (PHBT)

PHBT 112, BASIC LABORATORY TECHNIQUES 4 (6)
This course is for students enrolled in the phlebotomy program. Introduction of the student to the profession of clinical laboratory science as it relates to the phlebotomist. This includes organizational structure of hospitals and laboratories; medical ethics; related medical terminology; quality assurance; laboratory safety; specimen processing; and knowledge of basic routine test procedures in hematology, immunohematology, microbiology, serology, urinalysis and clinical chemistry. Competency required in the performance of venipuncture and micro skin puncture techniques. Laboratory required. (A special fee will be assessed). (CTAG)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: High school graduation or GED and acceptance in the phlebotomy program.
Typically Offered: Fall Semester

PHBT 121, PHLEBOTOMY CLINICAL PRACTICUM 3 (10)
This course will provide 150 hours of clinical blood drawing experience in affiliated clinical agencies. (A grade of C or better in Basic Laboratory Techniques and Body Structure and Function is required.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: HLED 153, BIOG 115, and PHBT 112
Typically Offered: Spring Semester

Physical Education/Fitness (PEFT)

PEFT 131, AEROBIC SPINNING 1 (2)
This course is designed to teach a safe and effective aerobic workout by using a stationary bicycle. The group exercise cycling approach will be used to help strengthen the cardiovascular system while developing the major muscles used in cycling. Students will learn how to maintain proper form used throughout the different phases of the cycling workout. This workout can be modified to meet all fitness levels.
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 132, ZUMBA 1 (2)
Zumba is an aerobic workout that blends Latin and International music, using dance moves that create a dynamic and energetic fitness class. This course utilizes cardiovascular interval training to maximize caloric output. The easy to follow routines combine fast and slow rhythms that help to tone and sculpt the entire body.
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 133, T-BOW FITNESS 1 (2)
This fitness class utilizes the versatile T-BOW to effectively train the major muscles used in cycling. Students will learn how to use lightweight, maraca-like toning sticks to enhance rhythm and tone the trunk, upper body and lower body.
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

PEFT 134, ZUMBA TONING FITNESS 1 (2)
Zumba toning combines body-sculpting movements and high-energy Latin-infused Zumba dance moves. Students learn how to use lightweight, maraca-like toning sticks to enhance rhythm and tone the trunk, upper body and lower body.
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

PEFT 151, LIFETIME FITNESS 1 (2)
Lifetime fitness is a self-paced aerobic and weight training program designed to improve one's cardiovascular system and muscular endurance utilizing circuit training. Individual exercise programs are designed for special needs. Aerobic and resistance training equipment are available. Can be audited once. A student must be 13 years of age or older to enroll. (A special fee will be assessed.)
General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters
PEFT 152, LIFETIME FITNESS II 1 (2)
This course is a continuation of Lifetime Fitness (PEFT 151), which is a self-paced aerobic and resistance training program designed to improve one's cardiovascular system and muscular endurance, utilizing circuit training. This course may be repeated up to three (3) times for credit, but can satisfy only one (1) credit for physical education requirement. Can be audited once. Non-credit options are available. (A special fee will be assessed.)

General Education: IN5
Course Entry Requirement(s): Prerequisite: PEFT 151
Typically Offered: Summer, Fall and Spring Semesters

PEFT 153, STRENGTH AND RESISTANCE TRAINING 1 (2)
Designed to provide the fundamentals of correct resistance training techniques variety of tools i.e. weight lifting equipment, dumbbells, tubing, resist-a-balls, to improve one's muscular fitness. Healthy living topics will be addressed. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 154, RESISTANCE TRAINING FOR WOMEN 1 (2)
Designed to provide the fundamentals of correct lifting techniques for a variety of resistance tools i.e. weight lifting equipment, dumbbells, tubing, resist-a-balls, to improve female physique and fitness level. This course is for women only. Healthy living topics will be addressed. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 155, PERSONAL CONDITIONING 1 (2)
This course is designed to provide instruction in the fundamentals of aerobic and strength conditioning exercises. During self paced workouts, the students will utilize the Fitness Center's resistance training equipment, variety of resistance tools, cardiovascular equipment, and the fieldhouse track. Healthy living topics will be addressed. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 156, CARDIO-KICKBOXING 1 (2)
This course is designed to teach safe kickboxing techniques. Exercise sessions consist of kicking and punching exercises. The goals of this class are met by combining low impact, high intensity cardio routines, muscle conditioning exercises and kickboxing techniques. (A special fee will be assessed.)

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 157, Pilates 1 (2)
The Pilates course incorporates a non-impact exercise routine that is designed to stretch and strengthen the trunk muscles, improve posture and align the body through proper biomechanics. Pilates workouts will be modified according to individual physical capabilities throughout the term. (A special fee will be assessed.)

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 158, ABDOMINAL WORKOUT 1 (2)
An introduction to abdominal exercises which utilize resistance training tools to help strengthen and shape the core muscles of the body's midsection. (A special fee will be assessed.)

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 159, PERSONAL CONDITIONING II 1 (2)
This indoor and outdoor ropes course engages students in problem solving, decision making, setting goals, developing communication and leadership skills in an atmosphere that is dynamic, challenging, safe and supportive. Application of technical climbing skills will be practiced in a challenge by choice environment. (A special fee will be assessed.)

General Education: IN1, IN3, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 160, RESISTANCE TRAINING FOR WOMEN II 1 (2)
A variety of resistance tools will be utilized in class (dumbbells, resista-ball, body bars, tubing, ankle weights, hand weights, step platforms, etc.). The body toning exercises will improve flexibility, strengthen muscles, and promote muscular endurance. Healthy living topics will be addressed. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 161, BODY TONING 1 (2)
This course combines muscle conditioning workout sessions to music consisting of warm-up, body toning exercises, and cool down activities. A variety of resistance tools will be utilized in class (dumbbells, resista-ball, body bars, tubing, ankle weights, hand weights, step platforms, etc.). The body toning exercises will improve flexibility, strengthen muscles, and promote muscular endurance. Healthy living topics will be addressed. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PEFT 163, STEP AEROBICS 1 (2)
Instruction in proper techniques and basic fundamentals of step training for developing cardiovascular endurance and muscle tone. A physically challenging and fun aerobic activity. (A special fee will be assessed.)

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester
**Physical Education/Self-Defense (PEDF)**

**PEDF 152, PERSONAL SELF-DEFENSE 1 (2)**
An introduction to personal self-defense through both classroom instruction and participatory practice. Introductory techniques and concepts will be taught in order to encourage the student to think in terms of options and choices, develop one's awareness, assertiveness skill, and safely practice physical self-defense techniques. A variety of methods will be taught to increase one's physical and mental preparedness, enhance confidence and enable the student to feel more empowered in his or her life.

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**PEDF 153, FENCING 1 (2)**
Students will be introduced to the fundamentals of modern foil fencing such as: footwork, lunge, attack, parry-riposte, strategy, tactics, technique and boutting. Fun and safety are emphasized at all times. All equipment (foils, gloves, jackets and masks) are provided. Special protective jackets are provided for ladies. (A special fee will be assessed).

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**Physical Education/Sports (PESP)**

**PESP 151, BASKETBALL 1 (2)**
Instruction and practice in the basic fundamentals of basketball. Rules, safety and skills application are stressed. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**PESP 160, TEAM AND INDIVIDUAL SPORTS 1 (2)**
This course is designed to provide instruction and practice of fundamental skills of various team and individual sports, emphasizing rules, safety and skills application. Sports covered will include (but not be limited to) tennis, flag football, bowling and golf. Students will actively participate in sports activities.

General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**PESP 161, GOLF I 1 (2)**
Instruction and practice to develop a basic knowledge of golf including etiquette, rules and fundamental skills. Part of the class is conducted at a local golf course. (A special fee will be assessed.)

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

**Physical Education/Wellness (PEWL)**

**PEWL 151, STRESS MANAGEMENT 1 (1)**
An introduction to a study of the physiological and psychological effects of stress upon the human body. The focus is on the investigation and practical application of specific skills for managing stress throughout one's lifetime.

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

**PEWL 170, SERVICE LEARNING I / STRESS MANAGEMENT 1 (7.5)**
This course provides a structured community service experience with an approved community partners and faculty advisor. Students will evaluate the importance of their personal contribution in meeting identified community needs while pursuing academic study and career exploration. Students will gain real world experience in an interactive, dynamic environment. Course will be graded on S/U basis.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None

**PEWL 186, YOGA I 1 (2)**
Students will explore the Yoga philosophy which promotes a healthy mind/body connections to discover a balance in all aspects of life. Class sessions will incorporate Yoga poses, postures, and flexibility exercises to refine, tone and define muscles, while incorporating meditation and breathing techniques.

General Education: IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

**PEWL 188, TAI CHI 1 (2)**
An introductory course exploring the forms and routines of T’ai Chi. Topics of discussion to include: health, flexibility, balance, stress reduction, internal energy, basic martial arts concepts, strength and the philosophy of this ancient Chinese art form. (A special fee will be assessed.)

General Education: IN3, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

**Physical Science (PSSC)**

**PSSC 153, PHYSICAL SCIENCE 4 (5)**
Course designed for non-science majors. Topics include motion, force, energy, electricity, magnetism, light and sound. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM)

General Education: C3, IN1
Course Entry Requirement(s): Course placement policy. Grade of C or higher in MTHM 058 or higher or satisfactory placement assessment in college level mathematics
Typically Offered: Summer, Fall and Spring Semesters

**PSSC 156, PHYSICAL GEOLOGY 4 (5)**
Course designed for non-science majors. Introduction to principles of geology. Topics include internal structure of the Earth, processes associated with the Earth’s crust, and structure of Earth materials. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)

General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
PSSC 157, HISTORICAL GEOLOGY 4 (5)
Geologic history of the Earth with emphasis on paleography and paleoclimatic topics. Includes plate tectonics, relative and absolute dating, rocks and minerals, interpretation of geologic maps, evolution, fossilization, major groups of fossils, and survey of geologic time. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Not offered this year

PSSC 158G, METEOROLOGY 3 (4)
Introductory science course designed to familiarize students with the basics of meteorology. The course focuses on the principles of the natural world and the causes of weather. The impact of human activities on weather and the global system will also be explored. Students will analyze and interpret the effects of the atmosphere on our natural and human ecosystems using real-time data from the National Weather Service. Laboratory required. (A special fee assessed.) Natural Science Core Course. (OTM)
General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PSSC 159G, OCEAN STUDIES 3 (4)
Introductory science course designed to examine the world’s oceans from an earth science perspective. Students will explore the physical, chemical, biological, and geographical properties of oceans and investigate the interactions between the oceans and the hydrosphere, atmosphere, lithosphere, and biosphere. Laboratory required. (A special fee will be assessed.) Natural Science Core Course.
General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PSSC 160G, INTRODUCTION TO CLIMATE STUDIES 3 (3)
An introductory science course designed to familiarize students with the basics of climatology as well as the challenges and opportunities presented by global climate change. Students will become acquainted with the important process of acquiring and assessing climate observations and will be introduced to various observational networks and climate data formats with the goal of raising their level of understanding of climate variability topics including: the difference between climate and weather; statistical techniques used in climate studies; dynamics, physical mechanisms, and impacts of climate variability phenomena; the science behind and limitations of climate prediction centers (CPC) prediction products, and the physical and feedback mechanism involved in global climate change. The course places students in a dynamic and highly motivational educational environment where they investigate Earth’s climate system using real-world environmental data. Students will analyze and interpret the effects of climate on our natural and human ecosystems, past and present, as well as explore the impact of climate change on human existence. (OTM)
General Education: C3, IN1
Course Entry Requirement(s): None

PSSC 161G, EARTH SCIENCE 3 (3)
Course designed for non-science majors. Study of the Earth’s major systems and their interrelationships. Topics include atmosphere and climate, geological composition, ocean environments, and processes that produce and modify the Earth’s crust. Natural Science Core Course.
(OTM)
General Education: C3, IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PSSC 299, INDIVIDUAL STUDIES/PHYSICAL STUDIES 1-2 (1)
An in-depth study of areas in Physical Science presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Physical Therapist Assisting (PTHA)

PTHA 105, FOUNDATIONS OF PHYSICAL THERAPIST ASSISTING 2 (3)
Course designed for Physical Therapist Assistant majors to provide the foundation of skills necessary to be successful in the field, including communication and documentation; pharmacological principles; an introduction to medical and surgical pathologies across the lifespan; scientific and mathematical concepts underlying modalities and exercise; models of function, health and disease; and basic patient care skills including moving patients and infection control. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN5
Course Entry Requirement(s): Prerequisite: Admission into the Physical Therapist Assisting program; Corequisite: PTHA 111 and PTHA 121
Typically Offered: Fall Semester

PTHA 111, INTRODUCTION TO PHYSICAL THERAPIST ASSISTING 2 (2)
Course designed for Physical Therapist Assistant majors describing the role of the physical therapist assistant within the health care system; legal and ethical standards of practice; professionalism; function of physical therapy personnel; psychosocial aspects of caring; and interpersonal communication. (A special fee will be assessed.)
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: Program admission; Corequisite PTHA 105 and PTHA 121
Typically Offered: Fall Semester

PTHA 112, FUNCTIONAL ANATOMY AND KINESIOLOGY 4 (6)
Course designed for Physical Therapist Assistant majors to study the anatomical and mechanical aspects of human motion. Study of the structure, muscle actions and joint motion throughout the body along with locomotion, respiration, posture, work and force. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN4, IN5
Course Entry Requirement(s): Prerequisite: PTHA 105, PTHA 111, PTHA 121 and BIOG 121; Corequisite PTHA 122; Concurrent: BIOG 122
Typically Offered: Spring Semester
PTHA 121, PHYSICAL THERAPIST ASSISTING PROCEDURES I 5 (8)
Course designed for Physical Therapist Assistant majors to instruct in the principles and practices of therapeutic applications of basic data collection and measurement techniques including vital signs, range of motion, muscle performance, ADL and functional activities, gait, balance, posture, anthropometric testing, skin, circulation, sensation, equilibrium reactions and pain. Laboratory required. (A special fee will be assessed.)
**General Education:** IN1, IN2, IN3, IN4, IN5
**Course Entry Requirement(s):** Prerequisite: Program admission; Corequisite PTHA 105 and PTHA 111
**Typically Offered:** Fall Semester

PTHA 122, PHYSICAL THERAPIST ASSISTING PROCEDURES II 5 (8)
Course designed for Physical Therapist Assistant majors to study the principles and practices of therapeutic applications of basic interventions provided under the direction and supervision of the physical therapist in the plan of care including biophysical agents, therapeutic exercise, manual therapy, gait and functional training. Laboratory required. (A special fee will be assessed.)
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: PTHA 105, PTHA 111, PTHA 121 and BIOG 121; Corequisite: PTHA 112
**Typically Offered:** Spring Semester

PTHA 221, REHABILITATION PRINCIPLES I 3 (3)
Course designed for Physical Therapist Assistant majors regarding the medical/surgical/pharmaceutical care and provision of physical therapy interventions for commonly encountered medical, surgical, cardiopulmonary, musculoskeletal, neuromuscular, immunological integumentary, metabolic, gastrointestinal, and genitourinary conditions across the lifespan; in various practice settings.
**General Education:** IN1, IN2, IN3, IN5
**Course Entry Requirement(s):** Prerequisite: PTHA 241; Corequisite PTHA 242
**Typically Offered:** Fall Semester

PTHA 222, REHABILITATION PRINCIPLES II 4 (6)
Course designed for Physical Therapist Assistant majors with an emphasis on comprehensive interventions and rehabilitation for a variety of pathologies across the lifespan and bodily systems, including orthopedics, spine, amputation, orthotics and prosthetics, pediatrics, upper and lower motor neuron disorders, geriatrics, pain, and cardiopulmonary disorders. Laboratory required. (A special fee will be assessed.)
**General Education:** IN1, IN4
**Course Entry Requirement(s):** Prerequisite: PTHA 221 and PTHA 242; Corequisite: PTHA 243 and PTHA 245
**Typically Offered:** Spring Semester

PTHA 241, CLINICAL PRACTICUM I 3 (12)
Course designed for Physical Therapist Assistant program majors as an introductory directed practice experience in an intermediate level long term, rehabilitation, acute or general care clinical setting under on site/close supervision. Under the direction and supervision of a Physical Therapist, student will develop initial patient contact skills and apply directed components of basic data collection and intervention techniques. Lecture 3 hours per week provides support for integration of program content into the clinical setting and development of professional skills. (Clinical practice 32 hours per week for 5 weeks.) (A special fee will be assessed.)
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: PTHA 112 and PTHA 122
**Typically Offered:** Summer Semester

PTHA 242, CLINICAL PRACTICUM II 3 (12)
Course designed for Physical Therapist Assistant program majors as directed practice experience in an intermediate level long term, rehabilitation, acute or general care clinical setting under on site/close supervision. Under the direction and supervision of a Physical Therapist, student will develop additional data collection and intervention techniques for general practice and specialty care populations. Lecture provides support for integration of program content into the clinical setting and development of professional skills. (Clinical practice 32 hours per week for 5 weeks) (A special fee will be assessed.)
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: PTHA 241; Corequisite: PTHA 221
**Typically Offered:** Fall Semester

PTHA 243, CLINICAL PRACTICUM III 5 (22)
Course designed for physical therapist assistant program majors as an advanced directed practice experience in acute, long term or specialty settings which progresses students to readiness for function at entry-level practice. Under the direction and on-site supervision of a physical therapist, students will apply directed components of data collection and interventions for basic and specialty setting/patient population, progressing to complete treatments and a full patient load. Lecture provides support for integration of program content into the clinical setting and prepares students for their role in the workplace. Clinical practice 40 hours per week for 8 weeks.
**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: PTHA 221 and PTHA 242; Corequisite: PTHA 222 and PTHA 245
**Typically Offered:** Spring Semester

PTHA 245, ADVANCED TOPICS AND CLINICAL CRITIQUE 3 (3)
Course designed for Physical Therapist Assistant program majors to survey contemporary issues in Physical Therapy, healthcare, and the healthcare environment including specialty treatment and populations, technology, career development, professional growth, fiscal, organizational and governmental considerations and employment issues.
**General Education:** IN1
**Course Entry Requirement(s):** Prerequisite: PTHA 221 and PTHA 242; Corequisite: PTHA 222 and PTHA 243
**Typically Offered:** Spring Semester

Physics (PHYC)

PHYC 115, PHYSICS FOR THE ALLIED HEALTH SCIENCES 4 (6)
Study of general physics concepts including mechanics, thermodynamics, waves, and electricity and magnetism for students in the Allied Health sciences. Laboratory required. (A special fee will be assessed.)
**General Education:** IN1
**Course Entry Requirement(s):** Concurrent: MTHM 121 or MTHM 168.
**Typically Offered:** Fall and Spring Semesters
PHYC 150, GENERAL PHYSICS I 4 (6)
Algebra-based physics course. Topics include linear and rotational kinematics, Newton’s laws of motion, energy, momentum, equilibrium, temperature and kinetic theory, and thermodynamics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG, MTAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: Successful completion of MTHM 121 or MTHM 172 or satisfactory placement assessment into college mathematics at a level above the prerequisite courses or division approval.
Typically Offered: Summer, Fall and Spring Semesters

PHYC 152, GENERAL PHYSICS II 5 (7)
Continuation of PHYC 150. Topics include waves, sound, optics, electric and magnetic fields and forces and modern physics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG, MTAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: PHYC 150 or division approval.
Typically Offered: Spring Semester

PHYC 251, COLLEGE PHYSICS I 5 (7)
Calculus-based physics course designed for engineers and science majors. Topics include force, energy, momentum, rotation and thermodynamics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: MTHM 181
Typically Offered: Fall and Spring Semesters

PHYC 252, COLLEGE PHYSICS II 5 (7)
Continuation of PHYC 251. Topics include electric fields and forces, magnetic fields, wave theory, harmonic motion, wave interference, and modern atomic physics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OTM, TAG)
General Education: C3, IN1
Course Entry Requirement(s): Prerequisite: PHYC 251 and MTHM 182 or division approval
Typically Offered: Fall and Spring Semesters

PHYC 287, WORK-BASED LEARNING I - PHYC 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: Student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline; have a minimum GPA of 2.5 in the discipline 2.0 overall; or have division approval.
Typically Offered: Offer as required

PHYC 299, INDIVIDUALIZED STUDIES IN PHYSICS 1-2 (1)
An in-depth study of areas in Physics presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisite: Second-year standing and divisional approval.
Typically Offered: Offer as required

Police Academy (PACD)

PACD 101, BASIC POLICE ACADEMY 1 9 (11)
Courses in this module are designed to study the criminal justice system including criminal law, the Ohio Revised Code (ORC), and the physical demands placed upon law enforcement officers. This course corresponds to Ohio Peace Officer Basic Academy Unit 1, Unit 2, and Unit 12. Students will comply with all student performance objectives as required by the Ohio Peace Officer Training Commission (OPOTC).
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Admission to the Lorain County Community College Police Academy
Typically Offered: Summer, Fall and Spring Semesters

PACD 102, BASIC POLICE ACADEMY 2 9 (13)
Students in this module are introduced to the safe operation of motor vehicles, firearms safety, handling, maintenance, and use of force. Students will also learn the fundamentals of criminal investigation, interviews, and interrogation and will comply with all student performance objectives as required by the Ohio Peace Officer Training Commission (OPOTC) curriculum. This course corresponds to Ohio Peace Officer Basic Academy Unit 4, Unit 5, and Unit 11 as required by the OPOTC.
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Admission to the Lorain County Community College Police Academy
Typically Offered: Summer, Fall and Spring Semesters

PACD 103, BASIC POLICE ACADEMY 3 9 (13)
Courses in this module are designed to study the interaction between the police and the community. It includes human and community relations, police operations and patrol, police ethics, the use of discretion, de-escalation techniques, and appropriate subject control methods. Students will comply with all student performance objectives as required by the Ohio Peace Officers Training Commission (OPOTC) curriculum. This corresponds to OPOTC Basic Academy Unit 3, Unit 6, and Unit 8.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Admission to the Lorain County Community College Police Academy
Typically Offered: Summer, Fall and Spring Semesters

PACD 104, BASIC POLICE ACADEMY 4 9 (13)
Courses in this module are designed to prepare the student on various procedures regarding traffic accidents and enforcement. It includes the proper care of the injured, basic and advanced crash investigation, traffic enforcement, the use of technology, DUI enforcement, HAZMAT awareness, traffic control, crowd control and officer safety. Students will comply with all student performance objectives as required by the Ohio Peace Officers Training Commission (OPOTC) curriculum. This course corresponds to Ohio Peace Officer Basic Academy Unit 7, Unit 9, Unit 10, and Unit 13 as required by the OPOTC.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Admission to the Lorain County Community College Police Academy
Typically Offered: Summer, Fall and Spring Semesters
Political Science (PLSC)

PLSC 151G, COMPARATIVE POLITICS 3 (3)
A general survey, introducing fundamentals of political theories, institutions, processes and methods of analysis. (OTM, TAG)
General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PLSC 155, STATE AND LOCAL GOVERNMENT 3 (3)
This course offers an opportunity to examine the origin, development, and functions of state and local governments, with special reference to Ohio political institutions and the interworking of metropolitan governments. The course examines our rich history beginning with Federalism, evolution of state government and constitutions, local citizen participation, political parties, elections, and public administration. Social Sciences Core Course. (OTM, TAG)
General Education: C4, IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PLSC 156, AMERICAN NATIONAL GOVERNMENT 3 (3)
This course provides a survey of national government in theory and practice. Formal governmental structure and procedures studied and made meaningful will be explored with an emphasis on the individual’s role in a functioning democracy. Social Sciences Core Course. (OTM, TAG)
General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PLSC 157G, CONTEMPORARY WORLD PROBLEMS 3 (3)
Study of international relations and the forces which bring about conflicts. Emphasis on United States foreign policy and the United Nations since World War II. (OTM, TAG)
General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PLSC 251, INTRODUCTION TO SOCIAL AND POLITICAL RESEARCH 3 (3)
Students will explore research practice through compilation of reliable and unreliable sources. Through research of literature, search engines and current periodicals, students will select information to design both written and oral projects. The use of technology is required.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: ENGL 161 and CISS 121
Typically Offered: Fall Semester

PLSC 263G, WOMEN AND POLITICS 3 (3)
Women and politics provides an overview of the emergence of American women’s rights and participation in politics. Students will primarily focus on the struggles and successes of women to vote and to participate in the political arena from the late 19th Century forward. Students will examine processes by which women became not only accepted but courted by both parties and by political leaders. Special attention will be given to how women’s influence has shaped national, state and local parties.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Spring Semester

PLSC 299, INDIV STUDIES IN POLITICAL SCIENCE 1-2 (1)
An in-depth study of areas of political science presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Practical Nursing (PRNS)

PRNS 110, INTRODUCTION TO MEDICATIONS 1 (1)
A course designed to provide the student with information basic to the administration of medication. An emphasis is placed on the mathematics needed to calculate drug dosages. (CTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: Admission into the Practical Nursing Program; Corequisite: PRNS 111, BIOG 115 and ENGL 161
Typically Offered: Fall Semester

PRNS 111, FUNDAMENTALS OF MEDICAL/SURGICAL NURSING I 10 (19)
An introduction to the role of the practical nurse and basic nursing techniques. Principles of adult growth and development, legal and ethical issues, nursing history and trends are introduced. Principles of medical / surgical nursing are introduced through meeting the needs of the adult clients with health problems related to the reproductive, musculoskeletal, gastrointestinal, sensory, and integumentary systems. Laboratory required. (A special fee will be assessed.) (CTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: High school graduate; 2.0 gpa in previous college coursework, high school algebra or equivalent with a ‘C’ or better; recognized STNA (state tested nursing assistant) status, completion of LCCC’s nurse aid training program
Typically Offered: Spring Semester

PRNS 112, MEDICAL/SURGICAL NURSING II 12 (23)
A continuation of practice in medical surgical nursing through meeting the needs of adult clients with problems related to the circulatory, respiratory, endocrine, neurological, urinary, hematological systems, the terminally ill, mental illness, community health nursing, geriatric nursing in long-term care, intravenous therapy, and nursing trends. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: BIOG 115, PRNS 110, PRNS 111; Concurrent: PSH 151

PRNS 116, MATERNITY NURSING 2 (3)
Managing the care of the client and their family in the healthcare setting. Emphasis will focus on the obstetrical client. Clinical required. (CTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: PRNS 112; Corequisite: PRNS 118; Concurrent: SOCY 151
Typically Offered: Summer Semester

PRNS 118, PEDIATRIC NURSING 2 (2.75)
Managing the care of the client and their family in the healthcare setting. Emphasis will focus on the pediatric client. Clinical and lab required. (CTAG)
General Education: IN1
Course Entry Requirement(s): Prerequisite: PRNS 112; Corequisite: PRNS 116
Typically Offered: Summer Semester
Typically Offered:

**Course Entry Requirement(s):** Prerequisite: PRNS 112

**Typically Offered:** Summer Semester

### Psychology (PSYH)

**PSYH 151, INTRODUCTION TO PSYCHOLOGY 3 (3)**
An introduction to psychology as the science of behavior and an overview of current psychological thought. Topics include the science of psychology, biological bases of behavior, learning, memory and cognition, motivation, stress and adjustment, personality, psychological disorders and their treatment, and social psychology. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** None, None

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 251, HUMAN GROWTH AND DEVELOPMENT 3 (3)**
The study of the phenomena of human growth and development and the influence of biological, cognitive, and psychosocial factors from conception throughout life. Topics include: prenatal development, infancy, childhood, adolescence, and adulthood. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN2, IN3, IN4, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 253, CHILD DEVELOPMENT 3 (3)**
A study of the biological, cognitive, and psychosocial factors in development from conception to puberty. This course includes discussion of perceptual-motor, emotional, language, intellectual, social, gender, and moral development. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 254, ADOLESCENT DEVELOPMENT 3 (3)**
A study of the biological, cognitive, and psychosocial factors in development from pre-adolescence to young adulthood. Emphasis on pubertal, family, peer, school, and media influences on development. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 256, ADULTHOOD AND AGING 3 (3)**
A study of the biological, cognitive, and psychosocial factors in development from early adulthood through the lifespan. Emphasis on a contextual model of development, an examination of the nature and sources of diversity, and the influence of age, gender, cohort, race/ethnicity, socioeconomic status, and culture on development. Social Science Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Spring Semester

**PSYH 257, ABNORMAL PSYCHOLOGY 3 (3)**
An exploration of the accountabilities, manifestations and treatments of psychological disorders on a continuum of functional to dysfunctional. Topics include: types, assessment, therapies and prevention of abnormal behaviors. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 259, HUMAN SEXUALITY 3 (3)**
A comprehensive interdisciplinary introduction to Human Sexuality. Major areas of focus include: sexual history, scientific research, anatomy and physiology, sexual orientations, gender roles, love, sexual life cycles, legal and ethical issues.

**General Education:** IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 261, SOCIAL PSYCHOLOGY 3 (3)**
A study of psychological principles underlying social behavior. Includes theoretical issues, empirical findings and applications in social perception, attitude formation, persuasion, conformity, group processes, prejudice, aggression, altruism, attraction and conflict resolution. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 262, PSYCHOLOGY OF THE INFORMATION AGE 3 (3)**
Psychology of the Information Age examines the influence that the information age has had on the psychology of human beings. Topics include: history of communication technology, research methods that utilize the internet, the cognitive, social, motivational, psychopathological, therapeutic and behavioral implications of using information technology.

**General Education:** IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 263, PERSONALITY THEORIES 3 (3)**
An introduction to the major theories and research that describe and explain the development of personality. Emphasis is placed on the determinants of healthy personality as it relates to self-concept, emotionality, and interpersonal relations. Applications in assessment and therapy are covered. Social Sciences Core Course. (OTM, TAG)

**General Education:** C4, IN1, IN3, IN5

**Course Entry Requirement(s):** Prerequisite: PSYH 151

**Typically Offered:** Summer, Fall and Spring Semesters

**PSYH 271, QUANTITATIVE METHODS IN BEHAVIORAL SCIENCE 4 (4)**
An introduction to the quantitative analysis and interpretation of behavioral data including descriptive statistics, correlation and regression, hypothesis testing, tests of significance and computer applications with special emphasis on statistical issues in experimental design.

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: PSYH 151 or SOCY 151

**Typically Offered:** Fall and Spring Semesters
PSYH 272, RESEARCH METHODS IN PSYCHOLOGY 4 (4)
A survey and application of research methods used in the study of behavior. Lecture and laboratory experience in the scientific basis of psychology including observation and measurement, research design, interpreting results, ethical issues, reading and writing research reports.
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: PSYH 151 and PSYH 271
Typically Offered: Fall and Spring Semesters

PSYH 273, INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY 3 (3)
This course is a survey of the field of industrial/organization psychology. It focuses on the application of scientific methods and psychological principles to industrial and organizational behavior. Topics include job analysis, selection, performance appraisal, motivation and job satisfaction, job related stress, group processes, leadership, organizational structure, and organizational culture. Social Sciences Core Course. (OTM)
General Education: IN1, IN3, IN5
Course Entry Requirement(s): Prerequisite: PSYH 151
Typically Offered: Fall Semester

PSYH 274, PSYCHOLOGY OF ADJUSTMENT 3 (3)
A study of the concepts, theories, principles, and applications that contribute to the psychology of human adjustment. Topics include stress and coping, self-concept, interpersonal communication and conflict, attraction and intimate relationships, developmental transitions, careers and work, mental and physical health.
General Education: IN1, IN3, IN5
Course Entry Requirement(s): Prerequisite: PSYH 151
Typically Offered: Spring Semester

PSYH 275, PSYCHOLOGY OF GENDER 3 (3)
A study of the concepts, theories, and research regarding the differences and similarities between men and women. Gender will be examined from a variety of perspectives, including biological, psychological, and sociocultural. Topics include history of psychology of gender, gender roles and stereotyping, theories of gender identity and development, cognitive abilities, achievement, emotions, interpersonal communication, relationships, careers and work, physical health, stress and psychopathology. Social Sciences Core Course. (OTM)
General Education: IN1, IN3, IN5
Course Entry Requirement(s): Prerequisite: PSYH 151
Typically Offered: Fall Semester

PSYH 276, PROFESSIONAL AND CAREER ISSUES IN PSYCHOLOGY 1 (1)
An overview of the field of psychology including educational requirements, career opportunities and professional issues for students considering a psychology major. A primary objective of the course is to foster professional development of the psychology major. Information is provided about what Psychologists do and the preparation required to work/study in various settings.
General Education: IN1, IN3, IN5
Course Entry Requirement(s): Prerequisite: PSYH 151
Typically Offered: Spring Semester

PSYH 277, ADVANCED RESEARCH PROJECT IN PSYCHOLOGY 4 (4)
This course provides students with extended experience in conducting an independent research project in psychology. Students will carry out an empirical study of their own design including selection of the research topic, a review of the relevant literature, research design and proposal, data collection and analysis, preparation of the final research report in APA format, and a project presentation. This course is especially beneficial for students who are considering graduate school in psychology.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: PSYH 151, PSYH 271 and PSYH 272
Typically Offered: Fall Semester

PSYH 287, WORK BASED LEARNING I - PSYH 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

PSYH 299, INDIVIDUALIZED STUDIES IN PSYCHOLOGY 1-2 (1)
An in-depth study of areas of psychology presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Public Administration (PBAD)

PBAD 151, INTRODUCTION TO PUBLIC ADMIN 3 (3)
Introduction to historical development of public administration, basic principles of organizational administration, behavior and dynamics, decision-making in the public sector, leadership in the organization, and special principles and techniques involved in public sector financial and personnel administration. Contemporary issues involving the study of values, legal concerns and ethics may also be included.
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

PBAD 152, PROGRAM/SERVICE PLANNING & EVAL 3 (3)
This course examines various governmental and community-based service programs and introduces planning and development techniques used to achieve successful results and outcomes. Topics explored will include assessment of community assets and needs, community-based planning strategies; conduct of research to identify resources, program and service implementation methods and other program development issues. Students will have hands-on experiential opportunities to become acquainted with key elements of a variety of programs and services.
General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall Semester
PBAD 155, BUDGET/FINANCE/COMM. ORGANIZATIONS 3 (3)
This course will provide the student with a basic understanding of budgeting processes (summarizing data, sampling methods, reporting methods, and payroll) and management of public funding. Various applications of budgets and finance will be explored through related activities and projects during and outside of class sessions. Management control systems that include focus on people, programs, and property are included (insurance, depreciation, amortization, and accounting methods). A myriad of documentation methods will be included that will ensure preparation for managing funding streams from local, state, federal or other sources. Politics related to various internal and external budget and finance issues will be examined. Technological resources, including software packages will be introduced.

General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: PBAD 151
Typically Offered: Fall Semester

PBAD 158, HUMAN RESOURCE/VOLUNTEER MANAGEMENT 3 (3)
This course examines various governmental and community-based service programs and introduces various models of public, government, and nonprofit personnel and human-resource management systems and processes. A variety of employee issues will be explored: 1) public policies for employees in government; 2) organizational needs and requirements; 3) employee needs and expectations; and 4) new challenges in the 21st century. Volunteerism and volunteer management will be examined as to advantages and challenges in working with people whose needs and motives reach beyond monetary compensation. Students will have hands-on experiential opportunities to become acquainted with key elements of a variety of programs, services and systems.

General Education: IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall Semester

PBAD 161, FUNDRAISING AND GRANTSMANSHIP 3 (3)
This course examines the planning, organization and execution of programs and strategies to raise benevolent support through gifts and grants. The spectrum of approaches and methods to fundraising/resource development will be introduced and explored. Students will receive hands-on experience in devising fundraising and grant capturing programs and applications. Students will be introduced to: components of the annual fund, special events, capital campaign, planned giving, and related topics and applications which effectively engage donors and volunteers. The place of the development/fundraising function in relation to the executive, the chief financial officer and the board will also be examined.

General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

PBAD 251, ORGANIZATIONAL LEADERSHIP 3 (3)
This course will provide an introduction to key functions in organizations and the impact of leadership influence on employees' customers/clients, board members, partners and others. Roles and responsibilities for the leader as an employee or as a board member will be included. The impact of decision-making will be explored as a process of choosing from several alternatives. Decision-making roles will be examined from the point of view of the entrepreneur, the conflict manager, the chief supporter, the resource distributor and the negotiator. Students will have opportunities to participate in leadership activities and planning strategies. The use of technology will be explored so students will be able to use technological resources and applications in work situations.

General Education: IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

PBAD 252, SURVEY OF LEGAL CONCEPTS 3 (3)
This course will include various aspects of politics and procedure, ethics, human rights, property, crime and punishment, selected business topics, labor and social welfare, the role and structure of government, and other selected issues of law in urban cities. Neighborhood law will also be studied to provide students with basic knowledge of problems and issues that can affect people in cities such as in easements and trespass, boundaries, utilities, zoning, covenants, legal research, conflict mediation and court processes.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

PBAD 285, PUBLIC ADMIN-PRACTICUM & SEMINAR 3 (9)
The lecture portion of the course focuses on specific aspects of leading or managing governmental and community-based service programs and explores various models of public, government, and nonprofit management systems and processes. Students will participate in a variety of activities to become familiar with, and experience leadership/program/service development techniques and performance measurement standards. Students will complete 125 clock hours of agency/organization practicum experience. The assignment/experience will require learning in-house policies and procedures; working by assignment on research projects; working with assigned employees to complete an approved, supervised project.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: PBAD 151
Typically Offered: Summer, Fall and Spring Semesters

PBAD 299, INDIV STUDIES/PUBLIC ADMINISTRATION 1-2 (1)
An in-depth study of areas of public administration presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisite: Second-year standing and divisional approval.

Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required
**Quality (QLTY)**

**QLTY 111, QUALITY MEASUREMENTS - METROLOGY 3 (5)**
Learning proper use and care of quality measuring instruments or devices. Students will be trained in measurement techniques and procedures based on industry standards and practices. Also included are introduction to advanced precision measurement devices, methods for inspection, maintenance and care of instruments, and writing technical reports. Laboratory required. (A special fee will be assessed.) Prerequisite: High school algebra and geometry or divisional approval.

*General Education: IN1*

*Course Entry Requirement(s):* Prerequisite: High school algebra and geometry or division approval

*Typically Offered: Spring Semester*

**QLTY 121, QUALITY ASSURANCE TECHNIQUES (SPC) 2 (4)**
This is an introductory course in fundamental quality assurance techniques. Basic statistical process and normal probability applications for quality improvements: histogram, Pareto charts, cause and effect analysis, control charts for variable and attribute data and its interpretation for process capability and probability of occurrences analysis are covered. Also studied are R&R gage capability and basic sampling techniques. Laboratory required. (A special fee will be assessed.)

*General Education: IN1*

*Course Entry Requirement(s):* Course placement policy. Grade of C or higher in MTHM 033 or satisfactory placement assessment in mathematics

*Typically Offered: Fall and Spring Semesters*

**QLTY 122, BASIC QUALITY TOOLS AND APPLICATIONS 3 (5)**
This course introduces basic quality tools and application techniques widely used in business and industry. Basic statistical processes control methods and quality improvements tools: histogram, Pareto charts, cause and effect analysis, scatter plots, and control charts for variable and attribute data and the interpretation for process capability and probability of occurrences analysis are covered. Quality problem root-cause analysis for corrective actions is discussed. This course offers an opportunity for experiential learning. Laboratory required. (A special fee will be assessed.)

*General Education: IN1, IN2*

*Course Entry Requirement(s):* Concurrent: MTHM 121 or MTHM 168.

*Typically Offered: Fall and Spring Semesters*

**QLTY 221, QUALITY MANAGEMENT PRINCIPLES AND PRACTICES 3 (3)**
Fundamental principles and practices of Total Quality Management (TQM) in an organization are covered. The basic TQM concepts of leadership, customer satisfaction, employee involvement, problem solving, bench marking, continuous process improvement, supplier partnership, and performance quality assessment are addressed. ISO 9000 related practices are discussed.

*General Education: IN1*

*Course Entry Requirement(s):* None

*Typically Offered: Spring Semester*

**QLTY 222, INTERNAL PLANT LOGISTICS 3 (3)**
This course covers all the basics of internal plant logistics in manufacturing and service operation planning including inventory control systems, purchasing, enterprise resource planning, and physical distribution and transportation systems from suppliers to consumers. Continuous quality improvement applications in all activities are emphasized.

*General Education: IN1*

*Course Entry Requirement(s):* Prerequisite: MTHM 121 or MTHM 151

*Typically Offered: Fall Semester*

**QLTY 224, LEAN MANAGEMENT PRINCIPLES & PRACTICES 3 (3)**
This course explains applications of Lean Principles and Practices for Quality Management in Manufacturing and Services. Lean principles and practices base improvements on time and motion studies. Time and motion studies are implemented in manufacturing and service environments to achieve Improved Quality, Eliminate Waste, Reduce Lead Times and Reduce Operating Costs. This course will provide the students with a basic understanding of Lean Principles and Practices as well as tools to utilize to achieve the improvement goals.

*General Education: IN1*

*Course Entry Requirement(s):* Concurrent: ENGL 161

*Typically Offered: Spring Semester*

**QLTY 226, SIX SIGMA BASIC TOOLS & TECHNIQUES 3 (4)**
This course is an application of Six Sigma Basic Tools and Techniques for Quality students. The Six Sigma processes and principles will be covered that include an overview of the history and quality tools focusing on continual improvement for all processes and functions in business. Tools such as Measurement methods, process capabilities, probabilities and design of experiments will be provided for direct application. Laboratory required. (A special fee will be assessed.)

*General Education: IN1*

*Course Entry Requirement(s):* Prerequisite: MTHM 151 or MTHM 121

*Typically Offered: Fall Semester*

**QLTY 232, SAMPLING AND INSPECTION CONTROL 2 (3)**
This course covers the principles of acceptance sampling plans for quality control and the use of sampling tables and standards in preparing inspection plans for new product design, product improvement, incoming material control, and vendors’ parts supply. Also included are gauge calibration, maintenance, and gauge data management studies. Design of experiment for reliability study will be introduced. Laboratory is required. (A special fee will be assessed.)

*General Education: IN1*

*Course Entry Requirement(s):* Prerequisite: QLTY 111 and QLTY 121

*Typically Offered: Spring Semester*

**QLTY 234, LEAN SIX SIGMA FOR PROCESS IMPROVEMENT 4 (5)**
This course integrates 'Lean Principles and Procedures' with 'Six Sigma Tools and Techniques’ as practiced by quality improvement industry. Students will be engaged in hands on practical applications of setting goals for lean enterprise, value stream mapping, eliminating waste, and reducing operating costs. Students will also apply the Define Measure, Analyze, Improve and Control (DMAIC) Model to improve project outcomes. Laboratory is required. (A special fee will be assessed.)

*General Education: IN1, IN2*

*Course Entry Requirement(s):* Prerequisite: QLTY 121; Concurrent: ENGL 161

*Typically Offered: Fall Semester*
QLTY 235, QUALITY AUDIT & CORRECTIVE ACTION 2 (2)
Introduction of basic principles of quality audit and cost control procedures that are applied in a typical industrial or service environment is covered. Implementation of auditing procedures, failure and root-cause analysis for corrective action, and preparing preventive action plans in both manufacturing and service oriented environment using case study analyses are discussed.
General Education: IN1
Course Entry Requirement(s): Prerequisite: QLTY 121, QLTY 226 or QLTY 232 or divisional approval
Typically Offered: Spring Semester

QLTY 236, RELIABILITY CENTERED MAINTENANCE 3 (4)
This course covers the concepts, core principles and applications of reliability centered maintenance (RCM) in an industrial manufacturing setting. Practical applications for Total Productive Maintenance (TPM), preventive and predictive maintenance, implementing Failure Modes and Effects Criticality Analysis (FMECA) and determining resources for corrective actions will be discussed. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Concurrent: MTHM 121
Typically Offered: Spring Semester

QLTY 241, ISO 9001 2 (2)
The course covers the internationally approved ISO 9000 series of quality management system (QMS) standards revised and latest version with major emphasis on provision of products and services that meet the customer expectations and applicable statutory and regulatory requirements.
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: QLTY 122
Typically Offered: Spring Semester

QLTY 287, WORK-BASED LEARNING I - QLTY 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval. Typically Offered: Offer as required

QLTY 288, WORK-BASED LEARNING II - QUALITY 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: QLTY 287
Typically Offered: Offer as required

Radiologic Technology (RDTC)

RDTC 110, INTRODUCTION TO RADIOGRAPHY 3 (3)
Course will present the history of radiology, preparation for clinical education, basic radiation production and protection, and communication with various client populations. Also an introduction to primary exposure factors, image production, processing, legal issues, ethics and radiographic equipment will be presented.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: One year of high school algebra (Accuplacer test) one year of a high school lab science both with a grade of C or higher. Concurrent: C or higher in RDTC 114, MTHM 158 or MTHM 168, BIOG 121, ALHN 110, and ALHN 113 to continue.
Typically Offered: Fall Semester

RDTC 114, RADIOGRAPHIC PROCEDURES I 4 (21)
Radiographic Procedures I orients the radiography student to detailed skeletal anatomy and positioning principles for chest, abdomen, upper and lower extremities, shoulder, pelvis and mobile radiography. Includes technical considerations for working with special populations. Laboratory includes manipulation and use of X-ray, and application and practice of positioning principles and image evaluation. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: One year of high school algebra (Accuplacer test) and one year of a high school laboratory science both will a grade of C or higher. Concurrent: C or higher in RDTC 110, BIOG 121, and MTHM 158 or MTHM 168 to continue the sequence
Typically Offered: Fall Semester

RDTC 116, RADIOGRAPHIC PROCEDURES II 4 (21)
Radiographic Procedures II presents detailed skeletal anatomy and positioning principles for urinary, gastrointestinal, biliary systems, vertebral column, skull, sinus and facial bones. Includes positioning and technical considerations for trauma radiography. Laboratory provides use of X-ray, application and practice of positioning principles and image evaluation. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 114; Concurrent: C or higher in RDTC 117, RDTC 118 and BIOG 122 to continue the sequence
Typically Offered: Spring Semester

RDTC 117, RADIOGRAPHIC PHYSICS AND EQUIPMENT 3 (3)
Radiologic equipment and the principles underlying the production of X-rays and the operation of imaging equipment. Atomic structure, the electromagnetic spectrum, electricity, and electromagnetism, are covered. Includes the X-ray circuit, X-ray tubes, generators and transformers, fluoroscopic imaging, grids, automatic exposure control devices, principles of tomography and digital radiography.
General Education: IN1
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 110 and RDTC 114; Concurrent: C or higher in RDTC 116 and RDTC 118 to continue the sequence
Typically Offered: Spring Semester
RDTC 118, IMAGING TECHNIQUE 4 (4)
This course is a detailed study of X-ray interactions, primary exposure factors and their effect on contrast and exposure, image receptor characteristics, primary and secondary radiation, technique formulation and exposure compensation. Required experiments apply theory to practice.
General Education: IN1
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 110 and RDTC 114; Concurrent: C or higher in RDTC 116 and RDTC 117 to continue the sequence
Typically Offered: Spring Semester

RDTC 119, ADVANCED PROCEDURES AND MODALITIES 4 (23)
Advanced contrast procedures performed in radiology departments. Includes an introduction to angiography and cardiac catheterization. Also includes an introduction to the advanced modalities of CT, MRI, Mammography, Ultrasound and Nuclear Medicine. Selected clinical experience in hospital X-ray departments. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 116, RDTC 117 and RDTC 118
Typically Offered: Summer Semester

RDTC 211, IMAGE CRITIQUE 2 (2)
Critical evaluation of the radiograph, with emphasis on quality control, improvement of the radiograph, criteria that identify how improvements can be made, and adjustments to radiographic technique.
General Education: IN1
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 119; Concurrent: C or higher in RDTC 212 and RDTC 213 to continue the sequence
Typically Offered: Fall Semester

RDTC 212, RADIOLOGIC PATHOLOGY 2 (2)
Radiographic pathology will orient the student to the study of disease, using radiographic examples. Signs, symptoms, causes and prognosis, as well as radiographic appearance of disease, will be discussed. Additionally, explanations of radiographic technical factors related to pathology will be included. This class will be taught with the use of videotapes, lectures and radiographic examples of disease processes.
General Education: IN1
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 119; Concurrent: C or higher in RDTC 212 and RDTC 213 to continue the sequence
Typically Offered: Fall Semester

RDTC 213, RADIOLOGIC IMAGING SCIENCE 5 (28)
Advanced topics in physics and technique or radiology. Includes an overview of radiologic imaging science, and in-depth evaluation of photographic and geometric factors effecting radiographic quality. Technical formula used for imaging are covered in detail. Advanced topics in CT imaging and Quality Control for radiologic equipment will be covered. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 119; Corequisite: C or higher in RDTC 211 and RDTC 212 to continue the sequence
Typically Offered: Fall Semester

RDTC 234, TRENDS IN RADIOLOGY 5 (27)
Current issues and topics in Radiologic Technology. The course will present information on radiology information systems and PACS systems, Quality management, Quality Assurance in Radiology, ethical and legal issues, and other current topical issues in Radiology. Focus areas in radiology will be reviewed in preparation for graduation. This course is also the program capstone, in which final competency in clinical and didactic studies will be evaluated. (A special fee will be assessed.)
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 211, RDTC 212 and RDTC 213; Corequisite: C or higher in RDTC 236
Typically Offered: Spring Semester

RDTC 236, RADIOBIOLOGY AND PROTECTION 2 (2)
In-depth coverage of radiobiology including sources of radiation and the effects of radiation on human tissue and the subsequent effects on the body as a whole. Application of principles of radiobiology to protection techniques for radiation workers and patients. Includes analysis of dose-response models, risk assessment techniques, and methods of determining and evaluating patient dose.
Course Entry Requirement(s): Prerequisite: C or higher in RDTC 211, RDTC 212 and RDTC 213; Corequisite: C or higher in RDTC 234
Typically Offered: Spring Semester

RDTC 299, INDIVIDUALIZED STUDIES IN RADIOLOGIC TECHNOLOGY 1-2 (16)
An in-depth study of various areas of radiologic technology presented by discussion and/or individual research and reading, also including clinical experience to attain competency in radiologic procedures.
Course Entry Requirement(s): Prerequisite: Graduation from foreign Radiography program and division approval.
Typically Offered: Offer as required

Reading and Study Skills (RDST)

RDST 021, COLLEGE READING I 3 (3)
College Reading I introduces the student to those reading skills deemed necessary for college success. Specifically, the course will focus on: vocabulary development, spelling improvement, and introductory content reading skills. Students enroll in College Reading II after satisfactory completion of this course. This course may not be taken concurrently with College Reading II or College Study Skills courses. Required by placement testing.
General Education: IN1
Course Entry Requirement(s): Course placement policy: satisfactory placement assessment in reading
Typically Offered: Not offered this year

RDST 022, COLLEGE READING II 3 (3)
College Reading II will familiarize the student with a variety of reading strategies and selected study skills, leading to the development of an independent learner. Topics include: vocabulary development; textbook reading and note taking; literary narratives; essays; and basic study skills, including time management, memorization and test-taking techniques. Required by placement testing.
General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or better in RDST 021 or satisfactory placement assessment in reading
Typically Offered: Not offered this year
RDST 031, COLLEGE STUDY SKILLS 2 (2)
College Study Skills provides an in-depth examination of selected study skills, deemed necessary for success in college. Topics include: library/Internet resources; time management skills, including goal setting and learning styles; textbook reading and note taking; note taking from lectures; memorization; and test-taking techniques. This course is open to all students. May be required by placement testing.
General Education: IN1
Course Entry Requirement(s): Course placement policy: RDST 022 or satisfactory placement assessment in reading
Typically Offered: Not offered this year

Religion (RELG)

RELG 181G, INTRODUCTION TO WORLD RELIGIONS 3 (3)
An introduction to the major world religions: Hinduism, Buddhism, Confucianism, Daoism, Judaism, Christianity and Islam. Explores beliefs and practices of each religion; includes reading from primary texts. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

RELG 261, RELIGION IN AMERICA 3 (3)
An examination of religious experience in America. Includes the study of historical development in American religious life as well an exploration of the religious diversity in contemporary American society. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall and Spring Semesters

RELG 251G, EXPLORING THE BIBLE 3 (3)
An introductory exploration of the major themes, nature and contents of the Old and New Testaments. (OTM)
General Education: C5, IN1, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall and Spring Semesters

RELG 262G, INTRODUCTION TO EASTERN PHILOSOPHY 3 (3)
This course is an introduction survey to Eastern philosophies including India, China and Japan. The course will make use of primary texts, in translation, to explore the cosmology, ontology and epistemology of Hinduism, Buddhism, Daoism, and Confucianism in their various manifestations through history. Humanities Core Course. (OTM)
General Education: C5, IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: ENGL 161
Typically Offered: Fall Semester

RELG 270G, RELIGION AND SCIENCE 3 (3)
This course explores the intersections and interactions of religion and science. By introducing critical methods in the study of religion and science, the course considers the issues such as the place of religion in a scientific age and the relationship between faith and reason. (OTM)
General Education: C5, IN1, IN3, IN4
Typically Offered: Spring Semester

RELG 281G, PHILOSOPHY OF RELIGION 3 (3)
An introduction to the major topics in the philosophy of religion including the nature and existence of God, the problem of evil, the significance of religious experience, and the nature of religious truth. No prerequisite but PHLY 151 and/or PHLY 161 is recommended. Humanities Core Course. (OTM)
General Education: C5, IN1, IN4
Typically Offered: Spring Semester

RELG 299, INDIVIDUALIZED STUDIES/RELIGION 1-2 (2)
An in depth study in the area of computer aided design presented by discussions and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Offer as required

Safety Technology (SAFE)

SAFE 105, OSHA GENERAL SAFETY 10 HR 1 (1)
The OSHA General Industry 10 Hour course is intended to provide entry level worker's general awareness on recognizing and preventing hazards in a general industry setting. Course is instructed by an OSHA recognized instructor. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) 10-Hour General Industry certificate.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None

SAFE 110, COMBUSTIBLE DUSTS 1 (2)
This course covers hazards surrounding combustible dust within general industry. Students will learn how to recognize and address hazards and risk associated with combustible dust, control electrical installation hazards and create abatements and solutions to mitigate combustible dust fires and explosions. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Introduction to Combustible Dust Hazards (7120) certificate. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): None

SAFE 116, GENERAL SAFETY MANAGEMENT 1 2 (2)
This course covers a myriad of topics including, bloodborne pathogens, health hazard awareness and OSHA record keeping. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) ‘Blood Borne Pathogens Exposure Control for Healthcare Facilities (7200), Health Hazard Awareness (7205) and Recordkeeping Rule Seminar (7845) certificates.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester
SAFE 118, GENERAL SAFETY MANAGEMENT II 2 (2)
This course covers a myriad of topics including introduction to Occupational Safety and Health Administration (OSHA) for small business, public warehousing and storage and introduction to safety and health management. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Introduction to OSHA for Small Business (7510), Public Warehousing & Storage (7005) and Introduction to Safety and Health Management (7500) certificates.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

SAFE 120, EMERGENCY PLANNING 2 (2)
Worksite Disaster Response covers material involving the topics of Hazardous Materials for First Responders, Pandemic Influenza and Introduction to Emergency & Evacuation Planning. Students will learn how to identify hazardous materials contamination and basic safety precautions. Topics include hazardous materials related terminology, basic protective procedures, information gathering, preparing for mass decontamination, constructing an emergency and evacuation plan, how to control and mitigate pandemic scenarios. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Evacuation and Emergency Planning (7105) and Pandemic Influenza Preparedness (7210) certificates. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

SAFE 130, RESPIRATOR PROTECTION 2 (3)
This course is designed to teach the student how to establish, maintain and monitor a respiratory protection program. The class covers OSHA standards, NIOSH certification, and examples of respiratory protection programs, medical requirements, fit testing and more. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) ‘Respiratory Protection (2225)’ certificate. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

SAFE 135, HAZWOPER 3 (4)
Students will become aware of how to safely work in areas that have suffered environmental damage and environmental spills, and they will learn how to clean and protect that environment and environmental emergency situations. Specifically, the treatment, storage or disposal (TSD) operation regulated by 40 CFR parts 264 and 265 by state law authorized under RCRA and required to have a permit or interim status from EPA pursuant to 40 CFR 270.1 or from a state agency pursuant to RCRA. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) 40 Hour HAZWOPER (Hazardous Waste Operations and Emergency Response) certificate. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

SAFE 140, OSHA STANDARDS FOR GENERAL INDUSTRY 2 (3)
This course covers OSHA standards, policies and procedures in general industry. Topics include scope and application of the OSHA General Industry Standards, general industry principles and special emphasis on those areas in general industry which are most hazardous. Upon course completion students will have the ability to define general industry terms found in the OSHA General Industry Standards, identify hazards which occur in general industry, locate and determine appropriate OSHA General Industry Standards, policies and procedures, and describe the use of OSHA General Industry Standards and regulation to supplement an ongoing safety and health program This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Occupational Safety and Health Standards for General Industry (511) certificate. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

SAFE 145, SAFETY IN GENERAL INDUSTRY 2 (3)
This course is designed to provide training to workers in general industry with safety responsibilities. The course will be instructed by an OSHA recognized instructor and will emphasize hazard identification, avoidance, control and prevention. Successful participants will be awarded an OSHA 30 card for general industry safety. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN5
Typically Offered: Fall Semester

SAFE 205, HAZARDOUS MATERIALS 2 (3)
This course is designed to introduce student to the OSHA General Industry standards related to the use of hazardous materials. Topics range from flammable and combustible liquids to cryogenic liquids. Various workplace applications of these materials, including spraying, dipping, etc, are included in the discussion. Students will learn how to recognize, identify, move, store, and handle hazardous materials. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Hazardous Materials (2015) certificate. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

SAFE 210, OSHA ACCIDENT INVESTIGATION 1 (1)
This course reviews the relationship between OSHA and small businesses, how to properly conduct incident investigations, how to identify and implement proper safety and health management procedures in the workplace. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Introduction to Incident (Accident) Investigation (7505) certificate. (A special fee will be assessed.)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>SAFE 215</td>
<td>FALL ARREST SYSTEMS 2 (3)</td>
<td></td>
<td>Students will learn the OSHA Fall Protection Standard for construction and receive training on multiple fall protection methods. Topics include principles of fall protection, and elements and limitations of fall arrest systems. The course is taught through lecture instruction as well as workshops in small groups. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Fall Protection (3115) certificate. Laboratory required. (A special fee will be assessed.) General Education: IN1, IN2, IN4, IN5 Course Entry Requirement(s): None Typically Offered: Fall Semester</td>
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<tr>
<td>SAFE 220</td>
<td>OSHA ELECTRICAL STANDARDS 2 (3)</td>
<td></td>
<td>This course is designed to provide the student with a survey of OSHA’s electrical standards and the hazards associated with electrical installations and equipment. Topics include single-phase and three-phase systems, cord-connected and plug-connected and fixed equipment, grounding, ground fault circuit interrupters, and safety-related work practices. Emphasis is placed on electrical hazard recognition and OSHA policies and procedures. Students will receive instruction on safe and correct use of their electrical testing equipment. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Electrical Standards (3095) certificate. Laboratory required. (A special fee will be assessed.) General Education: IN1, IN2, IN5 Course Entry Requirement(s): None Typically Offered: Spring Semester</td>
</tr>
<tr>
<td>SAFE 225</td>
<td>OSHA GUIDE TO INDUSTRIAL HYGIENE 2 (3)</td>
<td></td>
<td>Students will learn the applicable OSHA regulations and procedures involving Industrial Hygiene. This course aims to prepare student to recognize potential workplace health hazards and know how to correctly avoid, minimize, control, and/or eliminate said hazards where possible. Topics covered will include permissible exposure limits, OSHA health standards, respiratory protection measures, engineering controls, hazards communication, sampling procedures, and others. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) OSHA Guide to Industrial Hygiene (521) certificate. Laboratory required. (A special fee will be assessed.) General Education: IN1, IN2, IN5 Course Entry Requirement(s): None Typically Offered: Spring Semester</td>
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<tr>
<td>SAFE 230</td>
<td>PRINCIPLES OF ERGONOMICS 1 (2)</td>
<td></td>
<td>In this course, students discover the principles of ergonomics and related OSHA standards. Students are able to recognize, evaluate, control and/or abate workplace conditions that cause or contribute to musculoskeletal disorders. Core focus includes: work physiology, musculoskeletal disorders, risk factors, and others. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Principles of Ergonomics Applied to Work-Related Musculoskeletal and Nerve Disorders (2255) certificate. Laboratory required. (A special fee will be assessed.) General Education: IN1, IN2 Course Entry Requirement(s): None Typically Offered: Spring Semester</td>
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<tr>
<td>SAFE 235</td>
<td>MACHINE GUARDING BASICS 2 (3)</td>
<td></td>
<td>This course familiarizes the student with various types of common machinery and the related safety standards. Guidance is provided on the hazards associated with various kinds of machinery and the control of hazardous energy sources (lock-out/tag-out). The course presents an approach to machinery inspection that enables participants to recognize hazards and to provide options to achieve abatement. These hazards include mechanical motions and actions created by points of operation and other machinery processes. Also included is hand-on training in the laboratories. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Machinery and Machine Guarding Basics (2045) certificate. Laboratory required. (A special fee will be assessed.) General Education: IN1, IN2 Course Entry Requirement(s): None Typically Offered: Fall Semester</td>
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<tr>
<td>SAFE 240</td>
<td>LOCKOUT TAGOUT - CONTROLLING HAZARDOUS ENERGY 1</td>
<td></td>
<td>This course covers the role and responsibility of the employer to develop and implement an energy control program, or lock-out/tag-out (LOTO) for the protection of workers while performing servicing hand maintenance activities on machinery and equipment. Upon course completion the student will have the ability to explain the importance of energy control programs, procedures, training, audits and methods of controlling hazardous energy. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Lockout Tagout (7115) certificate. (A special fee will be assessed.) General Education: IN1, IN2, IN5 Course Entry Requirement(s): None Typically Offered: Spring Semester</td>
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<tr>
<td>SAFE 245</td>
<td>PERMIT REQUIRED CONFINED SPACE 2 (3)</td>
<td></td>
<td>Students completing this course will gain the knowledge to identify permit and non-permit required confined space, understanding of the OSHA confined space standards, conduct atmospheric testing of confined spaces, and implement a confined space program. This course covers the outcomes covered in the Occupational Safety and Health Administration (OSHA) Understanding OSHA’s Permit Required Confined Space Standard (2264) certificate. Laboratory required. (A special fee will be assessed.) General Education: IN1, IN2 Course Entry Requirement(s): None Typically Offered: Spring Semester</td>
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<tr>
<td>SAFE 287</td>
<td>WORK BASED LEARNING I - SAFE 1-3 (1)</td>
<td></td>
<td>This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies. General Education: IN1, IN2, IN3, IN4 Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval. Typically Offered: Spring Semester</td>
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</tbody>
</table>
Social Work (SOWK)

SOWK 151, INTRO TO SOCIAL WORK AND SOCIAL WELFARE 3 (3)
A survey of the field of social work. Course presents an overview in today's social problems and how social work addresses these problems. Introduction to social work licensure, values, ethics, fields of practice and funding structure of social service agencies will be discussed. This course is designed for those considering careers in social work. (TAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

SOWK 251G, SOCIAL WELFARE AND POVERTY 3 (3)
Provides an historical overview of how poverty has influenced the development of the social welfare system. Course looks at social reform and social policies which impact individuals and families. Current and future issues in social welfare are explored. (TAG)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: SOWK 151
Typically Offered: Fall and Spring Semesters

SOWK 252G, HUMAN BEHAVIOR/SOCIAL ENVIRONMENT 3 (3)
This course examines human growth and development from a social work perspective. Biological, psychological and social influences are addressed throughout lifespan development. General systems theory is utilized to help students understand the interaction between individuals and various systems which impact their lives.
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: PSYH 151 and SOCY 151
Typically Offered: Fall Semester

SOWK 287, WORK-BASED LEARNING I - SOWK 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

SOWK 299, INDIVIDUALIZED STUDIES IN SOCIAL WORK 1-2 (1)
An in-depth study of areas of social work presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Sociology (SOCY)

SOCY 151G, INTRODUCTION TO SOCIOLOGY 3 (3)
This introductory course is the study of human behavior in society. Its primary focus is on the influence of social relationships on people's attitudes and behavior, and on how societies are established and changed. Some of the topics covered are cultural, deviance, the family, globalization, social inequality, the mass media, ethnic and race relations, socialization, religion, research methods, and organizations. Social Sciences Core Course. (OTM, TAG)
General Education: C4, IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

SOCY 155G, INTRODUCTION TO ARCHAEOLOGY 3 (3)
This course introduces the student to Anthropological Archaeology - the study of past human culture using material remains from an urban perspective. Course emphasizes obtaining goals of archaeological research through: survey, excavation, artifact analysis and interpretation. This course provides a basic understanding of how we learn about ancient societies and how this teaches us about ourselves. This course is cross listed with ARCH 155G and URBS 155G Introduction to Archaeology. (OTM, TAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

SOCY 161G, INTRODUCTION TO CULTURAL ANTHROPOLOGY 3 (3)
This course explores the diversity of human societies and their cultures. Cross-cultural comparisons and analyses show how an integrated culture satisfies human needs and facilitates their survival. (OTM, TAG)
General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

SOCY 199, INTRODUCTION TO THE WORLD OF WORK - SOCY 1 (1)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.
Course Entry Requirement(s): Prerequisite: A student must have completed minimum 12 semester credit courses at LCCC (courses transferred are not counted; have earned minimum 2.0 overall GPA; OR have division approval. Maximum three '1' credit courses allowed). None
Typically Offered: Offer as required

SOCY 255G, THE FAMILY 3 (3)
A study of the family as a social institution, including cross-cultural comparisons and the historical development of the Western family. An examination of contemporary American marriage and the family in its various forms; contemporary social issues in marriage and family and alternative lifestyles will also be examined. (OTM, TAG)
General Education: C4, IN1, IN2, IN3, IN5
Course Entry Requirement(s): Prerequisite: SOCY 151G
Typically Offered: Summer, Fall and Spring Semesters
SOCY 256, SOCIAL PROBLEMS 3 (3)
The course examines topics such as crime, racism, sexism, poverty, urban decay, immigration, and terrorism. It gives students a grasp of how social problems are interrelated, and society's role in the creation and perpetuation of social problems. Students become aware that globally, what is considered a social problem in one society may not be regarded as such in another society. Social Sciences Core Course. (OTM, TAG)

General Education: C4, IN1, IN2, IN3, IN5
Course Entry Requirement(s): Prerequisite: SOCY 151G
Typically Offered: Summer, Fall and Spring Semesters

SOCY 265G, DEATH AND DYING 2 (2)
A cross-cultural and historical survey of social responses to death, with particular emphasis on the application of basic sociological concepts to further understanding of dying, death and survivorship. (OTM)

General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: SOCY 151G
Typically Offered: Summer and Fall Semesters

SOCY 276, RACE AND ETHNICITY 3 (3)
This course examines relations between racial and ethnic groups. A sociological framework is used to investigate dominant-subordinate relations in the perspective of a variety of social categories such as race/ethnicity, religion, gender, prejudice, discrimination, and the pattern and economic impact of immigration. Social Science Core Course. (OTM, TAG)

General Education: C4, IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: SOCY 151G
Typically Offered: Summer, Fall and Spring Semesters

SOCY 278, SOCIOLOGY OF SEX & GENDER 3 (3)
This course is designed for social science majors or those pursuing women's and gender studies. It examines sex and gender from a sociological framework by exploring how complex evolving patterns of sex and gender are constructed interpersonally, institutionally, and culturally. It examines how gender permeates relationships, workplace, media, and social interaction. The course also investigates the complex intersection of gender, sexuality, race/ethnicity and social class and how those factors contribute to social inequality. Social Sciences Core Course. (OTM)

General Education: C4, IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: SOCY 151G
Typically Offered: Spring Semester

SOCY 287, WORK-BASED LEARNING I - SOCY 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

SOCY 299, INDIVIDUALIZED STUDIES IN SOCIOLOGY 1-2 (1)
An in-depth study of areas of sociology presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

SOCY 501, PHYSICAL/BIOLOGICAL ANTHROPOLOGY 3 (3)
To be used to transfer in course sharing classes for OGTP.

Typically Offered: Offer as required

Diagnostic Medical Sonography (SONO)

SONO 111, ORIENTATION TO DIAGNOSTIC MEDICAL SONOGRAPHY 1 (1)
Topics to include the history and development of the Diagnostic Medical Sonography profession, sonography organizations, professional protocol and patient interaction, professional ethics and legal issues, repetitive stress injury prevention, sonographic terminology, image orientation, scanning techniques, concepts of ultrasound physics and instrumentation and a review of basic patient care techniques used in sonography.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: Admission into the Diagnostic Medical Sonography program and ALHN 107
Typically Offered: Fall Semester

SONO 122, IMAGING MODALITIES 1 (1)
Introduction to the various imaging modalities. Basic function, advantages and disadvantages of the various modalities. Identification of general anatomy, image orientation, and common pathologies in each modality with comparisons applied to sonography will also be discussed.

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: Admission into the diagnostic medical sonography program. SONO 131 (not required for students with a radiography background.)
Typically Offered: Summer Semester

SONO 131, INTRODUCTION TO DIAGNOSTIC MEDICAL SONOGRAPHY 7 (19)
Detailed study of normal anatomy, physiology, sonographic appearances, and scanning techniques of normal and common pathologic conditions of the abdominal vasculature, liver, gallbladder, pancreas, kidneys, female pelvis, early and advanced pregnancy and superficial structures. Clinical and college laboratory REQUIRED. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: Admission into the diagnostic medical sonography program and SONO 111, BIOG 122 and BIOG 123; Corequisite: SONO 221
Typically Offered: Spring Semester

SONO 215, DIAGNOSTIC MEDICAL SONOGRAPHY 17 (23)
Detailed study of the abdomen and small parts, discussing pathologic conditions and their sonographic appearances. Clinical and college laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: SONO 221 and SONO 131; Corequisite: SONO 122
Typically Offered: Summer Semester
SONO 221, ULTRASOUND PHYSICS AND INSTRUMENTATION I 2 (2)
This course is designed to provide the student in-depth details of the various modes used in diagnostic sonography and examples of each, physical principles of diagnostic ultrasound as it interacts with tissue, and the construction and function of single-element and multi-element transducers. This course requires prior knowledge of scientific formulas and metric conversions.

**General Education:** IN1
**Course Entry Requirement(s):** Prerequisite: SONO 111 and PHYC 115; Corequisite: SONO 131
**Typically Offered:** Spring Semester

SONO 222, ULTRASOUND PHYSICS AND INSTRUMENTATION II 2 (2)
Continuation of Ultrasound Physics and Instrumentation, including Doppler physics, hemodynamics, image processing recording devices, artifacts, biological effects, and quality control.

**General Education:** IN1
**Course Entry Requirement(s):** Prerequisite: SONO 215 and SONO 221; Corequisite: SONO 223
**Typically Offered:** Fall Semester

SONO 223, DIAGNOSTIC MEDICAL SONOGRAPHY II 8 (35)
The identification of various gynecologic disease processes, fetal development and various obstetrical, genetic pathologies based on sonographic appearance and clinical history. Clinical and college laboratory required. (A special fee will be assessed.)

**General Education:** IN1, IN2, IN3, IN4, IN5
**Course Entry Requirement(s):** Prerequisite: SONO 215 and SONO 221; Corequisite: SONO 222
**Typically Offered:** Fall Semester

SONO 224, ADVANCED DIAGNOSTIC MEDICAL SONOGRAPHY STUDIES 6 (34)
Doppler studies of the extracranial, transcranial, peripheral vascular arterial and venous, abdomen and fetus will be emphasized. Sonography of the neonatal head, spinal cord, and musculoskeletal, as well as other current advanced studies will be discussed. Clinical and college laboratory required. (A special fee will be assessed.)

**General Education:** IN1, IN2, IN3, IN4, IN5
**Course Entry Requirement(s):** Prerequisite: SONO 222 and SONO 223; Corequisite: SONO 229
**Typically Offered:** Spring Semester

SONO 229, PROFESSIONAL ISSUES IN DIAGNOSTIC MEDICAL SONOGRAPHY 1 (1)
Professional issues in diagnostic medical sonography to include administrative planning, resume writing, job interviewing skills, registry review, continuing education and career advancement.

**General Education:** IN1, IN2, IN4
**Course Entry Requirement(s):** Prerequisite: SONO 222 and SONO 223; Corequisite: SONO 224
**Typically Offered:** Spring Semester

SONO 299, INDIVIDUALIZED STUDIES IN SONO 1-2 (1)
An in-depth study of areas of Diagnostic Medical Sonography presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

**Course Entry Requirement(s):** Prerequisite: Division approval
**Typically Offered:** Offer as required

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**Spanish (SPNH)**

SPNH 151G, ELEMENTARY SPANISH I 4 (5)
An introduction to the language and cultures of the Spanish-speaking world. Development of creative communicative skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.

**General Education:** IN1, IN2, IN3
**Course Entry Requirement(s):** None
**Typically Offered:** Summer, Fall and Spring Semesters

SPNH 152G, ELEMENTARY SPANISH II 4 (5)
Continuation of Elementary Spanish I. Further study of the language and cultures of the Spanish speaking world. Continued development of creative communicative skills with a balanced emphasis on speaking, listening, reading and writing. Laboratory practice using various technologies.

**General Education:** IN1, IN2, IN3
**Course Entry Requirement(s):** Prerequisite: SPNH 151 or division approval
**Typically Offered:** Summer, Fall and Spring Semesters

SPNH 251G, INTERMEDIATE SPANISH I 3 (4)
Review of the fundamental structures and introduction of more complex grammatical structures and communicative skills with a balanced emphasis on speaking, listening, reading and writing. Exploration of the civilization, culture, and customs of Spanish-speaking people. Laboratory practice using various technologies.

**General Education:** IN1, IN2, IN3
**Course Entry Requirement(s):** Prerequisite: SPNH 152 or division approval
**Typically Offered:** Summer, Fall and Spring Semesters

SPNH 252G, INTERMEDIATE SPANISH II 3 (4)
Continuation of Intermediate Spanish I. Class discussions conducted in Spanish. Further refinement of the four language skills: comprehension, speaking, reading and writing. Introduction to a variety of topics related to Hispanic culture. Recommended for students planning to enroll in Language and Culture of Spain, and Language and Culture of Latin America. Individualized practice on cassette tapes.

**General Education:** IN1, IN2, IN3
**Course Entry Requirement(s):** Prerequisite: SPNH 251 or division approval.
**Typically Offered:** Summer, Fall and Spring Semesters

SPNH 257G, SPANISH COMPOSITION 3 (3)
A course in Spanish composition with the focus on the mastery of syntax and spelling, and the improvement of writing skills through the study of various rhetorical modes and writing for special purposes. Conducted in Spanish.

**General Education:** IN1, IN2, IN3
**Course Entry Requirement(s):** Prerequisite: SPNH 252 or division approval.
**Typically Offered:** Fall Semester

SPNH 258G, SPANISH CONVERSATION 3 (3)
Development of speaking and listening skills and strategies, working from intermediate toward an advanced level of proficiency. Emphasis on vocabulary acquisition and usage.

**General Education:** IN1, IN2, IN3
**Course Entry Requirement(s):** Prerequisite: SPNH 252 or division approval.
**Typically Offered:** Spring Semester
SPNH 259G, SPANISH GRAMMAR REVIEW 3 (3)
Review of the fundamental grammatical structures with an emphasis on those aspects of the language which are problematic for students. Emphasis on increasing the level of linguistic sophistication in the use of Spanish.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: SPNH 252 or division approval.
Typically Offered: Summer Semester

SPNH 260G, INTRODUCTION TO HISPANIC LITERATURE 4 (4)
An introduction to the literature of Spain and Spanish America. Significant works representing Spanish language poetry, drama, fiction, and essays (non-fiction) are studied in a broad historical and cultural context. Introduction to the fundamentals of literary criticism and literary movements. Conducted in Spanish.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: Two of the following three courses: SPNH 257G, SPNH 258G, SPNH 259G
Typically Offered: Not offered this year

SPNH 271G, CULTURE AND CIVILIZATION OF SPAIN 3 (3)
Conducted in Spanish. An introduction to various aspects of Spanish society and culture through a study of the geography, history, language, literature, and art of Spain.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: SPNH 252 or division approval.
Typically Offered: Not offered this year

SPNH 272G, CULTURE & CIVILIZATION OF LATIN AMERICA 3 (3)
Conducted in Spanish. An introduction to various aspects of Latin American society and culture through a study of the geography, history, language, literature and art of Central and South America.

General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: SPNH 252 or division approval.
Typically Offered: Not offered this year

SPNH 299G, INDIVIDUALIZED STUDIES IN SPANISH 1-2 (1)
This is an in-depth study of selected/various topics in Spanish language or literature. Repeatable up to a total of four(4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

State Tested Nurse Assisting (STNA)

STNA 114, NURSE AIDE TRAINING 5 (7)
This approved Ohio Department of Health (ODH) Training Competency Evaluation Program (TCEP) course is designed to provide students with the knowledge and technical skills to function as a nurse aide. At the conclusion of this course, the student will be able to perform nursing related services to patients and residents in a long term care facility and be eligible to take the state certification test. Laboratory Required. (A special fee will be assessed.) A C or better must be achieved in this course in order to receive a Certificate of Completion.

General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: Admission into Nurse Aide Program; Concurrent: SDEV 101; Course placement policy: Reading Placement Assessment, Currently enrolled high school students that meet admission requirements may apply. Must be 17 years old to apply.
Typically Offered: Summer, Fall and Spring Semesters

STNA 299, INDIVIDUALIZED STUDIES IN STNA 1-2 (1)
An in-depth study of areas of Nurse Aide Training presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Division approval.
Typically Offered: Offer as required

Sterile Processing (STRP)

STRP 101, STERILE PROCESSING FUNDAMENTALS 5 (7)
This course provides an introduction to the principles, techniques and issues in the surgical and sterile processing environment. Topics include, sterile technique, packaging and wrapping techniques, basic sterilization methods, basic surgical instruments, basic microbiology and hospital equipment identification. This course includes both a lecture and laboratory component.

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: High school graduate or equivalent, Amer Heart Assoc Health Care Provider, all clinical requirements for health, drug free criminal background check completed. Acceptance into Sterile Processing program; Concurrent: STRP 111
Typically Offered: Fall Semester

STRP 110, STERILE PROCESSING DIRECTED PRACTICE I 3 (16)
This course provides 'hands on' experience in a clinical environment to assist in the integration of all concepts basic to the field of Sterile Processing. Students will participate in all areas of the Sterile Processing department to include decontamination, instrument set preparation, sterilization, case cart preparation, business technologies, storage, distribution, and quality control. This course is taken in the first semester of the sterile processing program as 16 experiential hours per week towards the 400 hours required during the program.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: High school graduate or equivalent, Amer Heart Assoc Health Care Provider, all clinical requirements for health, drug free criminal background check completed. Acceptance into Sterile Processing program; Concurrent: STRP 101
Typically Offered: Fall Semester

STRP 111, STERILE PROCESSING DIRECTED PRACTICE II 3 (16)
This course provides 'hands on' experience in a clinical environment to assist in the integration of advanced concepts to the field of Sterile Processing. Students will participate in all areas of the Sterile Processing department to include decontamination, instrument set preparation, sterilization, case cart preparation, business technologies, storage, distribution, and quality control. This course is taken in the second semester of the sterile processing program as 16 experiential hours per week towards the 400 hours required during the program.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Corequisite: STRP 101 and STRP 120
Typically Offered: Spring Semester
Typically Offered:

**STRP 112, STERILE PROCESSING INTERNSHIP 3 (15)**
This course provides a unique 'hands on' work experience with an internship contract from employers to complete experiential requirements and focusing on advanced concepts to the field of sterile processing. Students who are awarded an internship will participate in all areas of the sterile processing department to include decontamination, instrument set preparation, sterilization, case cart preparation, business technologies, storage, distribution, and quality control. Internship hours will go towards the completion of the 400 hours required during the program.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Corequisite: STRP 101 and STRP 120
Typically Offered: Spring Semester

**STRP 120, STERILE PROCESSING ADVANCED PROFESSIONAL PRACTICES 5 (7)**
Offers advanced principles of inventory control, materials management, information technology, and quality control systems integral to the sterile processing department in health-care facilities. Introduces specialty surgical instrumentation and patient care equipment. Prepares the student to take the CRCST exam upon graduation and completion of 400 clinical hours. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: STRP 101 and STRP 110; Corequisite: STRP 111 or STRP 112
Typically Offered: Spring Semester

**Student Development (SDEV)**

**SDEV 101, COLLEGE 101 1 (1)**
This course introduces strategies for creating success in college. Topics focus on personal responsibility, motivation, goal setting, learning styles, emotional intelligence, study skills, life-long learning, career and academic planning, and completion.

General Education: IN1, IN4, IN5
Course Entry Requirement(s): None, None
Typically Offered: Summer, Fall and Spring Semesters

**SDEV 102, STRATEGIES FOR CREATING COLLEGE SUCCESS 3 (3)**
An introductory interactive course designed to introduce valuable resources and to teach strategies for creating success in college and in life and improving academic performance. Topics include personal responsibility; motivation, personal, academic and career; goal setting; learning styles; study skills; decision-making; problem solving; and priority management. This course may be used to fulfill the College 101 requirement.

General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**SDEV 103, CAREER EXPLORATION AND LIFE PLANNING 2 (2)**
An overview of technological, economic, sociological, cultural, and psychological trends that influence life planning, selection of college major, and career choice. Topics will include values clarification, goal setting, needs assessment, skill identification, and a synthesis of information to create a life/career plan.

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**SDEV 104, JOB SEARCH STRATEGIES 1 (1)**
In this hands-on course students will learn all aspects of finding employment including networking, on-line job boards and other Internet applications, including social networking. During the course students will create a finished resume and cover letter and complete a sample employment application. Students will also learn how to interview successfully and will participate in a simulated job interview. They will prepare thank you correspondence and understand how to follow up after an interview. Students will also learn how to evaluate an employment offer and salary negotiations. The course will also cover strategies for staying employed and continued professional success.

General Education: IN1, IN2
Course Entry Requirement(s): None

**SDEV 105, STUDENT SUCCESS AND MAJOR EXPLORATION 2 (2)**
An introductory course designed for first-year students who want help in career exploration and choosing a major while completing the required student success course. This course enables students to explore careers and college majors as well as develop the necessary skills for success in college. Topics include self-discovery through values clarification, skill identification, interest and personality assessments; career and major research; strategies for success in college; and establishing a plan for educational goal achievement. This course may be used to fulfill the College 101 requirement.

General Education: IN1, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

**SDEV 111, SUCCESS COACHING AND MENTORING I 3 (3)**
The ability to coach and mentor are valued competencies in business, non-profit, academic, and athletic environments. This course is intended to provide students with a comprehensive understanding of the concepts, principles, and practice of coaching and mentoring. Through theoretical and practical applications, students will develop the necessary knowledge and skills needed to foster or create and maintain effective coaching and mentoring relationships. Topics include Coaching vs. Mentoring, Creating the Coaching or Mentoring Relationship, Stages of Coaching and Mentoring.

General Education: IN1, IN2
Course Entry Requirement(s): None

**SDEV 112, SUCCESS COACHING AND MENTORING II 3 (3)**
A continuation of Success Coaching and Mentoring I. This course is intended to deepen understanding of the concepts, principles, and practice of coaching and mentoring. This course will include a service learning component. Topics include Ethics of Coaching and Mentoring; Coaching, Mentoring and Diversity; Assessment in Coaching and Mentoring Practice; Challenging Clients and Situations; Self-Management and Self-Care for the Coach and Mentor; Documentation/Case Management.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: SDEV 111
Typically Offered: Summer, Fall and Spring Semesters
SDEV 299, INDIVIDUALIZED STUDIES/COLLEGE 101 1-2 (1)
An in-depth study of various areas of Student Development presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four credit hours.

Course Entry Requirement(s): Prerequisite: Second year standing and divisional approval.
Typically Offered: Offer as required

Surgical Technology (SRGT)

SRGT 114, SURGICAL TECHNOLOGY II - SURGICAL PROCEDURES 8 (20)
This course provides lecture and clinical practice in the following surgical specialties: general, gynecology, urology, oral, ophthalmology, otolaryngology, and head and neck. Emphasis is on the surgical technician’s role during common surgical procedures in each specialty. Clinical practice is required.

General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: SRGT 124, ALHN 112, ALHN 113, BLOG 121, ENGL 161; Concurrent: BLOG 122 and MTHM 158
Typically Offered: Spring Semester

SRGT 124, INTRODUCTION TO SURGICAL TECHNOLOGY 8 (10)
This course is an introduction to the surgical technology field and the operating room environment. Fundamentals of surgical technology are included: aseptic and sterile technique, surgical conscience, basic operating room equipment, surgical instrumentation, suture and other basic supplies used in the operating room. Basic surgical procedures will be introduced. Emphasis is on patient, staff and student safety and infection control practices. Clinical and college laboratory required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Acceptance into program, HS graduate or equivalent, AHA health care provider, successful correction of all deficiencies shown during the placement assessment process with a C or better and ALHN 108. Concurrent: ALHN 112, ALHN 113, BLOG 121 ENGL 161.
Typically Offered: Fall Semester

SRGT 215, SURGICAL TECHNOLOGY III SURGICAL PROCEDURES 8 (20)
This course provides lecture and clinical practice in the following surgical specialties: orthopedics, neurosurgery, plastic and reconstructive, vascular, thoracic and cardiac. Emphasis is on the surgical technologist’s role during common surgical procedures in each specialty. Clinical practice is required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: SRGT 114; Concurrent: BLOG 251, ALHN 121 and ENGL 162
Typically Offered: Fall Semester

SRGT 226, SURGICAL TECHNOLOGY IV 11 (23.5)
This course will provide content, laboratory and clinical practice in ancillary and advanced surgical technologist roles: circulating, second assisting, preoperative areas, post anesthesia care unit and postoperative care of patients. Surgical risks and surgical emergencies are presented. Care of the high risk, age extreme and culturally diverse patient is included. Preparation of the graduating surgical technologist for employment is emphasized including developing professional skills, resumes, interviewing, exploring employment opportunities and adjusting to the realities of clinical practice and the world of work. Preparation for Disaster and care of traumatically injured patients is included. Students will present Program Portfolios. Professional credentialing professional organizations and history of the profession are included. Students will take the National Certification Examination just prior to graduation. Clinical and college laboratory are required. (A special fee will be assessed.)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: SRGT 215; Concurrent: SOCY 151
Typically Offered: Spring Semester

SRGT 287, WORKED-BASED LEARNING I - SRGT 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

Sustainable Agriculture (SAGR)

SAGR 101, FALL CROP PRODUCTION 3 (5)
This skills-based course includes a study of fall sustainable crop production practices, including but not limited to vegetables, culinary and medicinal herbs, and cut flowers. Topics can include harvest methods, soil testing and amendment, marketing and economic viability, and various record keeping procedures, such as those needed for organic certification. Students will gain knowledge of crop production appropriate to the fall season in the Great Lakes bioregion. Course incorporates off-campus outdoor living classrooms and is a service learning course.

General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

SAGR 102, SPRING CROP PRODUCTION 3 (5)
This skills-based course includes a study of spring sustainable crop production practices, including but not limited to vegetables, culinary and medicinal herbs, and cut flowers. Topics can include variety selection, production methods, soil testing and amendment, and various record keeping procedures, such as those needed for organic certification. Students will gain knowledge of crop production appropriate to the spring season in the Great Lakes bioregion. Course incorporates off-campus outdoor living classrooms and is a service learning course.

General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester
SAGR 103, SUMMER CROP PRODUCTION 3 (5)
This skills-based course includes a study of summer sustainable crop production practices, including but not limited to vegetables, culinary and medicinal herbs, and cut flowers. Topics can include irrigation systems, production methods, soil testing and amendment, weed barriers and pest control, and various record keeping procedures, such as those needed for organic certification. Students will gain knowledge of crop production appropriate to the summer season in the Great Lakes bioregion. Course incorporates off-campus outdoor living classrooms and is a service learning course.
General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer Semester

SAGR 105, INTRODUCTION TO LIVING LANDSCAPES 3 (3)
This course is an introduction to landscape design. Course teaches plant selection and care required to maintain landscapes in both exterior and interior environments. Soil types, watering needs, and pest identification are discussed as well as use of the color wheel and textures to create an aesthetically pleasing and function designs. Connections showing how interior and exterior landscaping relates to human health, the green industry, and sustainable agriculture are emphasized. This practicum course also contains an opportunity for service learning. A special fee will be assessed. This course provides preparation for a Pesticide Application Certification. An additional fee will be assessed if a student is interested in earning the certification. (CTAG)
General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

SAGR 106, SOIL MANAGEMENT AND CONSERVATION 3 (4)
This skills-based course includes a study of soil fertility and management for sustainable crop production. Topics can include soil testing, interpretation of soil test results, composting and soil microbes, cover crops, and other soil conservation/production practices. Students will gain knowledge of soils in the Great Lakes bioregion. Course includes an on-campus service learning component. (CTAG)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall Semester

SAGR 107G, WORLDVIEWS TO SUPPORT SUSTAINABLE AGRICULTURE 1 (1)
This course provides an ethical framework for sustainable agriculture by outlining current environmental and social justice challenges in a weekend-long symposium. It will review topics such as consumption, peak oil, militarization, environmental justice, social entrepreneurship, public policy and outline various social movements for a sustainable future to benefit humans and the rest of the natural world. Students will gain knowledge of worldviews and ethical stances appropriate to the Great Lakes bioregion. Course incorporates 1.5 day (15 hour) weekend symposium, which could be held at either the Wellington or main campuses.
General Education: IN1, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

SAGR 108, INTRODUCTION TO SUSTAINABLE ANIMAL FARMING 4 (5)
Course provides an introduction to sustainable practices in the production of ruminant (goat, sheep, alpaca, and cattle) and non-ruminant livestock (poultry and swine). Fundamental concepts of livestock management are explored, including a survey of animal identification and classification, basic anatomy and physiology, reproduction, feeding, housing, and disease control. Laboratory experience includes tours, demonstrations, and hands-on activities at a variety of local farms currently integrating sustainable practices. Product evaluation standards and marketing strategies will also be explored through shared experiences with local farmers.
General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Offer as required

SAGR 109, WILD EDIBLES 1 (1)
Course is hands-on and field-based. Students explore seasonal wild foods growing in Lorain County. Students learn how to forage in a variety of habitats, learn to identify edible species, how to distinguish from look-alikes, and how to incorporate wild edibles into his or her diet. Course content will also relate back to sustainable agriculture in the following ways: studies of comparative health among hunter-gatherer and farming cultures; ethics of foraging and overharvesting; politics of foraging; wild ancestors of modern agricultural crops; history of plant domestication; how to incorporate ‘wild’ foods into crop production systems; how to re-vision what agriculture might look like using techniques such as food forest; and a critique of problematic binaries: weed vs. Crop; native vs. invasive. This course may be repeated up to three (3) times for credit if the course is taken in different seasons (spring, summer, or fall), and can satisfy up to (3) credits for academic program requirement as an approved course substitution.
General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

SAGR 110, PERMACULTURE: PRINCIPLES AND APPLICATIONS 4 (4)
This course is an introduction to permaculture, an organizing framework for the application of systems thinking and ecological design to implement a vision of consciously designed landscapes, and related social systems, yielding an abundance of food, fiber and energy for provision of local needs. Building on a core set of ethical precepts and design principles, students will gain practical knowledge in designing productive and resilient landscapes that mimic the patterns and relationships found in nature. The course explores the regenerative implications of permaculture at the site-specific, local, bioregional and global levels of scale, as well as applications in the areas of disaster preparedness, community resilience, biodiversity, and food security. Course includes a substantial experiential education component with at least half of the instructional time spent utilizing hands-on application and practice. In completing both SAGR 110 Permaculture: Principles and Applications and SAGR 111 Permaculture Design for Community, the student may also earn professional Permaculture Design Certification.
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Summer and Spring Semesters
SAGR 111, PERMACULTURE DESIGN FOR COMMUNITY 2 (4)
This Service Learning course affords students who are concurrently enrolled in SAGR 110 with the opportunity to apply permaculture design to serve community needs in one or more of the following areas: food security, public health, environmental justice, site remediation, waste management, energy and water conservation, community resilience, disaster preparedness, and/or economic revitalization. As Service Learners, students work in teams to implement permaculture design projects with defined community benefits sponsored by nonprofit, school, or government organizations. Through direct application of permaculture design principles and techniques, students deepen and extend their learning, and come to fully appreciate the value of civic engagement and the personal rewards of community service. In completing both SAGR 110 Permaculture: Principles and Applications and SAGR 111 Permaculture Design for Community, the student will also earn Permaculture Design Certification.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Corequisite: SAGR 110
Typically Offered: Summer and Spring Semesters

SAGR 112, BUSINESS PRINCIPLES OF SUSTAINABLE AGRICULTURE 3 (3)
Course surveys a wide variety of business aspects in the emerging field of sustainable agriculture. Increasing consumer demand for locally-grown produce supports the economic development of ecologically sound, socially responsible businesses and cooperatives. An overview of basic business principles is tailored to those interested in developing new businesses or currently operating in specialty crop farming, non-profit, and/or other niche markets in the regional food system. Students define their roles within a business structure and engage in the creation of a mission statement and business plan designed for real-world application. Topics can include but are not limited to: marketing, risk management tools, business contracts, human resource management, business structures, cooperative principles and skills, labor management relations, and recordkeeping. (CTAG)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

SAGR 113, PLANT PROPAGATION 2 (3)
This skills-based course will cover a variety of techniques for successfully producing plants through seed sowing and vegetative propagation including cutting, plant division, and grafting. Concepts such as sex, structure, dormancy, stratification, scarification, and plant meristematic tissue will be covered as they relate to the successful propagation of plants. Course also includes an introduction to plant taxonomy and genetic diversity. Course includes an on-campus a Service Learning component. (CTAG)

General Education: IN1, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

SAGR 114, INTRODUCTION TO SUSTAINABLE AGRICULTURE 3 (5)
Course surveys a diverse set of principles and practices that support the sustainable production of food. A wide variety of local farms, community partners and related businesses provide examples of economic, environmental, and social sustainability. Lecture highlights current agricultural research, historical and cultural approaches to farming, and explores diverse perspectives of what is sustainable. Laboratory experiences include tours, demonstrations, and hands-on activities at a variety of local crop and livestock farms, and travel is provided as part of the course. Students explore career options through shared experiences with local farmers. Course promotes the holistic development of academic, social, personal and career skills and may contain a Service Learning component. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

SAGR 115G, FOOD SYSTEMS, SOCIETY AND GLOBAL HEALTH 3 (3)
Course is an introduction to food systems, including but not limited to food production, processing, and consumption. A variety of selected readings provide a rich and diverse background of cultural and natural histories and present fundamental perspectives in ecology, agriculture, and food science. Students investigate the connections, impacts, and relationships that food has on the environment, public policy, society, the economy, human health and food security. A systems approach is applied at the local, national and global scales. This course may include a Service Learning component.

General Education: IN1, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Spring Semester

SAGR 170, SERVICE LEARNING I SUSTAINABLE AGRICULTURE 1-3 (7.5)
This course provides a structured community service experience in sustainable agriculture with an approved community partner and faculty advisor. Students will evaluate the importance of their personal contribution in meeting identified community needs while pursuing academic study and career exploration. Students will gain real world experience in an interactive, dynamic environment.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: A student must have completed a minimum of six semester hours and have a minimum of 2.5 GPA or division approval.

Typically Offered: Offer as required

SAGR 287, WORK BASED LEARNING I - SAGR 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Offer as required
SAGR 288, WORK BASED LEARNING II - SAGR 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: SAGR 287
Typically Offered: Offer as required

SAGR 289, WORK BASED LEARNING III - SAGR 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: SAGR 288
Typically Offered: Offer as required

SAGR 299, INDIVIDUALIZED STUDIES IN SAGR 1-2 (1)
An in-depth study of areas in sustainable agriculture through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Technology (TECN)

TECN 111, TECHNICAL PROBLEM SOLVING 3 (5)
An introduction to the concepts of technical problem solving using the microcomputer. Familiarization with the problem solving technique as it relates to problems in engineering technology will be emphasized. The problem solving technique is based on the application of current microcomputer related tools and software packages. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

TECN 115, INDUSTRIAL BLUEPRINT READING 2 (3)
This course is an introduction to the skills required to read and understand industrial blueprints. The reading of blueprints is emphasized rather than the drawing of blueprints. Freehand sketching is included. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

TECN 121, FLUID POWER 3 (4)
This course is designed for Applied Science majors and focuses on the principles of hydraulics and pneumatics. Includes fluid mechanics/dynamics, conventional fluid circuits and fluid power components. Emphasis on applications, component selection and related mathematics computations. Laboratory required. (A special fee will be assessed.) (TAG)
General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 033 or satisfactory placement assessment in mathematics
Typically Offered: Fall and Spring Semesters

TECN 125, INDUSTRIAL SAFETY AND PRACTICES 2 (2)
This course covers the principles and techniques of industrial safety. Topics include: OSHA standards, fire prevention, personal protection and first aid, accident prevention, accident investigation and reporting, machine guarding, ergonomics, types of hazards and hazardous material.
General Education: IN1
Course Entry Requirement(s): None

TECN 126, PRINCIPLES OF TECHNOLOGY 3 (3)
Basic principles and applications of force, work, rate, resistance, energy and power in simple mechanical, electrical, thermal and hydraulic systems are taught through hands-on demonstrations.
General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 061 or satisfactory placement assessment in mathematics

TECN 127, MAINTENANCE MACHINING 2 (4)
This course covers the principles and techniques of maintenance machining in an industrial production environment. Topics include: use of lathes, milling machines, drill presses, grinders, threads and thread cutting tools, power tools, commonly used hand tools, and measurement instruments for maintenance operations. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): None

TECN 131, MANUFACTURING PROCESSES I 3 (6)
This course is an introduction to the use and understanding of commonly used machine tools, lathes, mills, drill presses, and surface grinders will be studied and used. Common fabrication processes will be studied. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Concurrent: CADD 111 or TECN 115.
Typically Offered: Fall and Spring Semesters

TECN 132, MANUFACTURING PROCESSES II 3 (6)
This course covers advanced techniques of manufacturing processes using lathes, mills, surface grinders and electro-discharge machines (EDM). Fixture and tool design will be studied. Laboratory required. (A special fee will be assessed.)
General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: TECN 115 and TECN 119.
Typically Offered: Spring Semester

TECN 133, MECHANICAL SYSTEMS 3 (5)
This course, designed for the Applied Science majors, examines the different mechanical systems and tooling used in an industrial environment. Included are discussion of safety, precision measurement, blueprints, hand and powers tools, fasteners, torque and tension, mechanical drives, shaft alignment, bearings, lubrication, rigging and ladder safety. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 033 or satisfactory placement assessment in mathematics
Typically Offered: Fall and Spring Semesters
Typically Offered: division approval.

Course Entry Requirement(s): Prerequisite: ELCT 111 and TECN 121.

Typically Offered: Spring Semester

TECN 220, INDUSTRIAL PIPING & TUBING 3 (4)
This course is an introduction to the concepts and principles of industrial piping, pipefitting, and tubing installation, materials, routing and layout specifications. Also covered are: simple pipe calculations, selection of materials, appropriate tools, cutting, threading, fittings, bending and offsets. Laboratory required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): Prerequisite: TECN 115

Typically Offered: Spring Semester

TECN 245, GEOMETRIC DIMENSIONING AND TOLERANCING 2 (2)
This course is an introduction to the ASME Y14.5 - 2009 Geometric Dimensioning and Tolerancing (GD&T) standard. General tolerancing methods will be reviewed. Geometric characteristic symbols and terms, and datums will be defined. Material condition modifiers will be identified and discussed. The geometric tolerances of form, orientation, profile, runout and location will be studied.

General Education: IN1

Course Entry Requirement(s): Prerequisite: TECN 115

Typically Offered: Fall and Spring Semesters

TECN 287, WORK BASED LEARNING I - TECN 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4

Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Offer as required

TECN 288, WORK BASED LEARNING II - TECN 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4

Course Entry Requirement(s): Prerequisite: TECN 287

Typically Offered: Offer as required

TECN 289, WORK BASED LEARNING III - TECN 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4

Course Entry Requirement(s): Prerequisite: TECN 288

Typically Offered: Offer as required

Telecommunications (TCMN)

TCMN 151G, INTRODUCTION TO MASS COMMUNICATION 3 (3)
Designed to foster intelligent selection and appraisal of mass media in the communication process; effects of print, radio, film, TV and advertising on the public. The course examines the innovations, inventions, industries, and people that have changed and challenged the world of mass communication. Viewing of selected programs, commercials, slides and film. (TAG)

General Education: IN1, IN2, IN3

Course Entry Requirement(s): None

Typically Offered: Summer Semester

TCMN 162, INTRODUCTION TO RADIO PRODUCTION 3 (3)
This course is designed to provide students with entry-level knowledge and skills in radio broadcasting. Emphasis will be placed on the development of production skills in the use of audio equipment as well as developing an understanding of professional radio procedure and practices. Techniques will also be covered dealing with the improvement of the voice as an effective communication instrument. (TAG, CTAG)

General Education: IN1, IN2, IN4

Course Entry Requirement(s): None

Typically Offered: Fall and Spring Semesters

TCMN 163, RADIO WORKSHOP 1 (2)
Practical experience for students interested in working with the LCCC Internet radio station. Students will assume on-air responsibilities of conducting professional radio programs and audio productions. Opportunities for learning radio management skills will be available as well in the areas of music, programming, promotion, news, sports and commercial production. Repeatable up to a total of four credit hours.

General Education: IN1, IN2, IN3, IN4

Course Entry Requirement(s): None

Typically Offered: Fall and Spring Semesters

TCMN 171, MULTI-CAMERA TV PRODUCTION 3 (4)
An introduction to the development of basic operations in television media. Class discussions/lectures and participation in the production of television presentations. Self and peer evaluation. One hour weekly arranged laboratory experience. (A special fee will be assessed.)

General Education: IN1, IN2

Course Entry Requirement(s): None

Typically Offered: Fall and Spring Semesters
TCMN 175, BROADCAST SPEAKING 3 (3)
Development of the basic skills required to be an effective radio and television communicator. Practice in announcing, news casting, commercial, public service, dramatic production disc jockeying and interviewing.

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Fall Semester

TCMN 177, INTERACTIVE TV AND VIDEO PRODUCTION 3 (3)
Hands-on experience intended to develop skills necessary to plan, to produce and to edit television productions using portable video cameras and non-linear editing. Topics to be covered include basic applications of non-linear editing and audio editing. Emphasis will also be placed on students receiving hands-on experience and creating a variety of video programs. (A special fee will be assessed.) (TAG, CTAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Spring Semester

TCMN 199, INTRODUCTION TO THE WORLD OF WORK - TCMN 1 (10)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self-examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.

Course Entry Requirement(s): A student must have completed minimum 12 semester credit courses at LCCC (courses transferred are not counted; have earned minimum 2.0 overall GPA; OR have division approval. Maximum three ‘1’ credit courses allowed.)
Typically Offered: Offer as required

TCMN 264, NON-LINEAR EDITING 3 (5)
This class is an exploration of non-linear video and digital sound editing. Students will be introduced to a variety of video editing and sound editing software programs and techniques. They will be expected to capture, edit, and create a series of time-based assignments as well as expanding the use of the computer as a creative tool. Conversion of analog to digital information will be explored. Production procedures will be emphasized. This course is cross-listed as ARTS 264 and TCMN 264.

General Education: IN1, IN2
Typically Offered: Not offered this year, Fall Semester

TCMN 265, TELEVISION WORKSHOP 1 (2)
Laboratory experience in television production. Students will produce, direct and create original programming for on-campus television programming. Repeatable twice. (A special fee will be assessed.)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: TCMN 164
Typically Offered: Fall and Spring Semesters

TCMN 275, TELEVISION PRODUCTION 3 (3)
Procedures and techniques involved in the planning, creating, performing in and directing of television programs. Participation in studio projects involving the productions of television presentations. (A special fee will be assessed.) (TAG)

General Education: IN1, IN2
Course Entry Requirement(s): Prerequisite: TCMN 171
Typically Offered: Not offered this year

TCMN 277, ADVANCED TELEVISION WORKSHOP 1 (2)
An advanced laboratory experience designed for persons interested in television production. Emphasis is placed on producing, directing, performing and technical development of on campus and commercial television programming. Repeatable twice. (A special fee will be assessed.)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: TCMN 164, 171, 275, and two sections of TCMN 265 or permission of instructor.
Typically Offered: Not offered this year

TCMN 278, FIELD PRODUCTION & ONLINE DISTRIBUTION 3 (3)
An introduction to the study of how to create a thirty minute public affairs television program. Concepts taught include: script writing, ENG (electronic news gathering) techniques, conducting interviews, research techniques, editing, and camera operation. (A special fee will be assessed.)

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: TCMN 177
Typically Offered: Fall Semester

TCMN 285, MEDIA INTERNSHIP 1-2 (7)
Supervised experience at cooperating radio, and television stations. Faculty supervision with written reports. Repeatable up to a total of four (4) credit hours.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: TCMN 175, 275 and or division approval.
Typically Offered: Summer, Fall and Spring Semesters

TCMN 299, INDIVIDUAL STUDIES IN TELECOMMUNICATIONS 1-2 (1)
An in-depth study of areas of communication and performing arts presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.

Course Entry Requirement(s): Prerequisite: Division approval
Typically Offered: Offer as required

Theater (THTR)

THTR 151G, INTRODUCTION TO THEATER 3 (3)
An introduction to the study of theater as art through the elements of writing, acting, directing, and play production. Social and cultural issues of the theater upon society will be discussed. Humanities core course.

General Education: C5, IN1, IN2, IN3
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

THTR 162, INTRODUCTION TO TECHNICAL PRODUCTION 3 (4)
An introduction to the technical knowledge and skills of theatrical production with an emphasis on stage scenery and lighting technology. Concepts of constructing basic scenic elements (flats, platforms, stairs. . .), the use of tools and materials; the use of lighting instruments and control equipment and safety practices for the execution of stage scenery and lighting. Laboratory required. (TAG, CTAG)

General Education: IN1, IN2
Course Entry Requirement(s): None
Typically Offered: Spring Semester
THTR 168, PLAYWRITING FOR STAGE & SCREEN 3 (3)
Writing scripts for performance on stage and for television and film. Also adapting other works for fiction and non-fiction for performance. Workshop sessions center on student writing. THTR168 and ENGL 168 are cross-listed with each other.
General Education: IN3
Course Entry Requirement(s): None
Typically Offered: Spring Semester

THTR 181, TECHNIQUES OF ACTING 3 (4)
Introduction to the basic principles of acting through the use of lectures, discussion and practice. Students participate in improvisation, acting out scenes from selected plays, and interpretation of dramatic literature. Laboratory required. (TAG)
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester

THTR 182, ADVANCED TECHNIQUES OF ACTING 3 (4)
Advanced study of acting techniques, character analysis, building the character performance skills. Emphasis on analysis performance of selected scenes. Repeatable up to a total of six (6) credit hours. Laboratory required.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: THTR 181
Typically Offered: Spring Semester

THTR 183, PERIODS AND STYLES OF PERFORMANCE 3 (4)
Advanced study of periods and styles of acting and performance modes. Emphasis will be on the selection, preparation and performance of selected literature. Repeatable up to a total of six (6) credit hours. Laboratory required.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): Prerequisite: THTR 181 and THTR 182 or divisional approval
Typically Offered: Not offered this year

THTR 184G, MULTICULTURAL PERFORMANCE STUDIES 3 (4)
An introduction to an examination of performance as a multifaceted and multicultural phenomenon. The course includes cultural performances, literary performances, and performance art as ways of studying performance as an art event. Students will examine personal narratives, public, ceremonies, folklore and folk tales and family and/or cultural rituals as modes of performance. Repeatable up to a total of six (6) credit hours. Laboratory required.
General Education: IN1, IN2, IN3, IN5
Course Entry Requirement(s): None
Typically Offered: Not offered this year

THTR 185G, THEATER HISTORY 3 (3)
Survey of major dramatists, movements, and practices of dramatic presentations from pre-Greek to the close of the 17th century. (OTM)
General Education: C5, IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

THTR 199, INTRODUCTION TO THE WORLD OF WORK - THTR 1 (1)
This course provides an internship-level supervised work experience with an approved employer. Emphasis is on career exploration to maximize sound career decisions. Students also explore the role of a college education in career preparation. Focus on self examination of the world of work in terms of values, skills, and interests. Exploration of occupational paths for all majors, disciplines, examination of employer-employee expectations, preparation of resumes and development of interviewing skills are covered.
Course Entry Requirement(s): A student must have completed minimum 12 semester credit courses at LCCC (courses transferred are not counted; have earned minimum 2.0 overall GPA; OR have division approval. Maximum three ‘1’ credit courses allowed.)
Typically Offered: Offer as required

THTR 255, VOICE AND MOVEMENT 3 (3)
Fundamentals of voice and movement for the performer. Emphasis will be placed on relaxation, alignment, articulation, and quality for performers in theater, communications, and broadcast media.
General Education: IN1, IN2, IN5
Course Entry Requirement(s): None
Typically Offered: Not offered this year

THTR 285, THEATER ACTING PRACTICUM 1 (2)
Practical experience for students accepted as cast members in LCCC Theater program productions. Repeatable up to a total of (6) credit hours. Laboratory required. (TAG)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: Division approval.
Typically Offered: Offer as required

THTR 286, THEATER TECHNOLOGY PRACTICUM 1 (2)
Practical experience for students accepted as members of the LCCC Theatre Company as stage managers, designers, technicians, or in technical positions created by the specific needs of the production. Repeatable up to a total of (6) credit hours. Laboratory required. (TAG)
General Education: IN1, IN2, IN3
Course Entry Requirement(s): Prerequisite: One previous theater course in residence at LCCC and division approval.
Typically Offered: Offer as required

THTR 287, WORK BASED LEARNING - THEATER 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

THTR 299, INDIVIDUALIZED STUDIES IN THEATER 1-2 (1)
An in-depth study of areas in theater through discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required
THTR 501, SCRIPT ANALYSIS 3 (3)
To be used to transfer in course sharing classes for OGTP.
Typically Offered: Offer as required

Tourism (TRSM)

TRSM 111, INTRODUCTION TO THE TOURISM INDUSTRY 3 (3)
Course designed for Hospitality and Tourism Management majors specifically for the travel industry track. An overview of the tourism industry. Study includes history of travel; traveler profiles; motivations, needs, and expectations of travelers; destination development; social and economic environment of the industry; specialized fields of the tourism industry; industry terminology and job-related opportunities.
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall Semester

TRSM 112, INTRODUCTION TO THE HOSPITALITY INDUSTRY 3 (3)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality and Culinary tracks. An exploration of the hospitality industry including the organization and structure of hotels, restaurants, clubs, cruise lines and casinos. Management, marketing, human resources and ethics of hospitality organizations are examined as well as career opportunities. Course is offered as part of the requirements for the Hospitality Operations and Hospitality Fundamentals Program certificates awarded by the American Hotel & Lodging Educational Institute. (CTAG)
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer and Fall Semesters

TRSM 118, FOOD SAFETY AND SANITATION 2 (2)
Food and Drug Administration (FDA) food code and information on food safety is examined. Topics include food handling, purchasing, receiving and safe storage of food. Sanitary facilities and equipment, food safety regulations and employee training are also covered. Students must pass the ServSafe® Food Protection Manager Certification Exam. (CTAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

TRSM 119, TECHNOLOGY IN THE HOSPITALITY INDUSTRY 2 (2)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality track. An introduction to information needs as they relate to hospitality. The basic property management systems, restaurant management systems, sales applications, revenue management and accounting applications are explored. System selection, security and the impact of the Internet are also examined. Course is offered as part of the requirements for the Rooms Division Certificate of Specialization and the Hospitality Operations certificates awarded by the American Hotel & Lodging Education Institute. (CTAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Fall Semester

TRSM 120, HOUSEKEEPING OPERATIONS 2 (2)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality track. The role and responsibilities of the housekeeping department are examined in relation to the operational success of a hotel and guest satisfaction. Topics include energy management, guest safety and security issues, health concerns, guestroom furnishings, inventory management, and expense control.
Course is offered as part of the requirements for the Rooms Division Certificate of Specialization, the Hospitality Operations and Hospitality Fundamentals Program certificates awarded by the American Hotel & Lodging Educational Institute. (CTAG)
General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

TRSM 121, FRONT OFFICE OPERATIONS 2 (2)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality track. Principles and procedures of the hotel front office from the reservation process to check-in/check-out and account settlement are examined as these relate to the overall operation of the lodging industry. The role and responsibilities of management including planning, evaluation and human resources of the front office are also explored. Course is offered as part of the requirements for the Rooms Division Certificate of Specialization, the Hospitality Operations and Hospitality Fundamentals Program certificates awarded by the American Hotel & Lodging Educational Institute. (CTAG)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

TRSM 124, CONFERENCE, MEETING AND EVENT PLANNING 3 (3)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality and Travel Industry tracts. An introduction to conferences, meetings and events. The responsibilities of the planner are examined. Also included are marketing/sales strategies, financial requirements, operational issues, security, and exhibit management. Students will plan and host an event. Course is offered in conjunction with the American Hotel & Lodging Educational Institute.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

TRSM 126, HOSPITALITY AND TOURISM MANAGEMENT CAREER EXPLORATION 1 (1)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality and Travel Industry tracts. An introduction to career planning. Topics include hospitality and tourism career paths, self-assessment and career goals, interviewing and networking techniques, self-marketing documents, and professional work habits.
General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): None
Typically Offered: Fall Semester
TRSM 143, HOSPITALITY LAW 3 (3)
Course is designed for Hospitality and Tourism Management majors specifically for the Hospitality and Travel Industry tracks. A study of the legal considerations of hotel and restaurant operations. Includes basic legal principles governing hospitality operations; laws affecting hotel employees; building codes and public health regulations as applicable to hotels and restaurants; tax laws relating hospitality operations. Course is offered as part of the requirements for the Rooms Division certificate of Specialization awarded by the American Hotel & Lodging Educational Institute.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall Semester

TRSM 224, AIRLINE RESERVATIONS AND TICKETING I 4 (4)
Course designed for Hospitality and Tourism Management majors specifically for the Travel Industry track. Introduction to airline reservations and ticketing procedures for domestic itineraries. Emphasis is placed on airport/city codes, documents, tariff displays, fare calculations, taxes, fare rules, payment options, refund/exchange procedures and search engines. The operational requirements of the Airline Reporting Corporation Industry Agents Handbook will be included. Entry level airline computer training is also included with topics covering flight availability; status displays; the selling of flight segments; the building of the Passenger Name Record (PNR); itinerary changes; fare quotes; seat selections; waitlist segments; queues; reducing and dividing records and miscellaneous airline computer formats.

General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: TRSM 111
Typically Offered: Spring Semester

TRSM 226, HOSPITALITY SUPERVISION 2 (2)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality track. An examination of the personnel issues relating to the hospitality industry. Topics include recruiting, training, evaluating, coaching and motivating. Also included are legal issues, managing conflict and time management. Course is offered as part of the requirements for the Rooms Division Certificate of Specialization, the Hospitality Operations and Hospitality Fundamentals Program certificates awarded by the American Hotel & Lodging Educational Institute.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: TRSM 112
Typically Offered: Spring Semester

TRSM 228, FOOD AND BEVERAGE MANAGEMENT 2 (2)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality track. The management function in food and beverage processes are examined. Topics include the organization of food and beverage organizations, marketing, nutrition, budgeting and cost control, facility design and production systems. Course is offered as part of the requirements for the Hospitality Operations and Hospitality Fundamentals Program certificates awarded by the American Hotel & Lodging Educational Institute.

General Education: IN1, IN2, IN3, IN4, IN5
Course Entry Requirement(s): Prerequisite: TRSM 112
Typically Offered: Spring Semester

TRSM 240, AIRLINE RESERVATIONS AND TICKETING II 3 (3)
Course designed for Hospitality and Tourism Management majors specifically for the Travel Industry track. Continuation of Airline Reservations & Ticketing I. Topics include car reservations: availability, quotes, booking and terminology; hotel reservations: availability-direct and from PNR, hotel features, and search qualifiers; tour reservations: booking, pricing, canceling and payment options. A special fee will be assessed and collected by the division.

General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: TRSM 224
Typically Offered: Fall Semester

TRSM 241G, WORLD LEISURE DESTINATIONS 3 (3)
A study of domestic and international destinations appealing to both leisure and corporate travelers. The course will examine the appeal of major tourist destinations with a concentration on the major attractions and the physical geography. Modes of transportation and the variety of travel products available will be covered. Cultural diversity is also explored.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: TRSM 111
Typically Offered: Fall Semester

TRSM 245, CASINO OPERATIONS 2 (2)
Course designed as an elective for Hospitality and Tourism Management majors specifically for the Hospitality and Travel tracks. A study of casino industry including industry development; organizational structure; legal issues; marketing and the various types of games. The future trends of casinos will also be explored. An optional trip may be offered to a casino. A special fee will be assessed and collected by the division. Students must be at least 21 years old to participate in the trip.

General Education: IN1, IN2, IN4
Course Entry Requirement(s): None
Typically Offered: Spring Semester

TRSM 247, CRUISE AND TOUR MANAGEMENT 3 (3)
Course designed as an elective for Hospitality and Tourism Management majors specifically for the Hospitality and Travel Industry tracks. An exploration of the cruise industry and professional tour management. Includes types of cruise ships and tour products available; destination geography; cultural awareness; tour preparation and research; management responsibilities; crisis management and marketing. An optional city tour and/or cruise may be offered. A special fee will be assessed and collected by the division.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: TRSM 111 or TRSM 112
Typically Offered: Fall Semester

TRSM 248G, INTERNATIONAL EXPERIENCE 2 (2)
Course designed as an elective for Hospitality and Tourism Management majors. An introduction to a foreign country's history, social, cultural, economic and political structure with an emphasis on its tourism industry and its appeal as a tourist destination. The course will culminate with a field study trip to the foreign country. Destinations will vary each year. A special fee will be assessed for the trip and will be collected by the division. Students will be responsible for securing all the necessary documentation, immunizations and permissions needed for travel. May be repeated twice for credit.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: TRSM 111 or TRSM 112; Concurrent: TRSM 241G
Typically Offered: Fall Semester
TRSM 249G, INTERNATIONAL TRAVEL AND WORLD EVENTS 3 (3)
Course designed for Hospitality and Tourism Management majors specifically for the Travel Industry track. An introduction to the essentials in international travel. Topics include currency exchange rates, customs, immigrations, documentation, health requirements, time zones, elapsed flying time. International airport/city codes and ticketing requirements will be covered. The course examines current world issues and events and the impact these have on travel and travelers.

General Education: IN1, IN3, IN4
Course Entry Requirement(s): Prerequisite: TRSM 241; Concurrent: TRSM 224
Typically Offered: Spring Semester

TRSM 285, HOSPITALITY AND TOURISM PRACTICUM 1-3 (7)
Course designed for Hospitality and Tourism Management majors specifically for the Hospitality and Travel Industry tracks. An unpaid supervised work experience in a position related to the student's major field of study. The work experience will assist students in exploring career choices within their field, understanding employer expectations and integrating classroom knowledge in a work setting. The planned work activity will be coordinated and supervised by the employer and a tourism faculty coordinator. A student must be pursuing a Hospitality and Tourism Management concentration of study. Thirty semester hours completed with twenty semester hours completed in major; minimum GPA of 2.0; minimum GPA in major of 2.5; and Divisional approval.
*Divisional approval requires a minimum of one (1) meeting with faculty coordinator to discuss placement and requirements of course.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: MKRG 113; Concurrent: TRSM 126
Typically Offered: Summer, Fall and Spring Semesters

TRSM 287, WORK BASED LEARNING I - TRSM 1-3 (1)
This course provides supervised work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating classroom learning with work experience. Students will be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Activities are coordinated, and evaluated by college personnel.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Offer as required

TRSM 288, WORK BASED LEARNING II - TRSM 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: TRSM 287
Typically Offered: Offer as required

TRSM 299, TOURISM - INDEPENDENT STUDY 1-2 (1)
An in-depth study of areas of tourism presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four(4) credit hours.
Course Entry Requirement(s): Prerequisite: Second year standing and division approval.
Typically Offered: Offer as required

Urban Studies (URBS)

URBS 122, REPORT WRITING 3 (3)
Students will learn the concepts, practices and skills of writing reports and other documents. Focus will be on accuracy and clarity. Emphasis will be on urban, geographic and related applications.

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Spring Semester

URBS 151G, INTRODUCTION TO URBAN STUDIES 3 (3)
Survey of urban history. Emphasis on an examination of the evolution of the city in America and the background of urban issues and problems. Includes consideration of future urban development trends. (OTM)

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

URBS 152G, CONTEMPORARY URBAN ISSUES 3 (3)
Examination of economic, political and social problems and issues effecting contemporary urban life in America. Topics include development of American cities during the 19th and 20th centuries; social and economic influences on today's cities; social problems and issues; and government response to change. Emphasis is placed on minority issues and concerns.

General Education: IN1, IN3
Course Entry Requirement(s): None
Typically Offered: Spring Semester

URBS 155G, INTRODUCTION TO ARCHAEOLOGY 3 (3)
This course introduces the student to Anthropological Archaeology - the study of past human culture using material remains from an urban perspective. Course emphasizes obtaining goals of archaeological research through: survey, excavation, artifact analysis and interpretation. This course provides a basic understanding of how we learn about ancient societies and how this teaches us about ourselves. This course is cross listed as ARCH 155G and SOCY 155G, Introduction to Archaeology. (OTM)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Summer, Fall and Spring Semesters

URBS 210, INTRODUCTION TO WOMEN'S STUDIES 3 (3)
This course provides students with an introduction to the interdisciplinary field of Women's Studies, examining historical and contemporary concepts of gender as they relate to social, political and cultural institutions and issues. The course provides multiple perspectives examining role of gender, including attention to foundational resources in feminist theory, creative expression through arts and literature, feminist theories and comparative cultural conditions of women. This course is cross-listed as URBS 210 and WMST 210. (OTM)

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters
URBS 250, URBAN SPATIAL SYSTEMS 3 (3)
This course is an introduction to the way in which market forces allocate the use of space in cities and regions. Economic development and economic analysis, economic processes of distribution, land use and competition issues will be explored. Basic markets that compose the urban system involve basic factors of production: land, labor and capital will be included. The impact of laws on land use (EPA, zoning, eminent domain, brownfields and historic preservations will be included). Metropolitan area fundamental markets: labor market, housing market, and product markets explored. Resources and the use of technology will also be introduced.

General Education: IN1, IN5
Course Entry Requirement(s): Prerequisite: URBS 151
Typically Offered: Fall Semester

URBS 287, WORK BASED LEARNING I - URB S 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

Typically Offered: Offer as required

URBS 299, INDIVIDUALIZED STUDIES IN URBAN STUDIES 1-2 (1)
An in-depth study of Urban Studies presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of (4) credit hours. Prerequisite: Second year standing and divisional approval.

Course Entry Requirement(s): Prerequisite: Second year standing and division approval.

Typically Offered: Offer as required

Welding (WTEC)

WTEC 108, OXY-FUEL WELDING AND CUTTING 2 (4)
This course covers the basic theories and practices of oxyacetylene gas welding, cutting, and brazing, types of welding equipment and operational safety issues. Welding equipment design, use, care, and maintenance are emphasized. Oxy-Fuel laboratory work will include fusion welding, brazing, and manual and semiautomatic cutting. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 108 and BMKR 108.

General Education: IN1
Course Entry Requirement(s): Concurrent: WTEC 111.
Typically Offered: Fall Semester

WTEC 111, WELDING SPECIFICATIONS/PRINT READING 2 (2)
This course covers basic engineering drawing principles, fundamental concepts of welding specifications, symbols, and blueprint reading as used in industry, and types of welding equipment and operational safety issues. Emphasis is on print reading, interpretation and analysis as used in industry, and types of welding equipment and operational safety issues. This course is cross-listed as WTEC 111 and BMKR 111.

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Fall Semester

WTEC 112, WELDING CODES AND STANDARDS 2 (2)
This course is designed to familiarize the student with the many governing codes and standards that are used in the welding industries today. Emphasis is to not only learn the correct applications of welding codes and standards, but to become aware of their function as a quality tool. This course is cross-listed as WTEC 112 and BMKR 112.

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer Semester

WTEC 116, BASIC SHIELDED METAL ARC WELDING 3 (5)
This course covers the basic theories and practices of AC and DC shielded metal arc welding, flat position welding of ferrous metal, and required welding code applications. Welding equipment design, use, care, safety, and maintenance are emphasized. Laboratory, exercises that develop welding skills in a variety of welding positions will be practiced. Welding power source selection will also be studied. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 116 and BMKR 116.

General Education: IN1
Course Entry Requirement(s): Concurrent: WTEC 111.
Typically Offered: Spring Semester

WTEC 212, WELDING FABRICATION, LAYOUT/DESIGN 4 (6)
This course introduces the student to the field of welding fabrication. It will provide the student the opportunity to apply knowledge of welding metallurgy, filler metal selection, testing and inspection of welds, Welding codes, standards and certifications, joint design, layout plans and cost estimates to welding fabrication projects. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 212 and BMKR 212.

General Education: IN1
Course Entry Requirement(s): None
Typically Offered: Summer Semester

WTEC 216, WIRE FED PROCESSES 3 (5)
This course covers the basic principles and practices of gas metal arc welding (GMAW). Laboratory work involves the application of GMAW as it is used in industry today. Use of various metal transfer modes for aluminum and steel, joint styles, welding positions, and manipulation techniques will be emphasized. Wire fed processes will include sub-arc theory. Laboratory exercises will include flux-covered arc welding. Welding equipment, design, use, care, safety and maintenance are emphasized. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 216 and BMKR 216.

General Education: IN1
Course Entry Requirement(s): Prerequisite: None
Typically Offered: Fall Semester

WTEC 217, GAS TUNGSTEN ARC WELDING 3 (5)
This course covers the basic principles and practices of gas tungsten arc welding (GTAW). Laboratory work involves the application of GTAW as it is used in industry today. Use of various metal transfer modes for aluminum, carbon steel, and stainless steel, joint styles, welding positions and manipulation techniques will be emphasized. Welding equipment, design, use, care, safety and maintenance are emphasized. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 217 and BMKR 217.

General Education: IN1
Course Entry Requirement(s): Prerequisite: None
Typically Offered: Spring Semester
WTEC 219, ADVANCED ARC WELDING 3 (5)
This course covers advanced theories and practices of groove, pipe, resistance and other material joining principles. Welding equipment design, use, care, safety and maintenance are emphasized. Laboratory exercises that develop welding skills in a variety of welding positions will be practiced. Welding power source selection will also be studied. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 219 and BMKR 219.
General Education: IN1
Typically Offered: Spring Semester

WTEC 221, WELD QUALITY INSPECTION 3 (5)
This course introduces the student to the variety of weld test procedures used in the welding industries, and how to determine weld strength and selection of proper weld materials. Test procedures such as visual weld inspection, non destructive testing, and radiographic testing will be covered. Laboratory required. (A special fee will be assessed.) This course is cross-listed as WTEC 221 and BMKR 221.
General Education: IN1
Course Entry Requirement(s): Concurrent: WTEC 112
Typically Offered: Fall Semester

WTEC 287, WORK-BASED LEARNING I - WTEC 1-3 (1)
This course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.
Typically Offered: Offer as required

WTEC 288, WORK BASED LEARNING II - WTEC 1-3 (1)
Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: WTEC 287
Typically Offered: Offer as required

WTEC 289, WORK BASED LEARNING - WTEC 1-3 (1)
Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student’s program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): Prerequisite: WTEC 288
Typically Offered: Offer as required

WTEC 299, INDIVIDUALIZED STUDIES IN WELDING 1-2 (1)
An in-depth study of areas of various welding studies presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours.
Typically Offered: Offer as required

Women's, Gender, and Sexuality Studies (WMST)

WMST 210, INTRODUCTION TO WOMEN'S STUDIES 3 (3)
This course provides students with an introduction to the interdisciplinary field of Women’s Studies, examining historical and contemporary concepts of gender as they relate to social, political and cultural institutions and issues. The course provides multiple perspectives examining role of gender, including attention to foundational resources in feminist theory, creative expression through arts and literature, feminist theories and comparative cultural conditions of women. This course is cross-listed as URBS 210 and WMST 210. (OTM)
General Education: IN1, IN2, IN3, IN4
Course Entry Requirement(s): None
Typically Offered: Fall and Spring Semesters

WMST 251, FEMINIST THEORY 3 (3)
Students of all majors are eligible to take this course; it would be especially appropriate for women’s studies majors, social science majors, and humanities majors. This course provides students with an in-depth examination of various historical and contemporary feminist theorists and theories. Students will examine feminist theories, originations, descriptions, and analyses of issues, proposed solutions, and outcomes. This course features influential feminist theories of gender, sex, sexuality, race, class, intersectionality, power, privilege, oppression, resistance and more.
General Education: C4, IN1, IN2, IN3, IN4
Typically Offered: Spring Semester
UNIVERSITY PARTNERSHIP AT LCCC

LCCC is the first community college in Ohio to have a University Partnership program, where students can select from over 60 different associate, bachelor’s and master’s degrees all offered by leading universities.

Classes are held in the The Dr. Roy A. Church University Center, a facility designed specifically for students enrolled in University Partnership degree programs. Some courses are also held at the University Partnership Ridge Campus in North Ridgeville.

The University Partnership provides students with a quality education that, when combined with LCCC coursework, is the best value in higher education. On-campus university partners provide the faculty and curriculum for all University Partnership courses.

Degrees cover a wide range of specialties, including business administration, biology, computer science and engineering, nursing, public health, education and more.

Thousands of people have found the University Partnership at LCCC to be the best path to reach their educational and career goals.

About the University Partnership

The University Partnership at Lorain County Community College was created to bring bachelor’s and graduate degrees to the residents of Lorain County. Under this partnership, many of the finest universities in Ohio offer programs to students right on the Lorain County Community College campus. The four-year institutions offer all courses required for the completion of the bachelor’s degree programs or the fulfillment of requirements for graduate or certificate programs. Lorain County Community College’s University Partnership coordinates the delivery of the degree programs. Partner institutions provide the faculty and curriculum.

The Dr. Roy A. Church University Center which opened on October 22, 1998, houses the University Partnership, the partners’ offices, classrooms, computer labs and interactive video distance-learning classrooms.

Some University Partnership courses are offered in the University Partnership Ridge Campus, which opened on January 7, 2013. Currently, the University of Toledo’s Computer Science and Engineering program is housed at the UPRC.

Getting Started

Admission, registration, financial aid and payment for courses/programs offered at Lorain County Community College through the University Partnership differ with each institution. Students interested in a specific program should schedule an appointment to meet with the advisor for the program.

The UP list of UPComing Events (https://www.lorainccc.edu/up/upcoming-events/) lists information sessions regarding new and current programs.

Admission

To enroll in a University Partnership program, students must apply for admission to the main campus of the partner university. The ideal approach for admission to a bachelor’s degree program is to complete the first two years of college courses (or an associate degree) from Lorain County Community College. Successful completion of the correct courses greatly simplifies admission to an undergraduate program. The University Partnership recommends meeting with an advisor from the partner institution during the first two years at LCCC. LCCC academic advisors assist students in transferring to the partner institution. Once the application to the partner university has been accepted, the student becomes a student of both the University Partnership and a student of that university.

Financial Aid

All financial aid and payment for classes is processed through the partner university’s main campus. Students may be eligible for financial aid in the form of scholarships, grants or loans. The Lorain County Community College Foundation, through the generous support of private donations, has also made scholarship dollars available to University Partnership students. For more information on the University Partnership Empowerment Award, the University Partnership Scholarship Program, or various scholarships offered by partner universities, please contact the University Partnership office or visit the UP Scholarships website. (https://www.lorainccc.edu/up/scholarship-opportunities/)

Students are urged to complete the proper paperwork and apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA form) well in advance of starting classes. Students can contact the partner university for assistance with the financial aid application. Students taking both Lorain County Community College and partner university courses must complete a consortium agreement available through the partner university.

Registering for Classes

All partner universities offer online registration. Please contact the University Partnership advisor for more information.

Tuition and Fees

Tuition and fees will be assessed by the institution in which the student is enrolled, not by Lorain County Community College. Students should contact the university for current tuition and fees. Complete information about payment and refund policies is available from the partnership representatives.

Bachelors’ and Masters’ Degree Programs

Ashland University

Bachelor’s Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/ashland-university-bachelors-degree-programs/)

- Bachelor of Science in Education-Early Childhood Intervention Specialist Licensure (PreK-3)
- Bachelor of Science in Education-Early Childhood Licensure (PreK-3)
- Bachelor of Science in Education-Middle Childhood Licensure (4-9)
Bachelors' and Masters' Degree Programs

- Bachelor of Science in Education-K-12 Intervention Specialist Mild/Moderate/Intensive Licensure
- Bachelor Plus for Teacher Licensure

Master's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/ashland-university-masters-degree-programs/)
- Master in Education major in Curriculum and Instruction
- Master in Education major in Educational Leadership
- Master in Education major in Adult Education Online Degree

Bowling Green State University

Bowling Green State University Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/bowling-green-state-university-bachelors-degree-program/)
- Bachelor of Science in Biology/ Bachelor of Arts in Biology

Bowling Green State University-Firelands College Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/bowling-green-state-university-firelands-college-degree-programs/)
- Associate of Applied Science--Respiratory Care Technology
- Bachelor of Applied Health Science--Respiratory Care Specialist

Cleveland State University

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/cleveland-state-university-bachelors-degree-programs/)
- Bachelor of Arts in Psychology
- Bachelor of Arts in Public Safety Management
- Bachelor of Arts in Nonprofit Administration
- Bachelor of Arts in Organizational Leadership
- Bachelor of Arts in Spanish
- Bachelor of Arts in Urban Studies

Hiram College

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/hiram-college-bachelors-degree-program/)
- Bachelor of Arts Major in Accounting and Financial Management
- Bachelor of Arts Major in Integrated Environmental Studies

Kent State University

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/kent-state-university-bachelors-degree-programs/)
- Bachelor of Business Administration Major in General Business with Optional Minors

Lake Erie College

Master's Degree Program (https://www.lorainccc.edu/up/lake-erie-college/)
- Master of Business Administration

Miami University

Bachelor's Degree Program (https://www.lorainccc.edu/up/miami-university/)
- Bachelor of Science Commerce Online Degree

Ohio University

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/ohio-university-bachelors-degree-programs/)
- Bachelor of Applied Communication Online Degree
- Bachelor of Technical and Applied Studies Online Degree
- Bachelor of Science in Nursing (RN to BSN) Online Degree

The University of Akron

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/university-of-akron-bachelors-degree-programs/)
- Bachelor of Organizational Supervision
- Bachelor of Science in Automated Manufacturing Engineering Technology
- Bachelor of Science in Computer Information Systems - Networking
- Bachelor of Science in Computer Information Systems - Programming
- Bachelor of Science in Exercise Science
- Bachelor of Science in Sports Studies

The University of Cincinnati

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/university-of-cincinnati-degree-programs/)
- Bachelor of Science in Fire and Safety Engineering Technology Online Degree

The University of Toledo

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/university-of-toledo-bachelors-degree-programs/)
- Bachelor of Arts in Liberal Studies Online Degree
- Bachelor of Arts in Professional Studies Online Degree
- Bachelor of Business Administration in Entrepreneurship Online Degree
- Bachelor of Business Administration in Information Systems Lecture Capture Degree
- Bachelor of Business Administration in Management Lecture Capture Degree
- Bachelor of Business Administration in Operations and Supply Chain Management Lecture Capture Degree
- Bachelor of Science in Computer Science and Engineering
- Bachelor of Science in Computer Science and Engineering Technology Online Degree
Western Governors University Ohio

Bachelor's Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/western-governors-university/)

Bachelor of Arts Teaching
- Elementary Education
- Bachelor of Science Business
- Accounting
- Business Management
- Health Information Management
- Healthcare Management—Business
- Human Resource Management
- IT Management—Business
- Marketing Management

Bachelor of Science Health & Nursing
- Healthcare Management—Business
- Health Information Management
- Health Services Coordination
- Nursing (RN to BSN)

Bachelor of Science IT
- Cloud and Systems Administration
- Computer Science
- Cybersecurity and Information Assurance
- Data Management/Data Analytics
- Health Information Management
- Information Technology
- IT Management—Business
- Network Operations and Security
- Software Development

Bachelor of Science Teaching
- Mathematics Education (Secondary)
- Science Education (Secondary Biological Science)
- Science Education (Secondary Chemistry)
- Science Education (Secondary Earth Science)
- Science Education (Secondary Physics)

Master's Degree Programs (https://www.lorainccc.edu/up/western-governors-masters-degree-programs/)

Master – College of Business
- Accounting M.S.
- Data Analytics M.S.
- Information Technology Management M.S.
- Management and Leadership M.S.
- Master of Business Administration
- Master of Health Leadership
- MBA Information Technology Management
- MBA Healthcare Management

Master, College of Information and Technology
- Cybersecurity and Information Assurance M.S.
- Data Analytics M.S.
- Information Technology Management M.S.
- MBA Information Technology Management

Master – College of Health and Nursing
- Nursing – Education (RN to MSN Program) M.S.
- Nursing – Leadership and Management (BSN to MSN) M.S.
- Nursing – Leadership and Management (RN to MSN) M.S.
- Nursing – Nursing Informatics (BSN to MSN) M.S.
- Nursing – Nursing Informatics (RN to BSN) M.S.
- Master of Health Leadership
- MBA Healthcare Management

Master, Graduate Programs for Licensed Teachers
- Curriculum and Instruction M.S.
- Educational Leadership M.S.
- English Language Learning (PreK-12) M.A.
- Instructional Design M.Ed.
- Special Education (K-12) M.S.
- Learning and Technology M.Ed.
- Mathematics Education (K-6) M.A.
- Mathematics Education (Secondary) M.A.
- Science Education (Secondary Biological Science) M.A.
- Science Education (Secondary Earth Science) M.A.
- Science Education (Secondary Chemistry) M.A.
- Science Education (Secondary Physics) M.A.

Master, Teachers College – Leading to Licensure
- Science Education (Secondary Earth Science) M.A.
- Teaching, Elementary Education M.A.
- Teaching, English Education (Secondary) M.A.
- Teaching, Mathematics Education (Secondary) M.A.
- Teaching, Science Education (Secondary) M.A.

Youngstown State University

Bachelor’s Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/youngstown-state-university-bachelors-degree-programs/)

- Bachelor of Arts in Gerontology
- Bachelor of Science in Applied Science-Allied Health Online Degree
- Bachelor of Science in Applied Science-Criminal Justice Online Degree
- Bachelor of Science in Applied Science-Long-Term Care Administration
- Bachelor of Science in Applied Science-Public Health Online Degree
- Bachelor of Social Work

Master’s Degree Programs (https://www.lorainccc.edu/up/bachelors-and-masters-degree-programs/youngstown-state-university-masters-degree-programs/)

- Bachelor of Arts in Gerontology
- Bachelor of Science in Applied Science-Allied Health Online Degree
- Bachelor of Science in Applied Science-Criminal Justice Online Degree
- Bachelor of Science in Applied Science-Long-Term Care Administration
- Bachelor of Science in Applied Science-Public Health Online Degree
- Bachelor of Social Work
• Master of Health and Human Services Online Degree
• Master of Respiratory Care Online Degree
• Master of Social Work
CAMPUS POLICIES AND PROCEDURES

LCCC’s goal is excellence in education and scholarly pursuit. Campus policies assist in meeting this goal through the protection of health, safety, welfare and property of the College and its students, and also preserving and providing an intellectual atmosphere and opportunity for all members of the College community to attain their educational objectives.

In attempting to meet these goals, the LCCC Board of Trustees seeks to regulate the use of the grounds, buildings, equipment and facilities of the College, as well as to provide for the appropriate and orderly conduct of students, staff, faculty and visitors for both campus and College-sponsored, off-campus activities. The board has adopted standards of conduct for students and visitors to the campus, the violation of which may result in suspension from classes, expulsion from the College and/or ejection from College property of persons who violate regulations.

Student Services Navigator

The Student Services Navigator provides direct student service to resolve student complaints and concerns in alignment with Lorain County Community College’s commitment to student access, success and completion. The Student Services Navigator supports the College’s focus on strong customer service and contributes to a supportive and integrated student experience and may address and resolve individual student concerns related to admissions, academic advising, student assessment, counseling, registration, financial aid, records and academic policies.

Kionna McIntosh-Pharms
kmcintosh@lorainccc.edu
(440) 366-7690

Affirmative Action

In its attempt to ensure equality of opportunity, the College shall conduct a vigorous and positive affirmative action agenda that includes the following activities: the wide dissemination, within Lorain County, of information about the educational and financial aid opportunities available at the College; the active recruitment of prospective minority and women students; the addressing of educational deficiencies, when recognized, through such means as developmental education.

Inquiries should be directed to the Affirmative Action Officer or designee:

Lorain County Community College
1005 N Abbe Road
Elyria, Ohio 44035
telephone (800) 995-5222, Ext. 4047

Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, state and local government services, public accommodations, commercial facilities and transportation. It also mandates the establishment of TDD/telephone relay services. The current text of the ADA includes changes made by the ADA Amendments Act of 2008 (P.L. 110-325), which became effective on January 1, 2009.

The ADA was originally enacted in public law format and later rearranged and published in the United States Code.

The 2010 Regulations

On July 23, 2010, Attorney General Eric Holder signed final regulations revising the department’s ADA regulations, including its ADA Standards for Accessible Design. The official text was published in the Federal Register on September 15, 2010 (corrections to this text were published in the Federal Register on March 11, 2011).


Accessibility Statement

As part of our commitment to excellence through diversity and inclusion, Lorain County Community College strives to ensure that campus communication and information technology is accessible to everyone in accordance with both federal and state laws including the Americans with Disabilities Act of 1990 (ADA) and Section 508 of the U.S. Rehabilitation Act.

Any difficulty accessing content on our website can be reported to section508@lorainccc.edu.

Accessibility Services

Accessibility Services provides a range of legally mandated services to students with documented or verifiable disabilities. Reasonable accommodations are provided in the academic setting in order to allow a person with a disability to participate equally and fully.

Accessibility Services is committed to creating a positive and supportive student experience at Lorain County Community College and providing equal access to an educational experience through the provision of academic accommodations. Accessibility Services staff members determine reasonable academic accommodations for students, based upon recommendations from licensed professionals including physicians, psychologists or other clinicians that diagnosed the student’s disability. Staff also consider accommodations that were previously used by the student in an educational setting.

Accessibility Services may not be able to fulfill all requests, but the office will collaborate with students to determine appropriate accommodations based on provided documentation and functional limitations. Eligibility for services/accommodations from Accessibility Services is a separate process from admissions to the College.

In addition to assisting students with accommodations, Accessibility Services staff are available to meet with students to work on enhancing study skills/strategies, time-management and self-advocacy skills. Assistance in identifying accessibility enhancing technology is also available.

All prospective students are encouraged to contact Accessibility Services in the early stages of their college planning. Pre-admission services include meeting with learning specialists to obtain information about eligibility for academic support services and accommodations, appropriate documentation of disability, and transitioning from high
activities. faculty and visitors for both campus and College-sponsored off-campus to provide for the appropriate and orderly conduct of students, staff, grounds, buildings, equipment and facilities of the College, as well as endeavor the LCCC Board of Trustees seeks to regulate the use of the welfare and property of the College and its students. To assist in this Conduct to meet these goals through the protection of health, safety, engagement and enlightenment. It is the purpose of this Code of professional and personal growth and development, and community visitors an environment conducive to academic pursuit and achievement, Lorain County Community College strives to provide faculty, staff, and Policy II-412: Code of Conduct

Code of Conduct

VI-300: Drug-Free Workplace.

The College may require a drug/alcohol screen for behaviors determined in violation of the Campus Code of Conduct and/or LCCC Procedure VI-300: Drug-Free Workplace.

Code of Conduct

Policy II-412: Code of Conduct

Lorain County Community College strives to provide faculty, staff, and visitors an environment conducive to academic pursuit and achievement, professional and personal growth and development, and community engagement and enlightenment. It is the purpose of this Code of Conduct to meet these goals through the protection of health, safety, welfare and property of the College and its students. To assist in this endeavor the LCCC Board of Trustees seeks to regulate the use of the grounds, buildings, equipment and facilities of the College, as well as to provide for the appropriate and orderly conduct of students, staff, faculty and visitors for both campus and College-sponsored off-campus activities.

- Click here to view the LCCC Code of Conduct (http://catalog.lorainccc.edu/catalog/lorainccc.edu/campus-policies/code-of-conduct/pol2412.pdf)
- Complaints and incidents are to be reported online (https://cm.maxient.com/reportingform.php?LorainCountyCC/)

Procedure for Administering the Code of Student Conduct

I. Introduction

1. The president may delegate the requisite responsibility and authority to the provost/vice president for academic affairs and University Partnership who may, in turn, delegate the requisite responsibility and authority to direct and implement the provisions of said procedure to student services administrators, supervisors, and staff pursuant to the guidelines set forth in the procedure.

2. It is the responsibility of the provost/vice president for academic affairs and University Partnership or his/her designee to provide committees with technical advice, training and secretarial support; to establish procedures to ensure an ongoing evaluation of student conduct rules; to collect and maintain all records of formal disciplinary action; to establish means to inform all members of the College community of student conduct policies and procedures; and to serve as a consultant to students and employees regarding the student conduct program.

II. Jurisdiction and Charges

1. These procedures are intended to ensure proper administration of the Code of Student Conduct.

2. In a collective sense, federal and state laws, the College's traffic and parking regulations, Board policy and College procedures provide guidance for campus conduct. A comprehensive list of laws, ordinances, policies and procedures relating to on-campus conduct is available in the Office of Student Life during working hours. Violations of these standards, laws and guidelines will be subject to disciplinary action.

3. Students claiming an inability to participate in the student conduct process for psychological or emotional reasons will be allowed to voluntarily withdraw from the College. This voluntary withdrawal represents the College's only response to a student choosing not to participate in the student conduct process. In such cases, the student conduct process will be held in abeyance, and the student placed on ineligible status (prohibiting future class registration) until the student chooses to re-enter the College. Student conduct proceedings will be reinstated at that time on the issue at question.

III. Procedural Standards

The procedural standards are presented to ensure that behavioral violations are dealt with appropriately and in an expedient fashion. Variance from these procedures may be necessitated by certain time lapses caused by vacation breaks and class period breaks. (See Disciplinary Process).

IV. General Provisions

For the purpose of clarification, all documents and records associated with this process are considered "student records" and are, therefore, not subject to release except as provided by law. Responsibility for enforcement of all College conduct and disciplinary sanctions must be assumed by all College administrators, supervisors, faculty and staff.

Family Education Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, provides students access to information about themselves, permits students to challenge such information about themselves and limits the release of such information about students without the student's explicit written consent.

LCCC is committed to this Act in its entirety. Procedural guidelines are available in appropriate College publications and questions regarding procedures may be directed to the Records office.
Access to Student Records

A student's record, with certain exceptions including directory information (see below), will not be released without prior written consent of the student. A student has the right to review and question the content of her/his educational record within a reasonable time (45 days) after making a written request for such a review. If there are any questions as to the accuracy or appropriateness of the record that cannot be resolved informally, an opportunity for a hearing on the matter will be provided.

Disclosure of Education Records

LCCC will disclose information from a student’s educational records only with the written consent of the student, except:

- To school officials who have a legitimate educational interest in the records.
- For purposes of this policy, a school official is a person employed by the Lorain County Community College in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel); a person serving on the board of trustees; or a student serving on an official committee with supervision. A school official also may include a volunteer or contact who performs a specific institutional service or function for which the College would otherwise use its own employees and who is under the direct control of the College with respect to the use and maintenance of personally identifiable information from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official has access to educational records to the extent that, and only as long as, the official has a legitimate educational interest in the records.
- Legitimate educational interest includes performing a task related to the regular duties of the employee or agent, the student’s education, the discipline of a student, a service or benefit for the student, or maintaining safety and security of the campus.
- To certain officials of the U.S. Department of Education, the comptroller general and state and local educational authorities, in connection with certain state or federally supported education programs.
- In connection with a student’s request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
- If required by a state law requiring disclosure that was adopted before November 19, 1974.
- To organizations conducting certain studies for or on behalf of the College.
- To accrediting organizations to carry out their functions.
- To comply with a judicial order or a lawfully issued subpoena.
- To appropriate parties in a health or safety emergency.

Directory Information

LCCC designates certain personally identifiable information that is contained within the student’s education record as directory information so that the College may, at its discretion, disclose this information without a student’s prior written consent. This information is student name, home address and telephone number, LCCC email address, major field of study, participation in officially recognized activities and current enrollment status (including dates of attendance, full- or part-time, withdrawal status). A student may restrict the publication and release of this directory information by filing a written request with the Records office.

In addition, the following information is always considered releasable: previous dates of attendance, degrees and awards received (to include honors), and previous educational agencies or institutions attended. Any questions regarding FERPA or student records should be directed to the Records office.

Record Retention Policy

LCCC retains the official academic record (transcript) of enrollment and credit earned at LCCC for 100 years after the student’s last enrollment at LCCC. Three years following any term of enrollment, the student’s transcript is the final, indisputable record of academic achievement.

Notice of Nondiscrimination

The College shall practice no discrimination on the basis of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation, as those terms are defined in Ohio law, federal law, and Executive Orders issued by the Governor for the State of Ohio in providing educational programs and activities, or work opportunities.

The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Keith Brown- Lead Title IX Coordinator
(440) 366-7692
College Center 209
kbrown@lorainccc.edu

Timothy Hess- Title IX Coordinator
(440) 366-7571
College Center 209
thes@lorainccc.edu

For further information on notice of non-discrimination, visit https://www2.ed.gov/about/offices/list/ocr/docs/nondisc.html. For the address and phone number of the office that serves your area, or call 1-800-421-3481.

Sexual Misconduct Policy

Lorain County Community College is committed to a consistent effort in maintaining an environment free of sexual misconduct (any unwelcome behavior of a sexual nature that is committed without consent or by force, intimidation, coercion or manipulation), and sex discrimination based on gender, gender identity or sexual orientation. Sexual misconduct in any form will not be tolerated and is prohibited.

In its goal to create an environment for all students, employees and visitors which is fair, non-discriminatory and free of coercion, the College has adopted this policy as the basis for education in the College community and complaint resolution. Students, employees and visitors shall comply with the prescribed behavior set forth in Policy II-412 Code of Conduct as these policies may intersect. This policy is also

Timothy Hess- Title IX Coordinator
(440) 366-7692
College Center 209
kbrown@lorainccc.edu

Timothy Hess- Title IX Coordinator
(440) 366-7571
College Center 209
thes@lorainccc.edu

For further information on notice of non-discrimination, visit https://www2.ed.gov/about/offices/list/ocr/docs/nondisc.html. For the address and phone number of the office that serves your area, or call 1-800-421-3481.

Sexual Misconduct Policy

Lorain County Community College is committed to a consistent effort in maintaining an environment free of sexual misconduct (any unwelcome behavior of a sexual nature that is committed without consent or by force, intimidation, coercion or manipulation), and sex discrimination based on gender, gender identity or sexual orientation. Sexual misconduct in any form will not be tolerated and is prohibited.

In its goal to create an environment for all students, employees and visitors which is fair, non-discriminatory and free of coercion, the College has adopted this policy as the basis for education in the College community and complaint resolution. Students, employees and visitors shall comply with the prescribed behavior set forth in Policy II-412 Code of Conduct as these policies may intersect. This policy is also
applicable to all third parties affiliated with the College. Third parties are neither employees nor students and can include, but are not limited to, consultants, vendors, contractors, board members, etc.

Sexual misconduct is a form of discrimination in violation of this policy and Title VII of the Federal Civil Rights Act of 1964 (as amended), Title IX of the 1972 Educational Amendments and Section 4112 of the Ohio Revised Code. Sexual misconduct has the potential of threatening an individual’s academic performance, economic livelihood, career advancement, psychological, and total well-being and is prohibited by this policy.

Students, LCCC employees and visitors at the College have a right to an environment free of sexual misconduct, not only by persons in positions of power, but by any LCCC employee, student, visitor or third party. Sexual misconduct constitutes a serious threat to the free interaction and exchange necessary for educational and personal development. Sexual misconduct is a serious offense which could lead to dismissal and/or termination from the College and criminal charges being filed with the local law enforcement authority having jurisdiction.

Notice of Nondiscrimination
The College shall practice no discrimination on the basis of race, color, creed, religion, national origin, ancestry, sex, marital status, child-bearing status, age, disability, sexual orientation, or gender identity and/or expression in providing educational programs and activities, or work opportunities. The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Keith Brown - Lead Title IX Coordinator
(440) 366-7692
College Center 209
kbrown@lorainccc.edu

Timothy Hess - Title IX Coordinator
(440) 366-7571
College Center 209
thess@lorainccc.edu

For further information on notice of non-discrimination, visit http://wdcrbcolp01.ed.gov/CFAPPS/OCR/contactus.cfm for the address and phone number of the office that serves your area, or call 1-800-421-3481.

Consensual Relationships
Dating relationships between faculty and their students, or between supervisors and their staff or student employees, are prohibited. Such consensual relationships unfairly exploit power differences, violate the respect and trust given someone in authority and may subtly, and even inadvertently, pressure those in the more vulnerable position. Mutual consent relationships will not automatically provide immunity if a complaint of sexual misconduct is filed.

Title IX Coordinator Responsibilities
A complaint of sexual misconduct should be filed with the Title IX Coordinator within 180 days of the most recent incident. Reporting incidents of sexual misconduct is highly encouraged and a transparent, fair and equitable process is employed to resolve such complaints.

The Title IX Coordinator’s role is to investigate claims of sexual misconduct by a student, employee, community member or third party occurring on College property including LCCC Outreach Centers or while attending any event or function sponsored by the College. The Title IX Coordinator will contact local law enforcement as needed or directed, help individuals file formal reports and obtain counseling, if necessary. Complaints involving minors will be immediately referred to the local law enforcement authority having jurisdiction. The Title IX Coordinator will also ensure annual dissemination and public availability of this policy to all campus community members, visitors, third parties and prospective students.

Sexual Misconduct Investigating Principles
In the investigation of complaints of sexual misconduct, the following principles will be adhered to:

1. Each complaint will be handled on an individual, case-by-case basis.

2. The investigation will be conducted as adequately, reliably, and impartially as possible.

3. In investigating complaints of sexual misconduct, to the extent possible, confidentiality will be afforded to the complainant and accused.

4. This policy strictly prohibits any type of retaliation toward an individual bringing forth a complaint of sexual misconduct.

5. The complaint will be resolved in a manner which is consistent with this policy and also prompt and equitable to all parties concerned.

6. Throughout the process, all parties will be treated with respect, dignity and sensitivity.

Process for Handling a Sexual Misconduct Complaint
The process outlined below shall provide guidance to any College employee that responds to a report of sexual misconduct. The process is designed to provide flexibility in dealing with the wide range of incidents which fall under the term “sexual misconduct” and are intended to be prompt, fair and equitable. The process is intended to be responsive to the particular situation at hand and is formal or informal as the allegations under review dictate. A preponderance of evidence standard will be used to determine if a violation of Policy II-412 (Code of Conduct) occurred.

General Information
Any individual who is seeking information concerning sexual misconduct or the complaint procedures should contact the Title IX Coordinator who will provide the requisite information and procedures.

Confidentiality
Should any individual wish to confidentially discuss a sexual misconduct allegation, he or she may go directly to the Counseling Office. Crisis counselors are licensed mental health professionals and most conversations had with them are considered privileged and confidential communications. In most cases, they are not required to disclose any personally identifiable information about the complainant to College officials. Initial discussions should not make reference to the name of any accused person unless the complainant is ready to file a formal complaint and proceed with an investigation.
Options for Filing a Formal Complaint
Should any individual wish to formally discuss and file a sexual misconduct complaint, he/she may go directly to a Title IX Coordinator, the Campus Security office, the Human Resources office, the Advocacy Resource Center (ARC) or Student Life. Complaints can also be submitted online by using the link http://www.lorainccc.edu/report (http://www.lorainccc.edu/report/). The complaint will be submitted to the Title IX Coordinator who will initially discuss the matter with the complainant to ascertain, as fully as possible, the reliability of the allegations and the scope of the problem.

Investigating a Formal Complaint
Once the complaint has been filed, the Title IX Coordinator will:

1. Consult with the complainant.
2. Consult with the respondent.
3. Discuss with appropriate persons suggested by the complainant and respondent who may have knowledge of the situation and may be of assistance in establishing the facts.
4. Review any other evidence presented by the complainant and respondent.
5. Prepare an investigative report within a prompt and reasonable period of time, typically within 30 business days.

The investigative report will be submitted to the appropriate vice president(s) for administrative action within seven business days of completion of the report. A copy of the administrative action will be provided to the complainant(s), respondent(s), Title IX Coordinator and unit administrator. Investigative reports involving a student, as either complainant or respondent, will be forwarded to the coordinator of Code of Conduct for possible Code of Conduct sanction in accordance with Procedure II-412 (Code of Conduct). Other appropriate entities as mandated for compliance (i.e. National Science Foundation, National Junior College Athletic Association, accrediting bodies, etc.) will be notified if the investigation determines a finding.

If the party involved is not satisfied with the decision made by the appropriate vice president, he or she may appeal, in writing, to the president. The appeal must be filed within seven business days of notification of the appropriate vice president’s decision.

The president will review the appeal and respond, in writing, to all parties (respondent, complainant, the Title IX Coordinator, unit administrator and appropriate vice president(s)) concerning his or her disposition of the appeal. This must be done within 10 business days after receiving the appeal.

Definitions

Bystander Intervention: Safe and positive options that may be carried out by an individual or individuals to prevent or stop an act of sexual misconduct. Any campus community member that observes or is made aware of an incidence of sexual misconduct is strongly encouraged to report the matter immediately to any College employee or to the Campus Security office. If the campus community member decides to intervene, some safe intervention options can include:

- Using appropriate and available means to immediately notify the College of the misconduct.
- Recruiting the assistance of others around you.

- Asking someone to contact Campus Security or call 9-1-1.
- Maintaining a safe distance at all times.

Coercion: Occurs when a person intimidates, tricks, forces or manipulates someone into engaging in sexual activity without the use of physical force. Perpetrators may also use threats of violence, blackmail, drugs and/or alcohol to coerce someone into sexual activity.

Consent: Voluntary, positive agreement between participants to engage in specific sexual activity.

Domestic Violence: A pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control over another intimate partner. Domestic violence can be physical, sexual, emotional, economic or psychological actions or threats of actions that influence another person. This includes any behaviors that intimidates, manipulates, humiliates, isolates, frightens, terrorizes, coerces, threatens, blames, hurts, injures or wounds someone.

Dating Violence: Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim. The existence of such a relationship shall be determined based on consideration of the following factors: the length of the relationship, the type of relationship and the frequency of interaction between the persons involved.

Incapacitation: The inability, temporarily or permanently, to give consent, because an individual is mentally and/or physically helpless, unconscious or unaware that the sexual activity is occurring. This may or may not be due to alcohol or other drugs.

Rape: Penetration, no matter how slight, of the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim.

Retaliatory Actions: Any adverse action taken against a person for making a good faith report of misconduct or participating in any proceeding.

Risk Reduction: Approaches that seek to mitigate risk factors that may otherwise increase the likelihood of perpetration, victimization or bystander inaction.

Sexual Assault: Any type of sexual contact or behavior that occurs without the explicit consent of the recipient. Falling under the definition of sexual assault are sexual activities such as child molestation, incest, fondling and attempted rape.

Sexual harassment: Any unwelcome sexual advance, request for sexual favors and other verbal, non-verbal, written, electronic or physical conduct of a sexual nature when:

- Submission to such conduct is made either explicitly or implicitly as a term or condition of instruction, employment or participation in any other Lorain County Community College activity.
- Submission to, or rejection of, such conduct by an individual is used as a basis for evaluation in making academic or personnel decisions affecting that individual.
- Such gender based conduct has the purpose or effect of substantially interfering with an individual's performance or creating an intimidating, hostile or offensive working and learning environment.

Sexual harassment may include, but is not limited to, the following types of behavior:
• Sexually oriented verbal kidding or use of nicknames, insults, images, electronic communications, or explicit remarks of a sexual or gender-oriented nature.
• Use of intimidating teaching techniques such as required role playing about sexually implicit or explicit situations.
• Physical contact(s) such as pinching, touching, kissing or brushing against another's body.
• Sexual advance(s) with the threat of punishment for non-compliance or with promise of reward for compliance.
• Physical assault(s) of a sexual nature.

Stalking: A pattern of repeated and unwanted attention, harassment, contact or any other course of conduct directed at a specific person that would cause a reasonable person to feel fear for his/her safety or for the safety of those around him/her or suffer substantial emotional distress.

Institutional Protective Measures and Resources
In an effort to provide a safe learning and working environment, prevent recurrence of acts of misconduct and remedy its effects, institutional protective measures and support mechanisms will be made available to complainants and respondents. College officials will assist with any class schedule adjustment(s) deemed necessary. In addition, College officials will also enforce on-campus no-contact orders or orders of protection prohibiting communication (in person, via telephone, text message, social media, etc.) among all parties. For anyone requiring additional measures, the Campus Security office will provide parking accommodations in a designated parking lot, safety escorts to and from class, and assist in facilitating changes in working conditions on campus. Additionally, for complainants or respondents requiring mental health assistance, the services offered through the Counseling office will be made available. Employees requiring mental health assistance may contact the Human Resources office for information regarding the Employee Assistance Program (EAP) or other available mental health services.

Other resources of information and support include the following offices:

Campus Security
Library/Community Resource Center LC 106
Department Extension 4053 or (440) -366-4053
Emergency Extension 4444 or (440) -366-4444
Campus Security email safe@lorainccc.edu

Care Center
Business Building BU 113 D
Department Extension 4848
(440) 366-4848

Counseling
Library/Community Resource Center LC 1st Floor
Department Extension 4033
(440) 366-4033

Accessibility Services
College Center CC 234
Department Extension 4058
(440) 366-4058

Student Life
College Center CC 206
Department Extension 4036

(440) 366-4036

Advocacy Resource Center
Bass Library, first floor
Extension 4272 or (440) 366-4ARC (4272)
arc@lorainccc.edu

Code of Conduct Range of Sanctions
Anyone found in violation of the College’s sexual misconduct policy or Ohio law is subject to disciplinary sanctions, as identified in Policy and Procedure II-412 (Code of Conduct), up to and including suspension, probation, dismissal, expulsion, termination and prosecution. Additional sanctions can include:

• Disciplinary probation.
• Interim suspension.
• Disciplinary suspension.
• Expulsion.
• Warning/reprimand.
• Counseling.
• Mandatory psychological evaluation and treatment.
• Fine/monetary restitution.
• Restitution for damages.
• Work/service restitution.
• Attendance at workshops.
• Educative/rehabilitative program referral.
• Behavior contract.
• On-campus no-contact order.
• Involuntary medical withdrawal.

Prevention, Education and Training
The College is committed to ensuring that all campus community members understand how to respond to reports of sexual misconduct. To that end, all new students and all new employees will be offered educational programs, informational sessions and resource materials in preventing, responding to and raising awareness of sexual misconduct. Other ongoing education efforts will include:

• Understanding sexual misconduct.
• Recognizing warning signs of abusive behavior and risk reduction.
• Understanding safe bystander intervention options.
• Knowing what resources are available on campus.
• Understanding available reporting options.

In an effort to ensure Title IX Coordinators are adequately trained to respond to, investigate or adjudicate incidences of sexual misconduct, training for Title IX Coordinators shall be conducted annually and will consist of attending conferences and seminars, participating in educational webinars, receiving training from locally available resources, and networking with national, regional and local higher education institutions for best practices.

External Resources and Support
Law Enforcement Agencies
9-1-1

Elyria Police
Informal Process

Procedural Steps

Process by the following steps:

A student who desires to resolve a grievance may initiate the resolution complaints and concerns in an expeditious, fair and amicable manner.

Lorain County Community College desires to resolve student grievances, Policy and Procedure II-320 Sexual Harassment. Policy to be reviewed substantial rewrite, revised and effective March 22, 2018. Replaces Approved March 18, 1993; revised and effective June 25, 1998; from the College's Title IX Coordinator.

with any of the agencies may be obtained from the agency directly or Education's Office for Civil Rights. Information regarding filing charges Equal Employment Opportunity Commission or the U.S. Department of Persons who believe they have been subjected to sexual misconduct may be able to file a complaint with the Ohio Civil Rights Commission, the U.S. Crisis Text Line Text "4HOPE" to 741 741

Legal Aid Society of Cleveland (216) 861-5242

LGBT Community Center of Greater Cleveland (216) 651-5428

Nord Center 1-800-888-6161 24/7 Emergency Crisis Line (440) 204-4359

National Sexual Assault Hotline 1-800-656-4673 24/7

Filing a Complaint with an External Agency

Persons who believe they have been subjected to sexual misconduct may be able to file a complaint with the Ohio Civil Rights Commission, the U.S. Equal Employment Opportunity Commission or the U.S. Department of Education's Office for Civil Rights. Information regarding filing charges with any of the agencies may be obtained from the agency directly or from the College’s Title IX Coordinator.

Approved March 18, 1993; revised and effective June 25, 1998; substantial rewrite, revised and effective March 22, 2018. Replaces Policy and Procedure II-320 Sexual Harassment. Policy to be reviewed annually.

Student Grievance Procedure

Lorain County Community College desires to resolve student grievances, complaints and concerns in an expeditious, fair and amicable manner.

A student who desires to resolve a grievance may initiate the resolution process by the following steps:

Procedural Steps

Informal Process

1. The informal process must be completed before a formal grievance can be filed. The student is advised to discuss the grievance informally with the person who is the source of the grievance or their supervisor. If the grievance is resolved by the parties, the matter is deemed closed. If the grievance is not resolved at this level, the student may request an informal review by one of the following designated College administrators or designee: if the source of the complaint is another student, the coordinator of Student Life; if the course of the complaint is a College employee, either the administrator who directly supervises the employee or the administrator’s designee. (To promote a fair and swift resolution of their concerns, students are advised to consult with only those administrators designated by this procedure, unless there are compelling reasons to do otherwise).

2. The administrator may choose to convene the parties involved in an effort to resolve the grievance during the informal process. If the grievance is not resolved at this level the student may initiate the formal grievance procedure.

Formal Grievance Procedure

A formal grievance can be initiated after the informal process has been completed and the student is not satisfied with the resolution. The formal grievance procedure begins when a written complaint is submitted to the College via the online form at Student Online Grievance. The formal grievance will then be routed to the appropriate administrator.

The administrator shall further investigate the complaint, and shall, as necessary, meet with the student and the person who is the source of the grievance. Any of the parties involved in the grievance may bring a full-time Lorain County Community College employee to the meeting as an observer. The administrator must provide a written response to the student and the person who is the source of grievance within seven business days of the meeting or receipt of the written complaint.

Appeal

Should the student desire to appeal the decision of the administrator, the student may submit a signed statement of appeal within seven business days to the appropriate vice president. The vice president will review the appeal, may choose to meet with the student and/or other parties as identified in (2) above, and respond in writing to all parties concerning the disposition of the appeal within 10 business days.

Final Review

Should the student desire to request a final review of the decision of the vice president, the student may submit a signed statement of appeal within seven business days to the president. The president will review the appeal, may choose to meet with the student, and/or other parties as identified in (2) above, and respond in writing to all parties concerning the final review within 10 business days.

Note: Lorain County Community College may be required to share information concerning complaints with the North Central Association of Colleges and Schools and/or other accrediting bodies.

Tobacco-Free

Purpose: LCCC is committed to promoting a healthy lifestyle and workplace environment and will support administrators, faculty, staff and students in their efforts to reduce or discontinue the use of tobacco products. The College has adopted a 100 percent tobacco-free policy that supports a healthy environment for all as defined as:

The use of tobacco, defined as all tobacco-derived or containing products, including and not limited to, cigarettes (e.g., clove, bidis, kreteks), electronic nicotine delivery systems (ENDS), such electronic cigarettes (including but not limited to Juul, Blu, VUSE, etc.) cigars and cigarillos, hookah smoked products, pipes and oral tobacco (e.g., spit and spitless, smokeless, chew,
snuff) and nasal tobacco. It also includes any smoking simulating device with the exception of smoking cessation products such as gum and/or patches.

The primary emphasis of this approach is to focus on the elimination of tobacco and all smoking simulating device use on all College property with cessation left as a choice for the individual.
STUDENT SERVICES

LCCC recognizes its students are juggling multiple roles while attending College, and offers services that support students from connection through completion using an integrated and holistic approach. We recognize students as individuals with diverse needs and intentionally create a student-centered experience. Visit the programs and links below to learn more about the holistic student support services to help you balance your life and goals while attending LCCC.

To complement these services, students enrolled at LCCC also receive Success Messaging, which delivers personalized, interactive, in-time text messages. Throughout each semester, students will receive positive reinforcement and nudging towards support services, as well as reminders about upcoming registration periods.

LCCC is committed to student success and to providing excellent service. We encourage students who utilize the services below to provide feedback by completing a quick five-question survey (https://www.surveymonkey.com/r/LCCCsatisfaction/).

Need help finding or navigating student services? Ask to be connected with our Student Services Navigator.

Resources to help with enrollment and financial needs:

Whether you are new to LCCC or returning to us after some time away, we welcome you to our student-centered college and are excited to help you enroll in classes. The links below provide detailed information about services to assist you with enrollment at LCCC.

- Admissions (https://www.lorainccc.edu/admissions-and-enrollment/)
- Advocacy and Resource Center (ARC) (https://www.lorainccc.edu/support-services/arc/)
- Bookstore (http://bookstore.lorainccc.edu/home.aspx)
- Enrollment/Registration (https://www.lorainccc.edu/admissions-and-enrollment/register-for-classes/)
- Financial Services (https://www.lorainccc.edu/paying-for-college/financial-aid/)
- International Student Services (https://www.lorainccc.edu/international/)
- Prior Learning Assessment (https://www.lorainccc.edu/prior-learning-assessment/)
- Records (https://www.lorainccc.edu/admissions-and-enrollment/records/)
- Testing and Assessment Center (https://www.lorainccc.edu/testing-and-assessment/)
- Transfer and Special Admissions (https://www.lorainccc.edu/admissions-and-enrollment/transfer-information/)
- Veterans Services (https://www.lorainccc.edu/veterans/)

Resources to support learning:

- Accessibility Services (https://www.lorainccc.edu/accessibility-services/)
- Library (https://www.lorainccc.edu/library/)
- College 101 Course (p. 310)
- Tutoring (https://www.lorainccc.edu/tutoring/) (Academic Support Center)

Resources to help with academic, transfer, and career planning:

LCCC believes every student's dream matters, and provides integrated services to help students explore the certificate and degree programs, transfer partnerships, entrepreneurial, and career opportunities. LCCC's assigned advisor model provides each student with a point of contact who can help them explore the college's nine career pathways, and connect to additional resources that support the achievement of academic and career goals.

- Academic Advising (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/)
- Choose a Major (https://www.lorainccc.edu/career-services/)
- Employment Opportunities (https://www.lorainccc.edu/career-services/-finding-a-job/career-link/)
- Find a Job (https://www.lorainccc.edu/career-services/-finding-a-job/)
- Internships (https://www.lorainccc.edu/career-services/internships/)
- Job Search Preparation (https://www.lorainccc.edu/career-services/job-search-preparation/)
- SAIL: Students Accelerated in Learning (https://www.lorainccc.edu/admissions-and-enrollment/sail-information-sessions/)
- Start Your Own Business (http://www.lccclaunch.com) - NEO LaunchNet
- University Partnership (https://www.lorainccc.edu/up/)

Resources to help with campus technology:

LCCC is also committed to ensuring students have access to the technology needed to support their academic progress. Students at LCCC learn in state of the art facilities and have access to systems and technology resources that aid in course registration, access student services, academic assistance, communication and degree planning.

- Canvas (https://www.lorainccc.edu/elearning/canvas/)
- Computer Labs (https://www.lorainccc.edu/campus-technology/computer-labs/)
- Degree Map (https://www.lorainccc.edu/campus-technology/degree-map/)
- MyCampus (https://www.lorainccc.edu/campus-technology/mycampus-login/)
- Schedule Planner (https://www.lorainccc.edu/campus-technology/schedule-planner/)
- Student Email (https://www.lorainccc.edu/campus-technology/email-accounts/)
- Wifi on Campus (https://www.lorainccc.edu/campus-technology/campus-technology-home/campus-wireless-network/)

Resources to become involved on campus:

LCCC is a vibrant campus community that views students as whole individuals and encourages engagement among its students, faculty, staff, and community. Students are encouraged to develop their leadership skills, engage with others who share common interests, relax
around campus, and gain experiences that will complement their future careers.

- The Collegian Student Newspaper
- Collegiate Athletics (https://www.lorainccc.edu/athletics/)
- Stocker Arts Center (https://www.lorainccc.edu/stocker/about-the-stocker-arts-center/)
- Student Clubs and Organizations (https://www.lorainccc.edu/student-life/clubs-organizations/)
- Student Senate (https://www.lorainccc.edu/student-life/student-senate/)

SAIL: Students Accelerated in Learning (https://www.lorainccc.edu/admissions-and-enrollment/sail-information-sessions/)

The Students Accelerated in Learning (SAIL) Program provides structured support services for real college students with real-world obstacles. SAIL’s cohort-based model provides students with both financial and academic support to graduate with associate degree within three years. SAIL places student success as the center of its support services, and includes regular and supportive academic advising, personalized career counseling, tutoring, priority pre-registration and workshops.

Support Services

LCCC recognizes its students are juggling multiple roles while attending College, and offers services that support students from connection through completion using an integrated and holistic approach. Students will find a culture of care around campus, and are encouraged to both connect with services and get to know faculty, staff and students who can support them on their educational journey.

- Accessibility Services (https://www.lorainccc.edu/accessibility-services/)
- Advocacy and Resource Center (ARC) (https://www.lorainccc.edu/support-services/arc/)
- Campus Security (https://www.lorainccc.edu/security/)
- Care Center for Addiction Recovery (https://www.lorainccc.edu/care/)
- Childcare (https://www.lorainccc.edu/support-services/childrens-learning-center/) - LCCC's Children's Center
- Commodore Cupboard (https://www.lorainccc.edu/support-services/commodore-cupboard/)
- Crisis Intervention (https://www.lorainccc.edu/support-services/)
- Emergency Aid (https://www.lorainccc.edu/support-services/emergency-loans/)
- Hunger Free LCCC (https://www.lorainccc.edu/support-services/hunger-free-lccc/)
- LGBTQA+ Community (https://www.lorainccc.edu/lgbtqa/)
- Personal Counseling (https://www.lorainccc.edu/support-services/personal-counseling/)
- Ride Share Program (https://www.lorainccc.edu/student-life/student-ride-share/)
- Student Services Navigator (https://www.lorainccc.edu/policies/) (assistance with student complaints and concerns)
- Students with Prior Convictions (https://www.lorainccc.edu/support-services/second-chance/)
- Suicide Prevention (https://www.lorainccc.edu/support-services/suicide-prevention-services/)
- Tobacco-Free Resources (https://www.lorainccc.edu/breathefree/)
- Veterans Services (https://www.lorainccc.edu/veterans/)

Advocacy and Resource Center

LCCC partners with a number of local agencies and organizations to bring basic needs access and support to campus through the Advocacy and Resource Center (ARC), located on the first floor of the Bass Library. The ARC serves as an on-campus connection community resources including food and income assistance programs, utility assistance, childcare services, mental health and addiction services, transportation, housing insecurity, legal services, support for domestic violence and sexual assault victims. Many of the services of the ARC are also open for use by community, including the campus’ Commodore Cupboard food pantry.

Academic Support Center

The Academic Support Center (Tutoring Center and Math Studio) provides personalized academic support services to currently enrolled students. The Academic Support Center offers two major services: resources and tutoring. Whether a student is having difficulties with coursework, wishes to improve an average grade, or is succeeding but wants to enhance his/her learning, the ASC is here to help.

Available for a variety of courses, tutoring complements classroom learning and provides academic support to students. Sessions include one-on-one appointments, walk-in times, study groups and online tutoring via Canvas and eTutoring. Resources within the ASC relate to a variety of courses and subject matter, and include practice problems, lab models and classroom skills. Students not only can improve their learning skills, but also can build a greater ease and confidence in the academic environment by using this resource. eTutoring is offered as an extension to the face-to-face tutoring through the Academic Support Center and provides free, professional online tutoring.

Students are encouraged to check with the ASC each semester for hours of operation and details of tutoring and other services. The ASC is located in College Center 204 and Physical Science 206 and can be reached by calling 440-366-4057 or 440-366-4065, email tutoringcenter@lorainccc.edu or visit www.lorainccc.edu/tutoring/ (https://www.lorainccc.edu/tutoring/).

Accessibility Services

Under the guidelines of The Americans with Disabilities Act and Section 504 of the Rehabilitation Act, Accessibility Services provides accommodations and support services to individuals with a wide range of disabilities. Our goal is to empower students and to help students make the most of their educational opportunities and potential by providing accommodations where there is a documented need. Further, the office follows strict confidentiality guidelines and secures personal information.
Career Services

LCCC’s Career Services can help students identify the career that best fits their goals and interests, prepare for a job search after graduation, and get a great job.

Choosing a Career or Major

Our career experts provide a variety of tools to help students choose the right college major. These tools include:

- One-on-one career decision assistance.
- Career services web pages (https://www.lorainccc.edu/career-services/choose-a-career/).
- MyPlan a free on-line career decision-making tool.
- Online Career Coach.

Getting Experience

To best prepare for a successful career in the workforce after graduation, students have access to career-related experiences as part of their education. LCCC is proud to offer experiential learning in over 90% of its programs, and these experiences can range from service learning to internships and many options in between.

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Students should begin planning for any of the following as soon as they have identified a career pathway or program of study:

- Paid internships (work-based learning).
- Student employment.
- Civic engagement and volunteerism with service learning.

Finding a Job

Career Services offers job search tools to students, graduates and members of the community. These tools include:

- Online job posting system: “anytime” web access to local employment and internship opportunities.
- Job search skills workshops and course.
- Resume development assistance.
- Interview preparation and practice.
- Salary information and job market data.
- Job/Internship fairs.

Transitions

Transitions is a free networking group for students nearing graduation and business professionals who are currently in the job market, concerned about their current job stability or interested in changing careers.

VIP Program and Career Fair

Whether you are actively seeking employment or simply want to explore new career opportunities the VIP program will give you the skills and knowledge necessary to conduct a smart, strategic, effective job search. Through a program-based series of workshops geared to specific pathways students will:

- Receive personalized career coaching on resume, interviewing and job search skills.
- Participate in an early networking opportunity with more than 100 employers.
- Stand out in the crowd and gain a competitive edge through thoughtful preparation.
- Have your resume included in the VIP Resume Book, given to all employers in attendance.

Unemployed or Underemployed

Lorain County residents are welcome to use the resources of the Career Services office. In collaboration with Ohio Means Jobs–Lorain County, LCCC offers access to an array of services to support workers who have lost their jobs and are looking for a new opportunity or career. In addition to assistance with finding internships, employment, career decision and career coaching, eligible students can connect to potential funding sources for training or skills enhancement and more.

Annual Career Fair

This annual event is an open community event that will help students meet employers, make connection, and mobilize their career. By partnering with Lorain County Joint Vocational School, Lorain County Urban League and Ohio Means Jobs Lorain County, LCCC brings together 100+ employers looking to hire talented people like LCCC’s students. The Career Fair is held in April. For more information, contact Career Services.

Get Started Today

Contact Career Services at (440) 366-4076 or email careers@lorainccc.edu to make an appointment.

Visit www.lorainccc.edu/careers (https://www.lorainccc.edu/career-services/), for a detailed description of all services and programs.

Career Services is located in the Bass Library/Community Resource Center, first floor, room LC 131 and can be reached by calling 366-4076.

Student Life

LCCC considers out-of-class activities to be an essential element of the collegiate educational process. The purpose of Student Life is to enhance the student’s total college experience by offering opportunities for students to participate in co-curricular activities; taking advantage of the wealth of leadership training opportunities, service to the College and the community, self-directed activities, the experience of sharing interests and the opportunity to interact with those who are from different backgrounds. Participation in such programs helps students develop their best educational, social and personal potential for responsible citizenship and effective leadership roles with the purpose of creating tomorrow's leaders.

Getting Involved

Students have an opportunity to participate in Student Senate, Phi Theta Kappa Honor Society, Psi Beta Honor Society, music, theater, forensics; also, student clubs and organizations, theatre programs, lectures and other events appropriate to college life.

LCCC offers a variety of personal, professional and social clubs and organizations for students on campus. Membership is open to all...
registered students. The Student Life office is the center for all student-sponsored events held at the College. The following student offices or organizations are located in College Center:

- Student Life.
- Student Senate, the student government organization through which students have a voice in campus affairs.
- *The Collegian* student newspaper.
- Boom Radio, student radio station.
Admissions
Lorain County Community College is committed to providing a pathway for all individuals who desire, benefit from, and wish to pursue a college education. LCCC's open-admission policy provides broad access to college, within the guidelines below and with appropriate scores on LCCC's placement assessment. Special admission programs are also available to current high school students, international students, transfer students, transient students, incarcerated students and many others.

Special Admission Programs
In some cases, and to meet the needs of individuals we serve, special admission programs are also available to current high school students, international students, transfer students, transient students, incarcerated students and many others. These special admission programs may require students to complete different steps or provide additional documentation associated with their unique situation.

The Enrollment, Financial and Career Services division serves as a one-stop for credit students, whether they are potential, new or returning students. This one-stop approach provides an array of enrollment, financial and career services that include admission, advising, counseling and registration. Student service representatives and advising teams are prepared to provide not only general information, but also College Credit Plus, College Tech Prep, University Partnership, veterans, English as a Second Language and international student information.

Application Procedure
All applications for admission must be made on an official application form or online at www.lorainccc.edu/apply. To receive expedited notice of acceptance to LCCC, students are encouraged to complete the online application, however form applications are available to student needs. Applicants must request high schools to forward official transcripts to the Enrollment Service or Records office. For those 18 years or older who did not earn high school diplomas, official GED scores must be sent from the state GED office to the Enrollment, Financial and Career Service or Records office. The high school transcript is waived for admission purposes if a student has earned an associate, bachelor or higher degree from a regionally accredited institution. All Lorain County Community College admission requirements must be met.

Students accepted to LCCC will receive personalized email and/or phone communication from our Enrollment Specialists, as well as receive text messages to guide them through the enrollment steps. Students who need assistance with enrolling or returning to LCCC after an absence are encouraged to contact an Enrollment Specialist (440-366-4818) who can help them with next steps. LCCC also offers an Enrollment Specialist who specializes in assisting adult learners in navigating the enrollment process (440-366-4726).

Program Admission Requirements
Some of LCCC's programs include specific program admission requirements. Please see your program's page and consult with your academic advisor for more information about requirements for admission to your program.

Registration
All available classes for the upcoming term are listed in the Online Class Schedule (https://www.lorainccc.edu/programs-and-careers/class-schedule/) or by searching courses in MyCampus (http://mycampus.lorainccc.edu/).

Academic advisors (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/) are available to help students select and register for courses, or students can register independently. LCCC’s Assigned Advisor Model provides each student with a central point of contact from connection through completion. In this model, students receive personalized academic advising, degree progress monitoring and program exploration within LCCC’s nine academic pathways. academic advisors are organized into teams around these nine pathways to provide students with expert advice and guidance on the programs of their choice. Assigned advisors can be found in the MyCampus portal. Students can make an appointment online at www.lorainccc.edu/advising. (https://www.lorainccc.edu/advising/)

To ensure students’ course registration aligns with their academic, transfer, and career goals, all students new to LCCC are required to meet with their academic advisor prior to initial registration. Advising and academic planning is a collaborative process, in which both the advisor and student should discuss:

- The degree or certificate requirements listed in the curriculum guide (http://catalog.lorainccc.edu/academic-programs/) for your program.
- Academic Planning. Students near graduation should understand when the needed courses will be offered. Many courses are only offered in one semester every year, so planning ahead is important.
- Prerequisites and course sequencing. These are courses that must be taken before the student can enroll in another course. For example: College Composition I (ENGL 161) is a prerequisite for College Composition II (ENGL 162). This means that ENGL 161 must be successfully completed before enrolling in ENGL 162. If a course has a prerequisite, it will be listed in the course description (http://catalog.lorainccc.edu/course-descriptions/).

Enrollment/Registration Schedule
Registration for fall and summer semester opens every March. Spring semester enrollment opens in October. Check the academic calendar (http://catalog.lorainccc.edu/academic-calendar/) for specific dates. Registration is limited during the first week of enrollment. Check the Registration Schedule (https://www.lorainccc.edu/admissions-and-enrollment/register-for-classes/registration-schedule/) to find out when you are eligible to register for classes.

Registration Process
Detailed checklists are available to help students navigate the steps for the application and registration process. Learn more at https://www.lorainccc.edu/register (https://www.lorainccc.edu/register/).

Registration Methods
Online Registration
Eligible returning students can register online at http://mycampus.lorainccc.edu (http://mycampus.lorainccc.edu/). In some cases, students may experience a registration hold, which is designed to ensure the student consults with an academic advisor. Students who
cannot register online are encouraged to reach out to their academic advisor or someone in Enrollment Services to discuss next steps or to resolve the hold.

**Register In-Person**

Students can register in person at Enrollment Services (Elyria Campus), or in any of the Learning Centers (https://www.lorainccc.edu/learning-centers/).

**Register by Phone**

During announced times, telephone registration is accepted from students by phoning the Records office at (440) 366-4067. A student registering by phone may make payment at time of registration with Visa, Discover, American Express or MasterCard. Telephone registration is for continuing students. New students may register by phone if the application is filed at least two weeks before registering.

**Register by Mail**

Mail registration is accepted from students who have filed an application for admission or from students who submit their applications for admission in the same mailing with the credit registration form. Mail registration is accepted with use of personal check, Visa, MasterCard, American Express or Discover. A schedule/receipt is mailed to students who register by mail. In the event changes to a student’s schedule are necessary, these changes need to be made in person by the registrant. Mail registration is for continuing students; new students may register by phone if the admission application is filed at least two weeks before registering. During announced times, students may register by mail by completing a credit registration form and mailing it to:

LCCC, Records Office  
1005 North Abbe Road  
Elyria, OH 44035

**Register by Fax**

Students may register by fax by printing and completing a credit registration form, making sure to include correct credit card information. Fax completed forms to (440) 366-4167. Fax registration is for continuing and former students. New students may register by fax if application is filed at least two weeks before registering. Fax registration is accepted with use of Visa, Discover, American Express or MasterCard.

**New Student Requirements**

LCCC’s new student requirements are designed to support successful completion of college coursework. These requirements provide students with important information they need prior to beginning classes and include information about resources, services, policies and procedures at Lorain County Community College. Students are required to:

- Participate in placement assessment (LCCC placement tests and/or ACT/SAT) to determine which English and math courses to schedule.
- Participate in the New Student Orientation prior to meeting with an academic advisor.
- Complete the College Student Inventory (CSI), an online questionnaire, to identify students’ strengths for completing educational goals.
- Meet with an academic advisor to schedule first semester courses and develop an Academic Plan.

Students who are non-degree seeking and registering for three or fewer hours, transient students, and students registering for audit are exempted from these requirements. However, once a student attempts more than three credit hours they need to complete the above new student requirements. Orientation can be completed either in person or online and details are located at www.lorainccc.edu/orientation (http://www.lorainccc.edu/Current+Students/Student+Orientations/).

**Registration after a course begins**

As part of LCCC’s commitment to student success, students are not permitted to enroll in a course after it has met for the first time. If a student is unable to attend the first class meeting, they will not be permitted to register for the course. In distance learning classes, registration must be completed prior to close of business on the second day of the course. However, students are encouraged to consult with an advisor, as LCCC offers many class options that begin later in the semester.

**Assessment**

**Placement Assessment**

As part of LCCC’s commitment to student success, applicants are REQUIRED to participate in a placement assessment process. Students are strongly encouraged to review their basic skills before assessing. Suggested resources for review can be obtained at the Enrollment, Financial and Career Services division or by visiting www.lorainccc.edu/assess (http://www.lorainccc.edu/Admissions+and+Registration/placement.htm). The placement assessment includes, but is not limited to, an evaluation of reading, sentence structure/writing and mathematical skills. Common tools used for this placement assessment can include an applicant’s ACT or SAT scores or LCCC placement assessment results (LCCC proctored). Based on the results of the placement assessment process, placement in courses commensurate with a student’s academic achievement is mandatory. This assessment must be completed prior to enrolling in the following:

- More than one course (three or four credit hours in length).
- Any mathematics course.
- ENGL 161.
- Any course requiring college-level reading and/or ENGL 161 as a prerequisite or corequisite.
- Any science course with mathematics as a prerequisite.

Our current placement tool is Accuplacer for reading/writing and ALEKS for math, although we do honor previous assessment scores from Compass and/or Asset. It is the policy of LCCC that applicants (exclusive of English as a second language (ESL) students) with previous Asset assessment scores of 30 or above in both language usage and reading skills are eligible to enroll in credit courses at the College. Students with previous Compass assessment scores of 36 or above on reading and 18 or above on writing skills are eligible to enroll in credit courses at the College. Students with Accuplacer scores of 237 in writing and 221 in reading or higher are eligible to enroll in credit classes.

Applicants with scores of 28-29 on either previous Asset language usage or reading skills and/or applicants with previous Compass reading scores of 30-35 and/or Compass writing skills scores of 13-17 may be admitted on probation and are limited to six credit hours per semester until a grade point average of 2.0 has been achieved in 12 credit hours of graded courses. Scores of 0-27 on either Asset language usage or reading skills and/or 0-29 in Compass reading and/or 0-12 in Compass writing make an applicant ineligible to enroll for credit courses. Those who score in this
range will be advised to seek alternative educational/training options. They may be retested after one year.

Situations involving a wide variance between or among scores will be addressed on an individual basis. Students who believe that their placement assessment scores do not accurately reflect their academic achievement and abilities may retest with the permission of their academic advisor. Students will be required to participate in mandatory preparation for Accuplacer (i.e., an academic boot camp or another approved online review) or ALEKS to enhance their chances of improving their placement assessment scores before permission is granted for reassessment.

Exceptions to participation in the placement assessment process include but are not limited to:

- A student who has completed an associate degree or higher at an accredited institution recognized by LCCC.
- A student who has successfully completed and transferred in both college-level English and math courses to LCCC.
- A transient student (taking classes and attending college elsewhere) student in good standing, who can show proof of pre-requisite completion.
- A student with an ACT English score of 18 or SAT writing score of 430 and reading score of 450 or, effective March 2016, a 490 in Evidence-Based English/Reading.
- A student with an ACT mathematics score of 22 or SAT mathematics score of 520.
- A student with an ACT reading score of 22 or SAT reading score of 450 or 490 effective March 2016 in Evidence-Based English/Reading.

OR

- A senior adult learner.
- A student registering for audit.
- A cross-registration student.

Students wishing to enroll in advanced courses in mathematics or certain science courses will be required to complete the mathematics section of the placement assessment. Additional information can be obtained in the Enrollment, Financial and Career Services division.

Under the guidelines of The Americans with Disabilities Act and Section 504 of the Rehabilitation Act, Accessibility Services provides accommodations and support services to individuals with a wide range of needs. Our goal is to empower students and to help students make the most of their educational opportunities and potential by providing accommodations where there is a documented need. Further, the office follows strict confidentiality guidelines and secures personal information. We also provide assistance to faculty and staff. Please visit our website for more information at www.lorainccc.edu/accessibility-services (http://www.lorainccc.edu/accessibility-services/) or contact our office at (440) 366-4058.

**College-Wide Assessment of Student Learning**

The College implemented its plan to assess student learning by focusing on assessment activities occurring at the following stages:

- Pre-admission.
- During the student’s academic program.

- At the time of graduation.
- Following program completion and/or graduation.

The implementation of the assessment plan includes the participation of randomly selected students at certain times throughout the academic year. The College will make every effort to minimize any inconvenience to participating students.

Data collected from these assessment activities will be analyzed in the aggregate level to maintain student confidentiality. The purpose of assessment is to continuously improve student learning.

**Prior Learning Assessment**

**Prior Learning Assessment (PLA)**

Many students come to LCCC with prior learning experiences comparable to learning achieved in college classrooms. The key component of any prior experience is not the experience itself, but the learning that has been accomplished by a person outside of the traditional classroom environment. Learning and experiences gained prior to LCCC enrollment need to be reviewed for alignment to LCCC course learning outcomes so that college credit may be awarded where appropriate. This review process occurs within the academic division in which the subject matter is housed, and by faculty with expertise in the field or subject matter. Up to 30 semester credit hours can be accumulated in prior learning credits, exclusive of transfer credits.

Prior to beginning the PLA process, students must complete the LCCC admissions process. In addition, students will need to submit official transcripts from all other colleges they have attended to the Transfer Center for evaluation. Once prior learning has been satisfactorily assessed and documented, credit acknowledgement for the parallel course will appear on the student’s transcript as a P for pass.

Should students transfer from LCCC to another institution, prior learning credit may not transfer except as part of an associate degree or certificate; students are advised to consult the transfer institution. Occasionally students may be REQUIRED to complete the upper-level course satisfactorily before credit is given for the lower-level courses in the sequence.

Students are also eligible for either accelerated sequencing or credit. In accelerated sequencing, students progress to the next course in the sequence. This is done for placement only and no credit is given. Course substitution may be appropriate in cases of non-sequential courses.

Learn more about prior learning at www.lorainccc.edu/PLA (https://www.lorainccc.edu/prior-learning-assessment/), or call (440) 366-4076 to set-up an appointment to meet with the PLA coordinator in Enrollment and Career Services located on the first floor of the Bass Library Community Resource Center.

A number of PLA methods for evaluation exist for the consideration of prior learning assessment.

**Prior Learning Assessment Methods**

**Credential Review**

- Access-to-Nursing

Graduates of an approved practical nursing program are eligible to advance in placement in the associate degree nursing program (RN
Credit-By-Exam

- **Block Credit (20-30 Semester Credits)**

Selected non-collegiate, post-secondary training and education are approved for block credit by special arrangement between LCCC and the participating agency and can be applied only to the associate of individualized studies or associate of technical studies. Information on programs with block credit components may be obtained from college advisors, the Engineering, Business and Information Technologies division or the Allied Health, Nursing, Health, Physical Education and Recreation division.

- **Non-Collegiate Training**

Some programs offered by business, government, industry or professional organizations may be considered equivalent to college-level courses and credit may be awarded. The student must provide official transcripts or certificates of completion and a request for non-traditional courses and credit may be awarded. The student must provide official professional organizations may be considered equivalent to college-level credits.

**Recreation division.**

division or the Allied Health, Nursing, Health, Physical Education and Information Technologies division.

- **Advanced Placement Credit Award**

The State of Ohio, working through the University System of Ohio, has initiated policies to facilitate the ease of transition from high school to college as well as between and among Ohio's Public colleges and universities.

As of Fall Term 2009:

1. Students obtaining an advanced placement (AP) examination score of three or above will be awarded the aligned course(s) and credits for the AP examination area(s) successfully completed.
2. General education courses and credits received will be applied towards graduation and will satisfy a general education requirement if the course(s) to which the AP area is equivalent fulfill a requirement.
3. If an equivalent course is not available for the AP examination area completed, elective or area credit will be awarded in the appropriate academic discipline and will be applied towards graduation where such elective credit options exist within the academic major.
4. Additional courses or credits may be available when a score of four or five is obtained. Award of credit for higher score values varies depending on the institution and academic discipline.
5. In academic disciplines containing highly dependent sequences (sciences, technology, engineering and mathematics-STEM) students are strongly advised to confer with the college/university advising staff to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

- **ACT-PEP (American College Testing-Proficiency Examination Program)**

ACT-PEP examinations cover a broad range of academic disciplines and generally include material presented in courses at the undergraduate level. Each examination is based on a detailed syllabus available to students.

- **CLEP (College Level Examination Program)**

The CLEP is a national program of examinations that can be used to evaluate non-traditional college education. LCCC grants transfer credit for subject examinations only. Tests are administered at LCCC's DEC Testing Center. Consult the Prior Learning Assessment office to identify the CLEP examinations that may be taken.

- **International Baccalaureate Diploma Program**

The International Baccalaureate Diploma Program offers a wide range of subject programs. LCCC grants transfer credits for approved International Baccalaureate subjects with acceptable scores. Student must submit official transcript from International Baccalaureate to LCCC for evaluation.

- **Proficiency Examination**

Proficiency examinations are developed by faculty and the dean and will be based on the learning outcomes of courses. Proficiency examinations are not available for all courses. Students should consult the Prior Learning Assessment office to determine the courses which proficiencies may be taken. A maximum number of 30 semester hours is allowed for courses approved through the petition for credit by examination process. No letter grade will be given for credit by examination. No student may seek examination credit for a class she/he has completed or in which she/he is still enrolled after the fourth week of classes of any regular college semester or the second week for all summer terms or the second week for eight-week terms.

**Procedures for the Proficiency Examination**

1. Student must have completed application for admission.
2. Student must complete petition for credit by examination with the PLA coordinator.
3. Arrangements for testing will then be completed and the student notified of such by either the PLA coordinator or the appropriate academic division.

**Portfolio Assessment Method**

**Documents, Performances, Auditions, Demonstrations**

Students whose work experience or other life experiences have enabled them to acquire knowledge and skills comparable to those taught in LCCC courses may petition an academic division for the opportunity to document such learning by portfolio (documents, performances, auditions and demonstrations) to be reviewed by faculty for the possible awarding of credit or for accelerated sequencing. To determine appropriate courses, students should consult the Prior Learning Assessment office for the courses of interest and follow the procedures indicated. Some agreements between professional academies and LCCC exist within College divisions. Consult the Prior Learning Assessment office for details.
Military Training

Military Training
According to the Department of Veterans Affairs, veterans must submit an official Joint Services Transcript (JST) or a Community College of the Air Force (CCAF) transcript to the Registrar's office for prior learning assessment of military service or training. The College awards three semester credit hours for physical education for completed basic training.

Military Transfer Assurance Guides (MTAGS)
Military Transfer Assurance Guides provide a statewide guarantee that certain types of military training, experience, and/or coursework align to existing college courses and will be awarded appropriate credit. The complete list of MTAGS approved by the Ohio Department of Higher Education (ODHE) can be found at transfercredit.ohio.gov (click on 'Military'). Other military service or training is assessed based on the recommendations of the American Council on Education as posted on the JST and LCCC academic division approval.

Courses Taken at Other Colleges:
Please refer to Transfer to and From LCCC (http://catalog.lorainccc.edu/admissions-enrollment/transfer-students/transfer-to-and-from-lccc/).

High School Graduates
Graduates from high schools recognized by the Ohio Department of Education (includes chartered, non-chartered, home school, private or public), or the Department of Education from the student's state of legal residence if not Ohio, are admitted based on their high school diplomas.

Students that have completed their final year of instruction at home or from an unaccredited homeschool association are admitted upon providing, along with their diploma, the official letter of excuse issued by the district superintendent for the student’s final year of home education.

The high school transcript may be waived for admission purposes if student have earned associate, bachelor or higher degree from a U.S. regionally accredited college or university upon providing official transcript with conferral date.

All admitted students are REQUIRED to participate in the assessment placement process unless qualifying as an exception (see information on placement assessment (p. 340)). High school graduates (under the age of 18 at time of enrollment) must provide a high school transcript that indicates their date of graduation or a General Education Development (GED) certificate. This must be provided along with the LCCC application for admission in order for enrollment to be processed.

Non-High School Graduates
Applicants 18 years old or older who are not high school graduates must earn a General Education Development (GED) certificate or high school diploma through an accredited adult diploma program, and request that their official GED scores or diploma be sent to the Records office before enrolling for the 13th hour of credit classes.

Students in this category interested in available scholarships should contact the Financial Aid office for criteria requirements. Applicants under 18 years of age who do not have a high school diploma or GED will not be admitted to the College except under the College Credit Plus programs. All admitted students are REQUIRED to participate in the placement assessment process unless qualifying as an exception.

College Opportunities for High School Students
High school students now have many opportunities to earn college credit while still in high school.

College Credit Plus
The College Credit Plus program provides students with an opportunity to earn college credit as early as seventh grade. Courses are frequently offered on-site at local high schools. Students may also have the option of taking LCCC classes online or on LCCC’s campus. Classes taken through CCP count for both high school and college credit and are FREE for most students.

The MyUniversity program, a unique partnership between LCCC and area high schools, provides a pathway for high school students to the full college experience – starting in high school.

LCCC offers two dual enrollment options for high school students. The Ohio College Credit Plus program, sponsored by the State of Ohio, allows students to earn college credits while in high school, all for free. Under this program, students enroll in courses and receive dual credit for high school requirements and for college credit. These credits may be used for transfer to the college or university of choice after high school graduation. Even books and other fees are covered under this state-funded program. More than 3,000 high school students participate in the College Credit Plus program by enrolling in LCCC classes.

High school students may also earn college credits under LCCC’s Credit-in-Escrow program. In this program, students pay for tuition, fees, books and supplies and bank their college credit for future use or for transfer to another university or college of choice.

College Credit Plus Facts
• To be eligible, students must be in grades 7-12 attending a public or non-public, chartered or non-chartered school or home-schooled.
• Written permission of appropriate secondary school officials is REQUIRED prior to course enrollment to assure graduation applicability of courses.
• The secondary school may require the student and parent or legal guardian to sign a statement of financial responsibility stating who agrees to assume the cost of the program in the event that the student fails one or more courses.
• First-time participants of the College Credit Plus program are REQUIRED to submit their completed application through their secondary school to LCCC’s Office of Special Admissions by April 15 for summer semester, by June 15 for fall semester or by October 15 for spring semester participation.
• Before final admission to College Credit Plus, all students must complete a personal assessment process by either completing the LCCC placement assessment or submitting ACT and/or SAT scores. Students must place at college-level in at least one area in order to be admitted to College Credit Plus.
• Students will be permitted to participate in college-level courses (no developmental education courses) during summer, fall and spring semesters, as recommended by the secondary school counselor and placement assessment process.
• Students may register for classes taught on the LCCC campus, at an LCCC Learning Center, online, at selected high school sites, or any combination.

Credit-in-Escrow Facts

• Available during the academic year to students in grades seven through twelve attending a public or non-public, chartered or non-chartered school who want to earn and bank their college credit for future use or for transfer to another college or university of choice.
• Students must be admitted three weeks prior to the first day of the semester.
• Before final admission to Credit-in-Escrow, all students must complete a personal assessment process by either completing an approved college-readiness exam or submitting ACT and/or SAT scores. Students must place at college-level in at least one area in order to be admitted to Credit-in-Escrow.
• Students will be permitted to participate in college courses during the fall, spring and summer semesters, as recommended by the secondary school counselor and LCCC placement assessment process.
• Students may have the option to have courses count on high school transcript as well but need to declare this intention in writing with their high school prior to participation.

Home-Educated

Home-educated students will be admitted to dual enrollment programs if the student is 12 years or older prior to September 30 of that academic year. Students are required to submit their application and course recommendation signed by a parent or legal guardian and an official high school transcript or report card (required if the student at any time attended a public or non-public high school) by April 15 for summer semester, by June 15 for fall semester or by October 15 for spring semester. Late applications will not be accepted. Before final admission to College Credit Plus, students must complete a personal assessment process by either completing an approved college-readiness exam or submitting ACT and/or SAT scores. Students must place at college-level in at least one area in order to be admitted to College Credit Plus. Students will be placed in courses according to the College’s assessment process.

Students who are home-educated or attending a nonpublic high school who wish to participate in College Credit Plus must complete additional paperwork as outlined by the Ohio Department of Education. For more information, visit https://www.ohiohighered.org/ccp (https://www.ohiohighered.org/content/college_credit_plus_info_students_families/).

MyUniversity

The MyUniversity program, a unique partnership between LCCC and area high schools, provides a pathway for high school students to the full college experience – starting in high school. MyUniversity builds on Ohio’s College Credit Plus program where 7-12 grade students can begin their college pathway before graduating from high school. Additionally, MyUniversity students have the opportunity to graduate from high school with both an associate degree and a high school diploma, free of charge and well on their way to the bachelor’s degree from the University Partnership. Suggested academic pathways starting in high school through University Partnership bachelor’s degrees can be found at www.lorainccc.edu/myuniversity (http://www.lorainccc.edu/About+Us/Our+Promise/My+University.htm).

College Credit Plus

College Tech Prep

College Tech Prep (CTP) programs are designed to help high school students prepare for college – and earn credit for college-level courses, while simultaneously exploring a possible career field. Students are able to gain hands-on experience and skills that today’s employers are seeking. Programs are offered through all Lorain County school districts. Each College Tech Prep program is directly linked to one or more associate degree or certificate pathways at LCCC. Contact the high school counselors for specific information and program locations.

High School College Tech Prep Program Options

Depending on student interest and school district, students may choose from a variety of College Tech Prep career pathway programs, which include the following options:

• Allied Health Sciences
• Biomedical Sciences
• Building and Design Technology
• Business Management
• Computer Aided Design
• Criminal Justice
• Culinary Arts
• Early Childhood Education
• Graphic Communications and Design
• Allied Health Sciences
• Interactive Multimedia Technology
• Network Communications Technology
• Project Lead the Way (pre-engineering)
• Sports, Health and Fitness Technology
• Teacher Education Exploration (LCJVS)
• Welding/Materials Joining Technology

Additional information on College Tech Prep programs is available in high school guidance offices or by visiting www.lorainccc.edu/techprep (http://www.lorainccc.edu/techprep/).

Information on specific LCCC degrees and certificate pathways for College Tech Prep programs is available from an LCCC advisor.

Early College High School

Early College High School is an innovative learning environment located on the LCCC campus. Early College is designed to inspire and motivate students who have potential to be the first in their families to graduate from college.

Elyria City Schools and Lorain City Schools have collaborated with Lorain County Community College to develop the Lorain County Early College High School. To date, Early College High School enrolls students from each district who serve as the core of the program. Students from Lorain County school districts may participate in the Early College High School program through open enrollment provided by the Elyria City School District.

The state of Ohio this Early College High School stipulates that the program shall prioritize the following students:
1. Students who are underrepresented in regard to completing post-secondary education;
2. Students who are economically disadvantaged, as defined by the Ohio Department of Education;
3. Students whose parents did not earn a college degree.

Beginning in the ninth grade year, students participate in a combined high school and college experience. Students enroll in courses at LCCC and receive dual credit for high school requirements and for college credit. These credits will be applied toward an associate degree at LCCC and may also transfer to any college or university in the State of Ohio. Students should consult the catalog of the transfer institution and plan their program with a college counselor for out-of-state institutions to ensure credits transfer. Students can validate credits at www.transferology.com (http://www.transferology.com).

**Undecided Students**

LCCC offers programs that launch students into their transfer and career plans, based on nine Career Pathways, or meta-majors. While LCCC strives to support students in timely degree completion, we also recognize the importance of selecting a program or pathway that aligns to students' personal and long-term needs. Students who are undecided about their program of study are encouraged to engage in the exploration process early in their enrollment (ideally, within the first semester of attendance) to help inform academic and course registration planning.

**Start With a Program and Career Pathway**

Students often need time to explore career options before selecting a specific program major. Choosing one of LCCC’s nine academic program and career pathways allows students up to 24 credit hours to select a specific degree or certificate program – without the expense typically associated with changing majors. Learn more about the benefits of selecting an Exploratory Major at https://www.lorainccc.edu/program-(http://www.lorainccc.edu/program-/) pathways/.

All students can access online and in-person tools to explore career options, however, students who are declared in an exploratory Program/ Career Pathway will receive additional outreach from their Advisor and Career Services to encourage the use of these tools and services.

**MyPlan Online Assessment**

MyPlan (https://www.lorainccc.edu/career-services/myplan/) is an online assessment available to students, graduates and members of the community. Results of the assessment help identify potential career paths based on individual strengths and interests. This information then helps students choose the right academic program to prepare for and achieve their career goals. Learn more about MyPlan at https://www.lorainccc.edu/career-services/myplan/

**Career Coach**

Career Coach (https://lorainccc.emsicareercoach.com/) provides the most current local data on wages, employment, local job postings and associated education and training. This online tool connects students with academic programs at LCCC and provides information to help students make an informed career decision. Access Career Coach at https://lorainccc.emsicareercoach.com/.

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**International Students**

Lorain County Community College welcomes international students, whether holding immigrant or non-immigrant status. Currently, LCCC enrolls international students from more than 17 countries. International students choose Lorain County Community College as the ideal environment to improve their English, pursue their education, graduate, transfer and advance their academic and career goals.

A non-immigrant student is a citizen of a country other than the United States who is authorized to remain in the United States to study for a temporary period of time and who intends to return to his or her home country. LCCC is authorized by the U.S. Department of State to issue the Certificate of Eligibility for Exchange Visitor (Form DS-2019) for J-1 students and visitors and by the Department of Homeland Security to issue the required Certificate of Eligibility (Form I-20) for F-1 students. Both J-1 and F-1 Visa students must maintain full time (12 or more credits) status at all times and remain in good academic standing.

**Admission Requirements**

1. **International Student Application.** Contact the International Student Services office for an application or visit www.lorainccc.edu/international (http://www.lorainccc.edu/international/) for information about our programs and application process. All application materials must be submitted in their entirety for the applicant to be considered.

2. **English Proficiency.** Applicants need to demonstrate proficiency in English even if planning to enroll in English as a Second Language (ESL) courses. If English is not the student’s first language, the results of an English language proficiency examination such as: TOEFL, iBT, IELTS, EIKEN or ITP must be submitted.

   - Students earning a minimum score of 61 iBT or 173 on the computer-based TOEFL test (or 500 on the paper and pencil test) may be considered for regular admission and must sit for the LCCC placement assessment examination upon arrival and prior to enrollment.

   - Students earning at least 46 iBT score or 133-170 on the computer-based TOEFL test (or 450 on the paper and pencil test) may be considered for English as a second language study prior to or concurrently with a limited number of courses. Students may also submit IELTS, EIKEN or ITP results to fulfill the English language proficiency requirement.

   - A minimum IELTS score is 5; a minimum EIKEN score is 2; a minimum ITP score is 3.

   - Students earning a minimum score of 2A on the EIKEN test may be considered for regular admission and must sit for the LCCC placement assessment examination upon arrival and prior to enrollment.

3. **Proof of Financial Eligibility.** Students must have adequate funds to cover all expenses for the first full year of study and must be able to demonstrate these funds to the American Consular officer who will consider their visa application.

   - Approximately **$US18,550.00** is **REQUIRED** for each year of study. No financial aid, grants or loans are available from LCCC. Students should not expect nor require employment income.
Transfer Students

Guaranteed Admission to Universities

Admission to eleven universities is guaranteed for qualifying LCCC graduates under a Guaranteed Admission agreement signed by LCCC and the participating universities.

LCCC graduates who complete associate of arts or associate of science degrees are guaranteed admission to:

- The University of Akron
- Ashland University
- Bowling Green State University
- Cleveland State University
- University of Cincinnati
- Hiram College
- John Carroll University
- Kent State University
- Lake Erie College
- The Ohio State University
- The University of Toledo
- Youngstown State University

Additionally, LCCC graduates who complete associate of applied studies degrees are guaranteed admission to Bowling Green State University. For specific information on Guaranteed Admission inter-institutional agreements, consult with the Enrollment, Financial and Career Services division.

Transfer to the University Partnership

The University Partnership at Lorain County Community College was created to bring bachelor’s and master’s degrees to Lorain County. The combination of LCCC coursework and University Partnership coursework are the best value in higher education. Many of these degrees can be completed with three years of coursework from LCCC (at LCCC rates) and only one year at university rates. All university partners have their own procedures for transferring. Contact the University Partnership office to connect with the appropriate partner advisor or visit www.lorainccc.edu/up (http://www.lorainccc.edu/up/).

LCCC Students and Students from other Colleges and Universities Transferring to the University Partnership

All university partners have their own procedures for transferring. It is advisable to schedule a meeting with a UP advisor. Contact the University Partnership office to be directed to the appropriate advisor or visit www.lorainccc.edu/up (http://www.lorainccc.edu/up/) for further information.

LCCC Students Transferring to Another College or University (p. 347)

Credit earned at LCCC is transferable to the four-year institution of the student’s choice so long as the student has met the requirements of the receiving institution. The State of Ohio guarantees that equivalent
courses transfer and will apply toward degree objectives in the same manner they would if the course had been taken at the receiving institution.

Review the State of Ohio transfer module (in this publication) with an academic advisor to maximize the benefit of this block transfer of credit mechanism.

**Individualized Transfer Plans**

If academic goals are not reflected in the College’s University Partnership programs or transfer agreements, meet with an advisor (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/) to develop an Individualized Transfer Plan (ITP). An ITP is tailored to individual needs, curriculum and academic background and to the college or university the student is planning to transfer after attendance at LCCC.

**Transfer to LCCC / Transfer from LCCC**

**Planning to transfer to another college or university?**

Lorain County Community College is accredited by the North Central Association of Colleges and Schools, the regional accrediting authority for Ohio. This accreditation assures acceptance of transfer-eligible credits earned at the College by senior colleges and universities in Ohio.

LCCC credits for students planning to transfer to a four-year institution will be accepted by the receiving institution under the Ohio Department of Higher Education Board of Regents Articulation and Transfer Policy. This policy guarantees the transfer of all college-level courses and a block of courses called the Transfer Module. The LCCC Transfer Module transfers to any public college or university in Ohio.

Transferology (https://www.transferology.com/) is designed to provide students with accurate information about how courses transfer and how they will apply toward the completion of a college degree.

**Transfer of Credit to LCCC**

More and more students are discovering the transfer path to LCCC. The College accepts students from other institutions. In addition, it is possible to transfer from LCCC to any University Partnership institution or other four-year colleges or universities.

Any qualified students who have attended other colleges or universities are welcome to attend. An official evaluation of transfer credit will not be completed until the student has accomplished the following:

1. Request all official transcripts from the appropriate official of each separate institution of higher education attended. This includes:
   - In-state college transcripts.
   - Out-of-state college transcripts.
   - International transcripts.
   - Military transcripts (DD-214, Joint Services Transcript, NOBE).
   - Advanced Placement transcripts.
   - CLEP transcripts.
   - Non-traditional college credit - including career/technical training and certification programs attended post-high school

2. Complete all LCCC admission procedures prior to requesting evaluation of college-level and/or military transcripts.

3. Complete and return the Transcript Evaluation Request form to the LCCC Registrar’s office. Each Transcript Evaluation Request is valid for three months from the date of receipt. If transcripts are not received within the three-month time limit, future registration may be restricted until all documents are received.

A student enrolling prior to the receipt of all official post-secondary transcript(s) is limited to six semester hours and subsequent enrollment will require receipt and evaluation of official transcripts from all previously attended colleges/universities. The Enrollment, Financial and Career Services division awards the transferability of credit. Students will receive Notification of Credit Accepted communication from the Registrar’s office when the evaluation is completed. The evaluation becomes part of the student’s permanent student achievement file.

Only credits and hours are transferable; transfer grade point averages/grades do not replace LCCC grades on the official LCCC transcript. Transfer credit is granted for college-level and some technical courses earned at regionally accredited institutions of higher education on a course-by-course basis. Credit received on a satisfactory/unsatisfactory or credit/no-credit basis will be evaluated using the same process as graded courses. LCCC translates satisfactory or credit as the equivalent of the student having passed the class.

A transfer student who is under academic probation at another college or university may be admitted as a probationary student. A student’s record becomes subject to review by the Committee on Admissions and Scholastic Standing.

For more information, visit the Lorain County Community College’s website (https://www.lorainccc.edu/admissions-and-enrollment/transfer-information/).

**Transfer of Credit from LCCC**

Credit earned at LCCC is transferable to the four-year institution of the student's choice so long as the student has met the requirements of the receiving institution.

While the State of Ohio guarantees that equivalent courses transfer and will apply toward degree objectives in the same manner they would if the course had been taken at the receiving institution, it is still a good idea for the student to contact the institution they want to transfer to early to identify any individual institution transfer policies or procedures. Students should also use Transferology and seek the expertise of an academic advisor to ensure they are proceeding efficiently toward transfer goals.

Students should review the State of Ohio Transfer Module (p. 23) (in the LCCC Catalog) with an academic advisor to maximize the benefit of this block transfer of credit mechanism.
What you should do to prepare to transfer

To facilitate transfer with maximum applicability of transfer credit, students should:

- Meet with an LCCC advisor (https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/) during the first semester.
- Seek more information from both advisors at LCCC and the college or university to which the student plans to transfer.
- Identify the institution and major where the student will transfer early in collegiate studies.
- Plan a course of study that will meet the requirements of a degree program at the receiving institution.
- Determine if there are language or any special course requirements that can be met during the first or second year.

Be sure to:

- Check with the college or university the student will attend after LCCC for transfer applications, catalogs and scholarship information for students wishing to transfer to other colleges and universities.
- Check to see if other Ohio colleges and universities will accept LCCC course credits with transferology (http://www.transferologylab.com).

Transfer Guidelines (State of Ohio)

State Guidelines Regarding Transfer

The Ohio Department of Education, following the directive of the Ohio General Assembly, developed a statewide policy to facilitate movement of students and transfer credits from one Ohio public college or university to another. The State policy avoids duplication of course requirements and enhances student mobility throughout Ohio's public higher education system. Since independent colleges and universities in Ohio may or may not be participating in the transfer policy, all students interested in transferring are encouraged to check with the college or university of their choice regarding transfer agreements.

The State of Ohio has established law and policies, which guarantee transfer students the following:

- All college-level courses satisfactorily completed at one public higher education institution will be accepted at all others.
- All equivalent courses transferred will apply to a student's degree objective in the same manner as the equivalent course at the receiving institution.
- A subset of a public higher education institution's general education requirements, called a transfer module, will transfer as a block (at least 36 semester hours) in lieu of the receiving institution's transfer module.
- Transfer students will be treated equitably with students who started at any of the public higher education institutions.
- Appeal procedures will be provided at the institutional level to adjudicate any problems relating to the implementation of the law and policies.

Students meeting the requirements of the transfer module are subject to the following conditions.

1. The policy encourages receiving institutions to give preferential consideration for admission to students who complete the transfer module and either the associate of arts or the associate of science degree. These students will be able to transfer all courses in which they receive a passing grade of D or better. A student must have an overall grade point average of 2.0 to be given credit for the transfer module.

2. As of August 2005, a revision to the Ohio Department of Higher Education's transfer and articulation policy went into effect. As a result, transfer credit from Ohio state-supported colleges and universities will be accepted for transfer credit with passing grades of D/D- for course credit earned fall term of 2005 and beyond, with or without the completion of the Ohio Transfer Module.

Admission to a given institution, however, does not guarantee that a transfer student will be admitted automatically to all majors, minors or fields of concentration at that institution. Once admitted, transfer students shall be subject to the same regulation governing applicability of catalog requirements as all other students. Furthermore, transfer students shall be given the same class standing and other privileges as all other students based on the number of credits earned. All residency requirements must be completed successfully at the receiving institution prior to the granting of a degree.

For more information about state transfer see The Ohio Articulation and Transfer Policy (https://www.ohiohighered.org/transfer/policy/).

Transferology

Transferology is a web-based program that allows students to keep track of and check on how their LCCC courses will transfer to other Ohio colleges and universities. With Transferology, students are able to:

1. Establish a Transferology account (free of charge).
2. Store information on completed courses.
3. Obtain information on how Lorain County Community College courses transfer to other Ohio colleges and universities.
4. Request transfer guides that will provide information about:
   - How courses transfer.
   - How courses apply to intended major after transferring.
   - What courses are still needed to complete a degree after transferring.
5. Obtain information about how courses from other Ohio colleges and universities transfer to Lorain County Community College.

To access Transferology, go to www.transferology.com (http://www.transferology.com) or www.lorainccc.edu/transfer (http://www.lorainccc.edu/transfer/).

Appeal Procedure for Transfer of Credit

Lorain County Community College desires to resolve student inquiries in an expeditious, fair and amicable manner.

If a student believes that his or her credit was not transferred properly, he or she is encouraged to discuss the situation informally with the transcript evaluator. Refer to the Notification of Transcript Evaluation for contact information. If the inquiry is resolved by the parties, the matter is deemed closed.

If the inquiry is not resolved at this level, the student may request an appeal to the Vice President of Enrollment Management and Student Services.
1. The vice president of enrollment management and student services may choose to convene the parties and all necessary documentation (transcripts, etc.) involved in an effort to resolve the appeal during the initial informal process. The vice president must provide a written response to the student and the transcript evaluator within seven business days of the meeting. If the appeal is not resolved at this level the student may initiate the formal written appeal procedure.

2. The formal appeal procedure begins when a written appeal is submitted to the provost/vice president for academic affairs and University Partnership by the student. The statement of appeal should be post-marked by or received by the office of the provost/vice president for academic affairs and University Partnership within 10 business days of the date of the letter from the vice president of enrollment management and student services. The vice president will review the appeal, may choose to meet with the student and/or other parties as applicable and respond in writing to all parties concerning the disposition of the appeal within 10 business days.

3. Should the student wish to request a further review of the decision of the provost/vice president for academic affairs and University Partnership, the student may submit a signed statement of appeal within 10 business days of the date of the letter from the provost to the president. The president will review the appeal, may choose to meet with the student and/or other parties as appropriate and respond in writing to all parties concerning the final review within 10 business days.

The internal appeals process ends.

After a student exhausts the appeals process at the receiving institution and chooses to pursue further action, the Ohio Department of Higher Education (ODHE) responds to formal written complaints related to the Ohio Articulation and Transfer Policy against public, independent non-profit and proprietary institutions of higher education in Ohio. While the ODHE has limited authority over colleges and universities and cannot offer legal advice or initiate civil court cases, staff will review written complaints submitted by its established process and work with student complainants and institutions. Refer to ODHE website for detailed information.

Note: Lorain County Community College may be required to share information concerning complaints with the North Central Association of Colleges and Schools and/or other accrediting bodies.

**LCCC Articulation (Transfer) Agreements**

In addition to the state transfer module, which ensures transfer and applicability of courses between Ohio public colleges and universities, LCCC has secured articulation agreements with selected four-year colleges and universities. Articulation agreement summaries are intended as a general guideline. Please consult an advisor for detailed information regarding updated course articulations, curriculum changes, requirements at the transfer institution and general assistance in making the transfer experience as seamless as possible.

For more information about state transfer and articulation see The Ohio Articulation and Transfer Policy (https://www.ohiohighered.org/transfer/policy/).

**Articulation Agreements for Transfer**

LCCC seeks to secure agreements with upper division institutions of higher education to facilitate successful transfer of its graduates. LCCC has articulation agreements with the following institutions:

- Ashland University
- Baldwin Wallace University
- Bowling Green State University
- Cleveland State University
- Cincinnati College of Mortuary Science
- GMI Engineering and Management Institute (Detroit, MI)
- Hiram College
- Kent State University
- Muskingum University
- Oberlin College
- Ohio Northern University (Ada, OH)
- Ohio State University
- Tri-State University (Angola, IN)
- The University of Akron
- University of Cincinnati
- University of Toledo and Youngstown State University

Details about these agreements are available upon request from the vice president for enrollment management and student services, located within the Enrollment, Financial and Career Services division.

**Responsibilities of Students**

To facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Specifically, students should identify an institution and major to which they desire to transfer early in their collegiate studies. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the first or second year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisors and the college or university to which they plan to transfer.

**UP Express**

**UP Express CSU**

Lorain County Community College students planning to transfer to Cleveland State University will benefit from an added pathway to a four-year degree with the creation of UP Express CSU. The new program is an extension of LCCC’s successful University Partnership with Cleveland State University and will be open to all degree programs at Cleveland State University.

**Program Highlights**

- UP Express CSU will provide dual admission to LCCC and CSU from day one.
• Students will receive a CSU Viking ID and can take advantage of special events and facilities at both institutions.
• A first-year experience course at LCCC will be taught by a CSU graduate.
• Students can take up to three classes at CSU while attending LCCC.
• Collaborative advising will be provided by both institutions.

Future Vikings Learning Community
The UP Express CSU program prepares students for CSU’s downtown campus experience with the Future Vikings Learning Community. Students will:
• Take classes with peers on LCCC’s campus.
• Receive streamlined advising services from both institutions.
• Have access to facilities such as computer labs and rec centers at both schools throughout the program.

Students still in high school can get a head start on this path to a CSU bachelor’s degree by taking College Credit Plus courses from LCCC, saving even more time and cost for a four-year degree.

Transfer Pathways to CSU
Lorain County Community College and Cleveland State University have created transfer pathways that allow LCCCs students to transfer course credits toward bachelor’s in degrees offered by CSU.

View the complete list of UP Express CSU transfer pathway programs (https://www.lorainccc.edu/programs-and-careers/up-express-csu/).

Transient Students

Transient Student (Incoming)
A student at another college or university can take classes at LCCC for credit at the home institution.

1. Complete the LCCC Application (https://www.lorainccc.edu/admissions-and-enrollment/apply-to-lccc/) if the student has never applied or completed an LCCC credit course
2. Complete and submit the Transient Student Registration Form (https://www.lorainccc.edu/admissions-and-enrollment/transient-student-registration-form/) . You will need to:
   a. Determine which courses you plan to register for at LCCC. (Learn more about selecting courses. (https://www.lorainccc.edu/admissions-and-enrollment/register-for-classes/)) Consult with your home institution’s academic advisor regarding course selection and equivalency. You may also use the Transferology (https://www.transferology.com/) system.
   b. Upload a copy of your unofficial transcript below.
   c. If you have earned AP, IB or CLEP credit, please also make sure to upload a copy of the official score report. (Do not upload any document containing your SSN.)
   d. Read the Acknowledgment Statement below, check the box, and click the Submit button to submit the form to Enrollment Services.
3. Pay tuition bill (https://www.lorainccc.edu/paying-for-college/pay-your-bill/).
4. Send LCCC transcript back to the student’s college or university (https://www.lorainccc.edu/admissions-and-enrollment/transcript-center/). Complete the process to have transcript sent to your college or university so they can be evaluated and award you credit for the course. The process can be completed at any time after you register for your class.

New students must create a MyCampus account after completing the application for admission. Students can check schedule, tuition information and grade report through MyCampus.

For More Information
Further information is available at https://www.lorainccc.edu/admissions-and-enrollment/visit-student-enrollment-process/ or from the LCCC Records office at (800) 995-LCCC, ext. 4067 or (440) 366-4067.

Important Documents
Transcript Request Form (http://www.lorainccc.edu/Transcripts/)
Transient Course Registration form (https://www.lorainccc.edu/admissions-and-enrollment/wp-content/uploads/sites/4/2016/05/TransientCourseRegistrationForm-1.pdf)

Transient Students (Outgoing)
LCCC students can take courses at another college or university for credit at LCCC.

1. Must be a current LCCC student.
2. Completed a minimum of 12 credit hours at LCCC.
3. Earned 2.0 or better cumulative grade point average.
4. In good financial standing at LCCC.
6. If the application is approved, the student will receive a Transient Student Registration form that can be used to register for classes at the other institution.
7. Students who are unsure about the course needed at another institution can either make an appointment with an LCCC advisor or check on the course transferability with the registrar’s office.
8. Must provide an official transcript to LCCC upon completion of the course in order to receive transfer credit at LCCC.

For more information on the Transfer Center, visit the Transfer Center website (https://www.lorainccc.edu/admissions-and-enrollment/transfer-information/).

Veterans
LCCC is recognized by the Department of Veterans Affairs (VA) as an institution qualified and equipped to provide education under Title 38 of the U.S. Code for Veterans’ Educational Benefits. This includes veterans whose enlistment was prior to January 1, 1977 and those veterans after January 1, 1977 who made appropriate contributions to the Montgomery
GI Bill® (MGIB) and/or eligible for the Post 9/11 GI Bill. Also included are survivors’ and dependents’ education and selective reserve programs.

*GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at http://www.benefits.va.gov/gibill (http://www.benefits.va.gov/gibill/).

Veterans Admissions
Veterans Admission and Registration Process

Apply to the College in the Enrollment, Financial and Career Services division (located on the first floor of the Bass Library). For assistance, please contact the Veteran and Military Service Member Center at (440) 366-7378 or veterans@lorainccc.edu. LCCC makes it easy for veterans to enroll:

1. Complete an online LCCC Application for Admission at www.lorainccc.edu/admissions (http://www.lorainccc.edu/admissions/) to receive a student identification number.

2. Meet with a member of the Veteran’s Certifying team to discuss and review veterans’ education benefits and scheduling options. Additional documents will require the veteran’s signature.

3. Request official high school and prior military and/or college transcripts to be forwarded directly to Lorain County Community College for formal credit evaluation. Transcript evaluation request forms are available in the Enrollment, Financial and Career Services division and online at www.lorainccc.edu/veterans. Note: LCCC follows American Council on Education guidelines for evaluation of military transcripts. Military Transfer Assurance Guides (MTAGs) provide a statewide guarantee that certain types of military training, experience, and/or coursework align to existing college and university courses and will be awarded appropriate credit. The complete list of MTAGs approved by the Ohio Department of Higher Education (ODHE) can be found at transfercredit.ohio.gov (click on ‘Military’).

4. Complete the placement assessment process through the Testing and Assessment Center (College Center Building, Room CC233). This process involves an evaluation of reading, writing and mathematical skills. Detailed information concerning the various exceptions to the placement assessment can be found in Assessment Information.

To process benefits for each semester, a veteran’s certification request form must be submitted to LCCC’s School Certifying Official team. Forms must be submitted before the term begins. A fillable online certification form is available at www.lorainccc.edu/veterans (http://www.lorainccc.edu/veterans/). An incomplete form will delay the process.

Myriam Cordy
School Certifying Official
Lorain County Community College
1005 North Abbe Road
Elyria, OH 44035

Academic advisors are available in the Enrollment, Financial and Career Services division to help students register for courses. Our team is ready to assist students using VA and/or Department of Defense benefits.

Montgomery GI Bill (MGIB) and Post 9/11 Processing Time

The application for veteran’s education benefits may take VA four to six weeks to process. Veterans’ Educational Benefit Certification Request form (Cert Request) received will take two to three business days based on how close it is to the starting date of the term. VA generally takes an additional two to four weeks to process. LCCC and VA process student’s benefits in the order they are received.

The following may cause delays:

• Incomplete Cert Request.
• Scheduling classes that do not apply to your degree.
• Need for additional documentation (grad request or documentation from another college).
• Multiple adjustments transmitted to VA.
• Changing your degree.
• GPA (does not meet standards of progress).
• Inactive phone number and/or email address.


Ohio GI Promise

Upon moving to Ohio, veterans with one year of honorable service (and their dependents) are immediately considered in-state residents for the purposes of tuition, state educational subsidies and financial aid. Active duty, guard, reserve service members and their families are also eligible for this educational benefit.

On June 26, 2012, Gov. John R. Kasich signed into law House Bill 490, a bill that includes provisions which expands the in-state tuition benefit to the spouse or dependents of a deceased veteran, regardless of the location of the death or the veteran’s residence at the time of death.

The residency officer at each public institution has sole authority to request any documentation in order to make the final determination as to the qualifying residency status of any qualified veteran or dependent under the provisions of the Ohio GI Promise.


Policies Which May Affect Your Certification

To properly process a certification request, all previous college transcripts and/or military records must be evaluated for appropriate transfer credit prior to certification of benefits, even if the coursework does not apply to the current curriculum.

In most cases, credit for prior learning for one to three physical education credits will be awarded upon receipt of the Joint Services Transcript or Community College of the Air Force. Please check with our prior learning
coordinator for more information on the implementation of this process. Additional physical education elective credits over the requirement of the chosen curriculum cannot be certified, unless fulfilling a degree completion requirement.

The Department of Veterans Affairs requires that coursework must be credited towards the bachelor of applied science, associate of arts or associate of science degrees, approved applied degrees (A.A.B and A.A.S), one-year and short-term technical certificates. Per VA policy, general certificates are not approved for education benefits. Some stipulations may apply. If educational goals are unclear, the student should consider declaring the associate of arts degree.

The student must report any schedule changes and supply a copy of the new schedule to LCCC’s school certifying officials. The Department of Veterans Affairs requires that coursework is applicable to the chosen degree or certificate. Courses that are not applicable to the chosen degree or certificate cannot be certified. The student will receive either a written notice or a telephone call when a course(s) cannot be certified. It is the student’s responsibility to respond to the notice. Please allow enough time to process a schedule adjustment (drop/add), if necessary.

### Change of Degree or Certificate Program

A change of degree or certificate program is permitted but must be accompanied by a Change of Program/Place of Training VA Form 22-1995 or 22-5495 (available online at [http://www.lorainccc.edu/veterans/forms](http://www.lorainccc.edu/veterans/forms)). The form is also available online at [www.gibill.va.gov](http://www.gibill.va.gov). Simply key in VA Form 22-1995 in the search box to find the online form. Any dependent of a veteran receiving Chapter 35 benefits must use the Change of Program/Place of Training VA Form 22-5495. Forward the completed 22-1995 or 22-5495 as an attachment to veterans@lorainccc.edu. VA Forms are also available in the Veteran’s and Military Service Members Center located in the College Center building, room 202. It is the VA’s decision to approve or disapprove the proposed change.

### Class Attendance

The class instructor will report the commencement of student class attendance after the census date of the class session. In a distance education context, documenting that a student has logged into an online class is not sufficient, by itself, to demonstrate academic attendance. The class instructor must demonstrate that a student participated in class or was otherwise engaged in an academically related activity, such as by contributing to an online discussion or initiating contact with a faculty member to ask a course-related question. The class instructor determines what constitutes commencement of attendance and will record the policy in the class syllabus. Please note that VS will not pay for any academic foundation (remedial/developmental) classes that are taken via distance learning.

If a student enrolls in a class and is reported as not attending by the class instructor, the student will be automatically dropped from the class. This may result in a debt to the student from VA for any overpayments.

### Repeating Courses

VA regulations prohibit repeating a course in which a passing grade (a D grade or higher) was earned. However, if a C grade or better is necessary to progress to the next level (i.e. nursing clinicals), the repeated course can be certified.

### Monthly Monetary Award (MGIB) and Certificate of Eligibility (Post 9/11)

It is the responsibility of the VA to determine eligibility and monthly monetary award. This is not determined by the Lorain County Community College school certifying official. It is also the responsibility of the student to know what their financial obligation is to LCCC if their educational benefits do not completely cover tuition and fees. Students using Post 9/11 GI Bill are required to provide LCCC a copy of their Certificate of Eligibility. This document outlines the percentage of benefits to which a student is entitled. Any questions regarding eligibility or education benefits should be directed to the Department of Veterans Affairs at (888) 442-4551.

**Important:** VA students are paid on a monthly basis based on current hours enrolled. Students need to be aware that taking courses in subterms (eight-weeks, five-weeks) may affect full-time status. It is the student’s responsibility to check with the VMSMC to verify enrollment.

The student receiving veteran’s educational benefits under MGIB Chapter 30 or 1606 must verify their current status at the end of each month by contacting the VA. Failure to do so will keep the veteran student from receiving their benefits. Chapter 33 (Post-9/11) and Chapter 35 (dependents/spouse) are excluded from verifying monthly enrollment. Reporting can be completed by phone at (877) 823-2378 or via the website at [https://www.gibill.va.gov/wave/index.do](https://www.gibill.va.gov/wave/index.do).

### Veteran’s Spouse and Dependents

Please review the additional information regarding your eligibility at [www.lorainccc.edu/veterans/forms](http://www.lorainccc.edu/veterans/forms) or contact the LCCC school certifying official. Complete information is also available on the US Department of Veterans Affairs website [http://www.gibill.va.gov](http://www.gibill.va.gov) under Chapter 35 Survivors and Dependents.

### Student Policies and Standards of Progress

The Lorain County Community College Catalog policies and regulations apply to all students, including veterans. Department of Veterans Affairs rules are additional rules which apply to veterans only. Academic advisors are available to answer any questions.

To continue receiving VA benefits, grades must be maintained as indicated in the Veterans’ Standards of Progress (p. 353).

### Veterans Called to Active Duty

LCCC recognizes that veteran students may have unique challenges if they are still serving on an active or reserve basis. Veterans enrolled in courses must communicate their absence to their instructor, academic advisor and certifying official prior to activation to ensure they are not dropped from their courses. Veterans who are enrolled in the current semester who get called to active duty can petition for an administrative withdrawal with 100 percent tuition refund by providing the appropriate documentation to the vice president of enrollment management and student services. Veteran students who get called to active duty near the end of the semester might consider pursuing an incomplete with their faculty member and finish the course through a time line established by both the student and the instructor.
Choice Act

Public Law 113-146 and Ohio Revised Code section 333.31 stipulates that all public institutions of higher education must treat any federal GI Bill education program funding recipient as an in-state resident for the purposes of tuition. The service member or veteran must be using VA education benefits under Chapter 30 or Chapter 33 (Post 9/11 Bill), served at least 90 days on active duty and have separated, enrolled in a state institution of higher education, and lives in Ohio as of the first day of a term of enrollment in an institution of higher education.

A spouse or dependent is eligible, only while using benefits, if they are the recipient of the Marine Gunnery Sergeant John David Fry scholarship or Chapter 33 transfer of entitlement, are enrolled in a state institution of higher education, live in Ohio as of the first day of a term of enrollment in an institution of higher education, and the veteran’s period of active duty was at least 90 days and they have separated.

A VA certifying official will identify the qualified VA benefit user and will provide instructions on the requirements for the Application for Residency Tuition Status Change. An Application for Resident Tuition Status Change must be accompanied by a copy of the service member or veteran’s DD-214 (member copy 4) and proof of in-state residency. Once the student establishes 12 consecutive months of in-county residency, he/she is required to re-apply for Resident Tuition Status Change following established residency petition guideline.

Return of Unearned TA Funds to the Government

Return of Tuition Assistance: Military Tuition Assistance (TA) is awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of TA funds originally awarded.

To comply with the new Department of Defense (DoD) policy, Lorain County Community College will return any unearned TA funds on a prorate basis through at least the 60% portion of the period for which the funds were provided. TA funds are earned proportionally during an enrollment period, with unearned funds returned based upon when a student stops attending. These funds are returned to the military service branch. See LCCC website for the Schedule of Returning Unearned TA to the Government. (https://www.lorainccc.edu/veterans/programs-and-policies/)

Instances when a service member stops attending due to a military service obligation, LCCC will work with the affected service member to identify solutions that will not result in student debt for the returned portion.

Section 103 of the Veterans Benefits and Transition Act of 2018

Lorain County Community College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual’s inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs.

Veterans Standards of Progress

The Veteran and Military Service Member Center (VMSMC) under the direction of the vice president of enrollment management and student services, will monitor/enforce standard practices for determining satisfactory progress and conduct of eligible persons receiving VA educational benefits.

The VMSMC will develop, publicize and administer the institutional policies regarding continued pursuit and progress being made by students utilizing VA educational benefits.

College policy and academic records are maintained to reflect the progress of enrolled VA students shall be the same as those prescribed for all LCCC students and shall contain grades for all classes attempted, together with the number of accumulated credit hours and the cumulative GPA. Not attending classes will affect your GPA and may lead to academic probation and/or dismissal.

In addition, the VMSMC will maintain all school records pertaining to enrollment certification and change of status of each enrolled VA student. The College policy relative to Standards of Progress for Veterans will be as follows:

In accordance with 38 CFR 21.4203(d), 38 CFR 21.4277, 38 CFR 21.7154, 38 CFR 21.7653(c), 38 CFR 21.7654, and 38 CFR 21.9725, law requires that educational assistance benefits to Veterans and other eligible persons be discontinued when the student ceases to make satisfactory progress toward completion of a training objective. Benefits can be resumed if a student reenrolls in the same educational institution and in the same program. In other cases, benefits cannot be resumed unless VA finds that the cause of the unsatisfactory attendance, conduct or progress has been removed and the program of education or training to be pursued by the student is suitable to their aptitudes, interests and abilities.

At the conclusion of each semester, school certifying officials will report to VA those students who have been placed on academic probation or dismissed. Academic dismissal will be reported as a termination on the last day of the term. If a student successfully petitions the dismissal, is readmitted, and is already certified for the subsequent term, no termination will be reported.

VA does not permit repeating a course in which a passing grade has been granted. A letter grade of D is considered a passing grade by VA regulations. There are limited exceptions to this rule.

The college academic records maintained by LCCC shall reflect the following data concerning VA funded student progress:

- Credit awarded toward the student’s current program due to previous training and experience
- There shall be recorded a final grade for each course attempted except those dropped within the first 12 weeks of any semester.
- The dates of partial withdrawal and complete withdrawal shall be maintained on the formal withdrawal slip and also on the registration form for the semester.
- All records will be cumulative and document all progress being made toward completion of a chosen program.
Cross Registration

Currently enrolled, full-time LCCC students in good financial and academic standing may take one undergraduate course per term at any other participating college. Tuition is free at the host institution, but the student will have to pay any special fees involved (lab, books, parking, etc.). Registration is limited to fall and spring semesters.

Registration is limited to a space-available basis and registration may occur at different times at the host college. Interested students may obtain a cross-registration application from the Enrollment, Financial and Career Services division.

Students from other participating institutions may obtain the REQUIRED cross registration form from their home institution. Registration is limited to a space-available basis and will be accepted from the first day of the term through Friday of the first week of the term. Cross registration for students from other colleges taking courses at LCCC must be processed in the Records office. Further information is available from the Enrollment, Financial and Career Services division.

Residency

All applicants and current students requesting a change of fees to in-state or in-county must complete an Application for Residency Tuition Status Change and provide acceptable proof of residence and source(s) of income. This form (https://www.lorainccc.edu/admissions-and-enrollment/wp-content/uploads/sites/4/2016/08/ResidencyStatusChangeForm.pdf) is available in the Enrollment, Financial and Career Services division and must be submitted and approved prior to the first official day of the term for which reclassification is being requested. Residency changes cannot be retroactive. A change to a Lorain County address does not automatically change residency status. Applications are submitted to the Enrollment, Financial and Career Services division.

Residence Status

1. Intent and authority
   a. It is the intent of the Ohio Department of Higher Education in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the State of Ohio primarily for the purpose of receiving the benefit of a state-supported education.
   b. This rule is adopted pursuant to Chapter 119 of the Revised Code and under the authority conferred upon the Ohio Department of Higher by Section 3333.31 of the Revised Code.

2. Definitions for the purposes of this rule:
   a. A "resident of Ohio/Lorain County for all other legal purposes" shall mean any person who maintains a 12-month place or places of residence in Ohio/Lorain County, who is qualified as a resident to vote in Ohio/Lorain County and receive state welfare benefits and who may be subjected to tax liability under Section 5747.02 of the Revised Code, provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.
   b. "Financial support" as used in this rule, shall not include grants, scholarships and awards from persons or entities, which are not related to the recipient.
   c. An “institution of higher education” as used in this rule shall mean any university, community college, technical institute or college, general and technical college, medical college or private medical or dental college, which receives a direct subsidy from the State of Ohio.
   d. For determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, “domicile” is a person's permanent place of abode; there must exist a demonstrated intent to live permanently in Ohio/Lorain County and a legal ability under federal and state law to reside permanently in the state/county. For the purpose of this policy, only one domicile may be maintained at a given time.
   e. For determining residency for tuition surcharge purposes at Ohio's state-assisted colleges and universities, an individual's immigration status will not preclude an individual from obtaining resident status if that individual has the current legal status to remain permanently in the United States.

3. Residency for subsidy and tuition purposes. The following persons shall be classified as residents of the State of Ohio/Lorain County for subsidy and tuition surcharge purposes:
   a. A dependent student, at least one of whose parents or legal guardian has been a resident of the State of Ohio/Lorain County for all other legal purposes for 12 consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
   b. A person who has been a resident of Ohio/Lorain County for the purpose of this rule for at least 12 consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving and has not directly or indirectly received in the preceding 12 consecutive months, financial support from persons or entities who are not residents of Ohio/Lorain County for all other legal purposes.
   c. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time, self-sustaining employment in Ohio and established domicile in Ohio/Lorain County for reasons other than gaining the benefit of favorable tuition rates. Documentation of full-time employment and domicile shall include both of the following documents:
      i. A sworn statement from the employer or the employer's representative on the letterhead of the employer or the employer's representative certifying that the parent or spouse of the student is employed full-time in Ohio.
      ii. A copy of the lease under which the parent or spouse is the lessee and occupant of rented residential property in Ohio/Lorain County; a copy of the closing statement on residential real property located in Ohio/Lorain County of which the parent or spouse is the owner and the occupant; or if the parent or spouse is not the lessee or owner of the residence in which he or she has established domicile, a notarized letter from the owner of the residence certifying that the parent or spouse resides at that residence.
   d. A veteran and the veteran's spouse and any dependent of the veteran, who meets both of the following conditions:
      i. The veteran either (i) served one or more years on active military duty and was honorably discharged or received a medical discharge that was related to the military service or (ii) was killed while serving on active military duty or has been declared to be missing in action or a prisoner of war.
      ii. If the veteran seeks residency status for tuition surcharge purposes, the veteran has established domicile in this state as of the first day of term of enrollment in an institution of
higher education. If the spouse or a dependent of the veteran seeks residency status for tuition surcharge purposes, the veteran and the spouse or dependent seeking residency status have established domicile in this state as of the first day of a term of enrollment in an institution of higher education, except that if the veteran was killed while serving on active military duty or has been declared to be missing in action or a prisoner of war, only the spouse or dependent seeking residency status shall be required to have established domicile in accordance with this division.

4. Additional criteria that may be considered in determining residency may include but are not limited to the following:
   a. Criteria evidencing residency:
      i. If a person is subject to tax liability under Section 5747.02 of the Revised Code.
      ii. If a person qualifies to vote in the State of Ohio/Lorain County.
      iii. If a person is eligible to receive state welfare benefits.
      iv. If a person has an Ohio driver's license and/or motor vehicle registration listing a Lorain County address and issued 12 months earlier than the petition date.
   b. Criteria evidencing lack of residency:
      i. If a person is a resident of or intends to be a resident of another county, state or nation for the purposes of tax liability, voting, receipt of welfare benefits or student loan benefits (if student qualified for that loan program by being a resident of that county, state or nation).
      ii. If a person is a resident or intends to be a resident of another county, state or nation for any purpose other than tax liability, voting, or receipt of welfare benefits (see paragraph (D)(2)(a) of this rule).

5. Exceptions to the general rule of residency for subsidy and tuition surcharge purposes:
   a. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio/Lorain County and who is pursuing a part-time program of instruction shall be considered a resident of Ohio/Lorain County for these purposes.
   b. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio/Lorain County for all other legal purposes and her or his dependents shall be considered residents of Ohio/Lorain County for these purposes as long as Ohio/Lorain County remains the state or county of such person's domicile.
   c. A person on active duty status in the United States military service who is stationed and resides in Ohio/Lorain County and her or his dependents shall be considered residents of Ohio/Lorain County for these purposes.
   d. A person who is transferred by her/his employer beyond the territorial limits of the 50 states of the United States and the District of Columbia while a resident of Ohio/Lorain County for all other legal purposes and his or her dependents shall be considered residents of Ohio/Lorain County for these purposes as long as Ohio/Lorain County remains the state or county of such person's domicile as long as such person has fulfilled her or his tax liability to the State of Ohio/Lorain County for at least the tax year preceding enrollment.
   e. A person who has been employed as a migrant worker in Ohio/Lorain County and her or his dependents shall be considered a resident for these purposes provided such person has worked in Ohio/Lorain County at least four months during each of the three years preceding the proposed enrollment.

6. Procedures
   a. A dependent person classified as a resident of Ohio/Lorain County for these purposes under the provisions of section (C)(1) of this rule who is enrolled when his or her parents or legal guardian removes their residency from the State of Ohio/Lorain County shall continue to be considered a resident during continuous full-time enrollment and until her or his completion of any one academic degree program.
   b. In considering residency removal of the student or the student's parents or legal guardian from Ohio/Lorain County shall not, during a period of 12 months following such removal, constitute relinquishment of Ohio/Lorain County residency status otherwise established under paragraphs (C)(1) or (C)(2) of this rule.
   c. For students who qualify for residency status under (C)(3) of this rule, residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside Ohio less than 12 months after accepting employment and establishing domicile in Ohio.
   d. Any person once classified as a nonresident, upon the completion of 12 consecutive months of residency, must apply to the institution she or he attends for reclassification as a resident of Ohio/Lorain County for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of her or his financial support is or in the preceding 12 consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. The Records office personnel, who may require, among other things, the submission of documentation regarding the sources of a student's actual financial support, shall make evidentiary determination under this rule.
   e. Any reclassification of a person who was once classified as a non-resident for these purposes shall have prospective application only from the date of such reclassification.
   f. Any institution of higher education charged with reporting student enrollment to the Ohio Department of Higher Education for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of her or his Ohio/Lorain County residency for purposes of this rule. Such an institution may require the submission of affidavits and other documentary evidence, which it may deem necessary to a full and complete determination under this rule.

7. Residency Changes
   a. A student wishing to appeal or change her or his classification as a non-resident for these purposes shall have prospective application only from the date of such reclassification.
   b. A student classified as a non-resident student at the time of admission to the College and who qualifies as a resident may appeal the classification to the Records office personnel.
   c. A matriculated student classified as a non-resident and who qualifies as a resident may appeal the classification to the Records office personnel.
   d. Any student denied reclassification by the above administrative officer may appeal the denial to the registrar.
Change of Residency Status

Application for Change of Residency Status

Policy Regarding Ohio and/or Lorain County Student Residency for State Subsidy and Tuition Surcharge Purposes

(As required by Ohio law for in-state and by the LCCC District Board of Trustees for in-county)

Below is the link to the Application for Residency Status Change for purposes of tuition. Please be aware that this process is governed by Ohio law and the Ohio Board of Regents. The office of Registration and Student Records is obligated to the Ohio Board of Regents and the citizens of Lorain County as determined by the College Board of Trustees to uphold all rules and requirements of residency for tuition purposes.

- **DACA Residency Application**

The term "Ohio Resident" for tuition purposes may differ from other definitions of Ohio residency. A person who has an Ohio driver's license or who is an Ohio resident for tax, voting, or welfare purposes may not necessarily be considered a resident for tuition purposes. To be classified as a resident for tuition purposes, a student must meet the guidelines for residency as defined by the Ohio Board of Regents Administrative Code 3333-1-10.

Students are also encouraged to read through the Frequently Asked Questions (https://www.lorainccc.edu/admissions-and-enrollment/records/residency/residency-frequently-asked-questions/) which further explains residency and application deadlines. If a student has questions they should contact the Records office at (440) 366-4067 for clarification. All information distributed by the college and on this web site is subject to change and should not be considered conclusive.

Please be aware that as part of this process students may be asked to provide additional documents beyond what is requested on the application itself. Because of the personal nature of some of the documents we may be requesting, any supporting documentation will be reviewed for purposes of making a residency determination only and will not ever become part of the student’s permanent academic file. Documents will be viewed only by the appropriate residency officer(s) of the college and any state auditors that may request the documents. Failure to provide the requested forms to substantiate a residency change will result in the denial of an application. All forms must be provided by the deadlines listed below. By state law and college policy, reclassification will not be retroactive for any previous term(s). Applications received after the start of a term can only be considered for the following academic term.

All residency change applications and requested supporting documentation must be submitted and approved prior to the first official day of the academic term you desire reclassification to be effective.

**Fall term:** Starts in August of each year

**Spring term:** Starts in January of each year

**Summer term:** Starts in May of each year

Specific start dates will vary with each calendar/academic year and can be found on the college's official website or by calling the Records office at (440) 366-4067. As with any deadline item, it is always beneficial to submit materials as early in the process as possible to allow sufficient time for review and approval.

Payment due dates cannot be waived or extended while a student’s residency is being reviewed. Student’s must make full payment (including non-resident fees) by the appropriate payment due date. If approved, refunds will be issued through normal college channels and according to refund policies.

Immigration Status

Eligibility for the in-state tuition subsidy benefit and immigration status is dependent upon several factors. A student must meet the following criteria in addition to the other residency requirements. Please refer to the explanation below to determine if your immigration status entitles you to apply for in-state residency.

**A Financially Independent Student**

If a person is financially independent, they must be a U.S. citizen, Permanent Resident Alien, Political Asylee, Political Refugee, Deferred Action for Childhood Arrivals (DACA), or hold an A, E, G, H, I, L, O, P, R, TC, TD, or TN visa to be eligible for review as an in-state resident for tuition purposes.

If a student holds a B, F, J, M, or U visa and is financially independent, they are not eligible to establish Ohio residency.

Students who are financially independent and their immigration status is pending (i.e. for green card), are not eligible for in-state residency unless their most recent immigration status prior to entering pending status, was an eligible status to receive the in-state tuition subsidy benefit. (i.e. visa type of A, E, G, H, I, L, O, P, R, TC, TD, or TN)

**A Financially Dependent Student**

If a student is financially dependent upon a spouse or parent, the person they are dependent upon must also be a U.S. citizen, permanent resident alien, political asylee, or political refugee, or hold an A, E, G, H, I, L, O, P, R, TC, TD, or TN visa to qualify to be reviewed for in-state residency.

(Note: Financial dependence upon a parent is defined as having been claimed on the parent’s federal income tax return in the most recent tax year. Financial dependence upon a spouse is proven with a marriage certificate.)

A student who holds a B, F, J, M, or U visa can qualify for in-state residency only if they are financially dependent upon a spouse or parent who is a bona fide Ohio resident. A bona fide Ohio resident is defined as a person who meets the criteria established in the Ohio Board of Regents Guidelines and is also a U.S. citizen, permanent resident alien, political asylee, or political refugee, or holds an A, E, G, H, I, L, O, P, R, TC, TD, or TN visa.

If a student is dependent upon a spouse or parent who holds a B, F, J, or M visa, they are not eligible to establish in-state residency.

Special Note (1): If a student is a dependent of a bona fide Ohio resident and the student’s current visa type is B, F, J, M, or U, they must also have applied to adjust their status to permanent resident alien or to adjust
their status to match that of the person they are dependent on in order to qualify for the in-state tuition subsidy benefit.

Special Note (2): If a student’s immigration status changes after being classified as a resident, it may affect their ability to remain classified as a resident. For example, if a student is financially independent and on an H1B visa and adjusts their status to F-1, they would no longer be eligible for in-state residency.

Selective Service

Under the provisions of Section 3345.32 of the Ohio Revised Code, all males between the ages of 18 and 26 attending a state-assisted university/college in Ohio are REQUIRED to register with the Selective Service system or be exempt from registering on the basis of one of a list of exceptions. Failure to provide a selective service number prior to the official first day of the semester will result in the imposition of the nonresident tuition surcharge regardless of the student’s state of residence. To register online, visit www.sss.gov (http://www.sss.gov/).

Exceptions include: those on active duty with the armed forces of the United States (other than training with a reserve or national guard unit); nonimmigrant aliens lawfully in the U.S. in accordance with Section 101(A)(15) of the Immigration and Naturalization Act; and permanent residents of the Trust Territory of the Pacific Islands or Northern Mariana Islands who are not U.S. Citizens.

The State of Ohio requires Lorain County Community College to determine registration status in order to properly assess fees and determine eligibility for state financial aid programs. Students may register for selective service in the year they become 18 and must have registered within 30 days after their 18th birthday. They may register at any U.S. Post Office or on the web at: www.sss.gov. (http://www.sss.gov/)

It is a student’s responsibility to provide the college Records office with his Selective Service Registration number. Failure to do so will result in the assessment of non-resident (out-of-state) fees. Students are expected to make full payment (including non-resident fees) by their appropriate payment due date. Payment deadlines may not be waived or extended while a student’s residency status is under review or while the student is waiting to receive a selective service registration number.

To provide a Selective Service Registration number or for more information, contact our Records office at (440) 366-4067.

Senior Adult Fee Waivers

To be eligible for the instructional fee waiver, a senior adult learner must be 60 years of age or older and a resident of the State of Ohio for the immediate preceding 12 consecutive months. A registration and instructional fee waiver request form must be completed. A senior adult learner will be REQUIRED to pay all non-instructional fees (general fee, special course fees, etc.) and must purchase books and materials needed for the course. Instructional fees may be waived for a senior citizen enrolling in credit courses on an audit basis. Registration for classes using this fee waiver policy will be on a space-available, first come, first served basis. Senior adult learner fee waivers do not apply to University Partnership courses.

Study Abroad

Lorain County Community College offers students the opportunity to continue their education at one of several international colleges. LCCC has educational partnerships with colleges in China, Denmark, France, Germany, Great Britain, Greece, Scotland and Vietnam. Students may choose to pursue a short-term study abroad option, or to complete an entire year of studies at one of our partner institutions. Students interested in study abroad programs must maintain at least a 3.0 GPA and must have completed one year of undergraduate study. For more information, please visit www.lorainccc.edu/studyabroad (http://www.lorainccc.edu/studyabroad/).
ACADEMIC STANDARDS AND REGULATIONS

- Academic Support Courses and Co-Requisite Model (p. 358)
- Academic Probation and Dismissal (p. 358)
- Attendance (p. 359)
- Course Load and Credit Hour Limitation (p. 360)
- Dean's List (p. 360)
- Forgiveness Policy (p. 360)
- Grading System (p. 361)
- Graduation Requirements (p. 362)

Academic Support Courses and Co-Requisite Model

Academic Support Courses

College students often need support to be successful in their chosen fields of study. Academic support courses are provided for students who need to refresh or strengthen academic skills. Courses are available in mathematics, English/writing, reading and study skills. A complete listing of these courses appears in the course description section of College Catalog.

All new students are required to complete the placement assessment. LCCC uses Accuplacer for reading/writing and ALEKS for math.

Academic advisors use assessment results and other measures to help students select courses that align with academic abilities. If a student feels their placement assessment scores do not reflect their academic ability, they can request to reassess. Students placed in academic support courses in reading, writing and/or math are required to enroll in these courses before taking any other college courses. Delaying enrollment in these classes can delay program completion and graduation.

Academic support provides the necessary foundation to help students strengthen their skills. If all required academic support courses are scheduled, students may take other classes concurrently. Additionally, after starting a math or English course, all courses must be taken consecutively and sequentially until the required sequence is completed. Extenuating circumstances will be addressed on a case-by-case basis.

Students who place into three developmental education subjects (i.e., math, English and reading) will be required to enroll in SDEV 102, Strategies for College Success, to support their academic success.

Students who are not eligible for placement into a mathematics course will be provided a math success coach and will be automatically enrolled in the free Math Foundations Lab. In the Math Foundations Lab, students will use the ALEKS program to work on an individualized preparation and learning module with the goal of becoming eligible for a credit bearing math course. This individualized, self-paced, online experience is supported by math success coaches and time spent on-campus each week in the lab in PS 115 until a student reassesses and successfully improves placement. After taking the initial ALEKS placement assessment, students are able to reassess up to four more times within one year of the initial assessment. For the first reassessment, students must work a total of eight hours in the Preparation and Learning Modules in ALEKS prior to re-assessing. For any additional re-assessments, students must work at least 5 hours in the Preparation and Learning Modules prior to re-assessing.

Academic support courses carry college credit. They are included in the computation of a student’s cumulative grade point average and count toward financial aid requirements; however, they do not count toward degree requirements and are not transferable to another college or university.

Co-Requisite Model

LCCC has adopted the co-requisite model in some of its English and mathematics courses. The co-requisite pairs a college level course with a supplementary instruction and support course. Student success has increased dramatically with the new model. In the co-requisite model, students receive extra help while they take a college-level course and are able to reduce the time to complete English and mathematics college-level courses.

Academic Recovery and Dismissal

A student is placed on academic recovery (formerly known as academic probation) when her/his cumulative grade point average falls below the established minimum which follows:

<table>
<thead>
<tr>
<th>Credit Hours Attempted</th>
<th>Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-29 semester hours</td>
<td>1.60</td>
</tr>
<tr>
<td>30-44 semester hours</td>
<td>1.75</td>
</tr>
<tr>
<td>45-up semester hours</td>
<td>2.00</td>
</tr>
</tbody>
</table>

An academic standing notification email is sent to each student at the conclusion of each semester.

A student attending or who has attended another college or university and who is placed on recovery by that college or university may be placed on recovery if admitted to LCCC. She/he will remain on recovery until meeting the minimum cumulative GPA REQUIRED for the number of credit hours attempted at LCCC.

Academic recovery will require a student to reduce her/his course load and to register at the next regular semester registration for not more than 12 credit hours of coursework; and not more than six credit hours of work in a regular eight-week summer semester or one class in a five-week summer term. In addition, a registration hold will be placed on the student’s MyCampus account and the student will need to meet with their advisor to register for classes or adjust their schedule. To support academic progress, students will be required to meet with their academic advisor to discuss academic plans, register for classes, and make schedule adjustments while in academic recovery. A registration hold will be placed on the student’s account to encourage consultation with an advisor while in academic recovery.

A student will be in good academic standing when her/his cumulative grade point average meets the established minimum above.

Dismissals and Reinstatement

The committee on scholastic standing has set a standard of scholastic achievement that every LCCC student must reach. Each semester, the registrar reviews student academic progress and recommends students to be dismissed who have attempted at least ten semester credit hours. A student who fails to earn a 1.5 GPA after attempting ten semester hours is subject to dismissal, as are those who have been on academic recovery
two or more semesters (at least 20 credit hours cumulatively attempted) and whose GPA is considerably below the minimum GPA REQUIRED to be removed from probation. Established minimum GPAs for dismissal are:

<table>
<thead>
<tr>
<th>Credit Hours Attempted</th>
<th>Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-29 credit hours attempted</td>
<td>1.50</td>
</tr>
<tr>
<td>30-44 credit hours attempted</td>
<td>1.65</td>
</tr>
<tr>
<td>45-up credit hours attempted</td>
<td>1.80</td>
</tr>
</tbody>
</table>

In addition, and aligned with LCCC’s focus on supporting student success and completion, the registrar reviews each student’s course withdrawal history and will recommend for dismissal those with excessive withdrawals.

**First Dismissal**

A student, notified of academic dismissal by the registrar the first time, may be readmitted after an absence of two semesters subject to the recommendation of a college advisor, which may include portions of the placement assessment process; i.e., testing or retesting. Students may be restricted to part-time study during their first semester of study after returning from a first dismissal.

Any student who has been readmitted to the College after the first academic dismissal will be expected to demonstrate solid evidence of academic advancement. Failure to do so will result in a second academic dismissal. A student who has been academically dismissed the second time may be readmitted only after consultation with, and approval from, the manager of enrollment and advising services under the direction of the vice president for enrollment management and student services, and only after an absence of one calendar year.

**Second Dismissal**

Any student who has been readmitted to the College after the second dismissal will be expected to demonstrate solid evidence of academic advancement. Students may be restricted to part-time study during their first semesters of study after returning from a second dismissal. Failure to do so will result in a third academic dismissal.

**Third Dismissal**

After a two year period, a student who has been academically dismissed for the third time can request readmission (in writing) to the provost/vice president for academic affairs and University Partnership. The provost/vice president for academic affairs and University Partnership may or may not approve the request. Restrictions will apply if the request is granted. There are no additional provisions for reinstatement after the fourth dismissal.

Students academically dismissed have the right to appeal in writing to the committee on scholastic standing. Letters of appeal must be received in the Records office before the close of business on the eighth Friday of the semester following the dismissal semester. Failure to meet the appeal deadline for the dismissal semester will negate the right to appeal.

To support a successful return to LCCC, all students seeking readmission after any dismissal status must make their appointment with the appropriate college official a minimum of 30 days prior to the start of the semester for which they are seeking reinstatement. Academic dismissal can impact students’ access to financial resources, and this period of time allows a student time to complete other processes associated with their return to college after an absence.

**Returning After Dismissal**

Transfer students who are on probation or dismissed from other colleges/universities will be subject to the same reduced course load limitation policy that applies to LCCC students on probation.

A student is subject to dismissal from LCCC for social misconduct and academic dishonesty at any time, regardless of her or his academic standing. The procedures for dismissal due to social misconduct and academic dishonesty are outlined in the policy section under Code of Conduct (refer to the catalog for Code of Conduct).

**Non-Academic Dismissal**

The faculty directly associated with any program offered at LCCC retains the prerogative to recommend dismissal of a student to the Committee on Scholastic Standing, regardless of the student’s cumulative grade point average. Valid supporting evidence that the student lacks a particular personal or professional characteristic and/or ability REQUIRED, must accompany the recommendation for dismissal.

A student dismissed from the program in which she/he was enrolled is encouraged to confer with an advisor before entering another program offered at the College. Readmission to the College is dependent upon policy and procedure as well as circumstances outlined in the Code of Conduct (refer to the catalog for Code of Conduct (https://www.lorainccc.edu/policies/campus-policies/code-of-conduct/)).

**Academic and Employment Workload**

Students who are employed more than 20 hours per week might reduce their class load in accordance with their work load. College level study generally requires at least two hours of study for each hour of in-class time. A suggested schedule for balance is:

<table>
<thead>
<tr>
<th>Employment Work Load</th>
<th>Academic Work Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 40 hours</td>
<td>8 credit hours</td>
</tr>
<tr>
<td>30-40 hours</td>
<td>9-11 credit hours</td>
</tr>
<tr>
<td>20-30 hours</td>
<td>12-14 credit hours</td>
</tr>
<tr>
<td>Under 20 hours</td>
<td>15+ credit hours</td>
</tr>
</tbody>
</table>

**Attendance**

The class instructor will report the commencement of student class attendance after the census date of the class session. In online classes, documenting that a student has logged into an online class is not sufficient, by itself, to demonstrate academic attendance by the student. The class instructor must demonstrate that a student has actively participated in class or was otherwise engaged in an academically related activity. Examples of such activity might include, but are not limited to contributing to an online discussion or initiating contact with a faculty member to ask a course-related question. The class instructor will determine what constitutes commencement of attendance and should record their policy in class syllabus.

If a student enrolls in a class and is reported as not attending by the class instructor, the student will be automatically dropped from the class.

Procedures governing class attendance at LCCC allow each faculty member to establish attendance regulations, which she/he deems necessary for her/his particular course.

If attendance becomes impossible, students are encouraged to speak with their instructor immediately to communicate this concern and
determine the best course of action given the circumstances. In the event that a student can no longer attend the course or chooses to end enrollment in the course, the student must officially withdraw from the course via MyCampus, Canvas withdrawal or Enrollment Services. Withdrawal procedures, as well as guidance for students prior to initiating a withdrawal, are described in the College Catalog enrollment section.

Severe Weather Attendance

When severe weather strikes the area, students are advised to consider the conditions in their immediate area concerning the safety of travel. Conditions can vary significantly within the service area of the College and decisions regarding College operations are made on the general status of the overall service area. Students are responsible for their own safety and travel decisions. All coursework is also the continuing responsibility of students. A choice to be absent from a course for any reason does not exonerate students from the full responsibility to complete all prescribed coursework.

Attendance and Impact on Forms of Aid

Students receiving veterans benefits are REQUIRED to attend classes. Please refer to Veterans’ Standards of Progress (p. 353) or contact the Department of Veterans Affairs Center in Enrollment, Financial and Career Services division for further information.

Students receiving Title IV Financial Aid (Federal Pell Grant, Federal Family Education Loan Program and Federal Work Study) are REQUIRED to attend classes and will have their attendance verified by their class instructor. Please refer to Financial Aid (p. 366) section or contact the Financial Services department for further information.

Student attendance may be required through other programs in which the student is receiving benefits, both internal and external to LCCC (examples may include public benefits, food assistance programs, unemployment/ skills training programs, etc). For this reason, students should review all requirements under any program participation, especially those for which financial or other benefits are drawn, prior to withdrawal.

Faculty absence

In the event that a faculty member is not present at the usually scheduled class session, students must remain in the classroom for 15 minutes. At the end of that time, if the faculty member has not arrived and no special instructions have been received, students are permitted to leave class without penalty and should report to the division office for information.

Course Load and Credit Hour Limitation

The course load of a full-time student is 12 or more credit hours, up to 18 credit hours. During Fall and Spring semesters, students are limited to 9 credit hours during any accelerated sessions/sub-terms (5-, 8-, or 10-week sessions). Students may take up to 12 credit hours during the Summer semester, and are advised to also limit to 9 credit hours during any one accelerated session/sub-term.

Students who meet any one of the following criteria may request an exception to these course loads, and should consult with their Academic Advisor to receive an exception:

1. prescribed curriculum requires more than 18 credit hours per semester exclusive of physical education; or
2. newly admitted, recent high school graduates whose cumulative average for four years of high school work is of B quality (3.0) or higher; or
3. students with the immediately preceding 15 credit hours of coursework of B quality (3.0) or higher, completed at LCCC or another accredited college or university.

The course load of a part-time student may not exceed 11 credit hours of coursework in a regular semester or five credit hours in an eight-week term or three credit hours in a five-week term.

Exceptions

Students who are requesting full-time enrollment verification for insurance coverage or government assistance programs and who are enrolled in allied health program courses with clinical hours may be an exception. Due to the unique demands of clinical laboratory courses, practicum and co-ops, enrollment status will be determined by the number of contact hours REQUIRED rather than the credit hours to be earned. Twelve contact hours per week in a regular semester will constitute full-time enrollment. Eleven contact hours or fewer will constitute part-time enrollment. These definitions do not apply to financial aid recipients.

Dean’s List

Full-Time

The full-time dean’s list recognizes students who successfully complete a minimum of 12 semester hours of credit courses and earn a GPA of 3.5 or above for the fall and/or spring semester’s work. The provost/vice president for academic affairs and University Partnership will recognize students at the completion of each semester.

Part-Time

The part-time dean’s list recognizes students who:

• Enroll part-time (6-11 credit hours per semester).
• Successfully complete a minimum of 15 cumulative credit hours.
• Earn a GPA of 3.5 or above.

At this time the student will be considered for the dean’s list for the fall and/or spring semester’s work. The provost/vice president for academic affairs and University Partnership will recognize students at the completion of each semester.

Summer

The summer dean’s list recognizes students who:

• Enroll at least six credit hours.
• Successfully complete a minimum of 15 cumulative credit hours.
• Earn a GPA of 3.5 or above.

At this time the student will be considered for the dean’s list for the summer semester’s work. The provost/vice president for academic affairs and University Partnership will recognize students at the completion of the summer semester.

Forgiveness Policy

The college recognizes that some students may not be able to overcome previously earned poor records in order to meet new career and
Grading System

The quality of coursework at LCCC is indicated by letter grades. Each letter grade carries “credit points” which are used in computing the student’s cumulative grade point average.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior quality – 4.00 credit points per semester hour.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>High quality – 3.00 credit points per semester hour.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Average – 2.00 credit points per semester hour.</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Below average – 1.00 credit points per semester hour.</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Failing – 0.00 credit points per semester hour.</td>
<td></td>
</tr>
<tr>
<td>FAW</td>
<td>Failing administrative withdrawal due to insufficient pursuit of course completion – (0.00 credit points per semester).</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Proficiency/articulated credit – not computed in average.</td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory – not computed in average.</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory – not computed in average.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete – not computed in average.</td>
<td></td>
</tr>
<tr>
<td>AU</td>
<td>Audit/no credit – not computed in average.</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Examination credit – not computed in average.</td>
<td></td>
</tr>
<tr>
<td>XP</td>
<td>Transfer credit – not computed in average.</td>
<td></td>
</tr>
</tbody>
</table>

Eligible student must work with her/his advisor to complete Fresh Start Academic Forgiveness application and submit completed form to Records office/Enrollment Services. Once approved and applied, the forgiven grades are irrevocable and will not be included in cumulative GPA calculation. The forgiven courses will be included for satisfactory academic progress and will be included for graduation honors calculation. Student can repeat forgiven courses, in accordance with repeat policy. Fresh Start result has no impact on previous probation, dismissal and/or dean’s list status.

Grade Forgiveness

Grade forgiveness is applicable once and only once, for currently enrolled students who have completed at least 15 credit hours of coursework at LCCC with a 2.0 cumulative GPA or higher for all coursework completed since the last term in which forgiveness is sought. The student may petition for Grade Forgiveness by completing the Forgiveness of Grades Petition to have grades of D, F or FAW forgiven and not computed in the grade point average and have the forgiven grade designation (FRG or FRR) substituted for the former grade(s). The student may seek forgiveness for up to 12 semester hours or four (4) courses.

The course(s) for which the student is seeking forgiveness must not be needed for her/his new career or educational goals. These forgiven grades will be included when computing the cumulative point hour average for graduation with honors.

Fresh Start Academic Forgiveness

The Fresh Start Academic Forgiveness is a one-time opportunity that is intended to help LCCC students return to good academic standing after an extended absence. Students may request Fresh Start for any courses in which they earned D, F or FAW prior to her/his return.

Eligibility requirements:

- Currently enrolled.
- Returned after an absence of at least three calendar years (nine consecutive terms).
- Have earned at least 12 letter graded semester hours at LCCC since the return.
- Have earned at least 2.0 cumulative GPA in all courses attempted since the return.
- Have not earned F/FAW/U grade in any courses attempted since the return.
- Has no outstanding financial obligations to LCCC.
- Declared valid/current program/plan.
- No previous Fresh Start granted.
- No earned degrees/certificates prior to Fresh Start petition.

Eligible student must work with her/his advisor to complete Fresh Start Academic Forgiveness application and submit completed form to Records office/Enrollment Services. Once approved and applied, the forgiven grades are irrevocable and will not be included in cumulative GPA calculation. The forgiven courses will be included for satisfactory academic progress and will be included for graduation honors calculation. Student can repeat forgiven courses, in accordance with repeat policy. Fresh Start result has no impact on previous probation, dismissal and/or dean’s list status.

*Grade forgiveness does not supersede requirements for special admission programs at LCCC.

Midterm Grades

Midterm grades reflect the students’ progress through the 50% point in time of the term. In some cases, they represent about half of the grade in the course. In other cases, much of the coursework is yet to be completed and graded. The intent of the midterm grade is to inform students of their current progress to date in the term in an effort to help them stay enrolled in class and improve their success rate. If students
have questions concerning their midterm grade, they should contact their course instructor.

Midterm grades will be reported by the faculty member at the 50% point of the term for all courses except for those considered dynamically dated (sessions less than five weeks in length). Students who are not actively pursuing course completion may receive a grade of FAW (see policy on failure administrative withdrawal) and may be withdrawn from the course at a 0% refund of tuition and fees. Midterm grades will be available to students online through their MyCampus account.

Course instructors have the option of using either the standard grades or satisfactory/unsatisfactory for midterm grades. Standard grades are defined as A, B, C, D, F or FAW. Satisfactory/unsatisfactory grades are defined as S, U or FAW.

Midterm grades are not entered on the student’s permanent record with the exception of grades of W, AU or FAW.

Grade Reports

Grades are available to students online and are recorded on the student’s permanent academic record. Suspected errors must be reported to the Records office within three weeks of the last official day of the semester. Transcripts will be withheld from students with outstanding obligations to the College.

Grade and Course Expectation Appeals

It is the responsibility of faculty to exercise professional judgment in the conduct of courses to which they are assigned, to evaluate the student’s performance, to assure fair and equitable treatment of all students and to strive to communicate requirements and expectations to students in a clear and timely manner. It is the responsibility of students to carry out the requirements and assignments of the course, to recognize that variation in teaching techniques and styles are an integral part of the learning process and to understand that they have an equal share of responsibility for their individual success in the course.

Students who are concerned about unfair treatment have the responsibility to raise the question with the faculty member to obtain clarification of the situation. If the student feels that further review is necessary, she/he may appeal to the academic division dean responsible for the course, who will review all the facts and viewpoints surrounding the matter in an attempt to reach a satisfactory agreement. The dean’s decision may be appealed to the provost/vice president for academic affairs and University Partnership who will review the matter and render a decision. The review by the provost will include communications with other areas of the College and/or the president’s office.

At all levels of review, the rights of a student will be given consideration; however, equal recognition will be given to the need for faculty to contribute to a student’s learning and development using a variety of techniques and approaches.

View the student grievance procedure and online form (p. 333).

Incomplete

A faculty member and a student may agree to enter into a contract whereby a grade of incomplete (I) is reported for a specific course. A contract between the faculty member and student must be negotiated and signed prior to the final examination and the reporting of a grade of I.

Conditions under which an incomplete contract can be formed: The student was unable to complete the course due to circumstances and conditions beyond her/his control and there is a reasonable possibility that the student will be able to complete the course requirements within the contracted time.

Conditions of the contract: The student must meet the conditions of the agreed upon and signed contract.

1. In such cases the student and faculty will sign a contract stating materials and activities the student must successfully complete and the date by which the student must complete those.
2. Faculty member will set the date to complete the course requirements considering the work to be done, her/his professional schedule and the schedule of the student.
3. If the student does not complete the course requirements within the contracted time, an F will be recorded for the course in the permanent record of the student.

Graduation Requirements

Universal Requirements for an Bachelor of Applied Science Degree

1. Earn a minimum of 120 hours of credit, exclusive of college preparatory courses, with a total cumulative average GPA of 2.5 or higher in both the degree area and on all graded coursework.
2. Successfully complete at least 30 LCCC credit hours, exclusive of college preparatory courses, Credit by Examination, Prior Learning Assessment credits, and transfer credits.
3. Complete the requirements of the bachelor of applied science program.
4. Complete all incomplete (I) coursework.
5. Complete a Graduation Candidacy Request and submit it to the Enrollment, Financial, and Career Services no later than Friday of the eighth week of the semester in which graduation requirements will be completed or anytime during the preceding semester.
6. Attend the May commencement exercises when possible. Caps and gowns must be picked up during the published dates/times prior to Commencement in the Bookstore.
7. Students who have not completed a graduation candidacy request, but at the end of a semester meet all qualifications to graduate, may be automatically graduated effective the following term. Students will graduate based on the declared program of study recorded in LCCC’s Student Information System.

Universal Requirements for an Associate Degree

1. Earn a minimum 60 semester hours of credit, exclusive of college preparatory courses, with a total cumulative grade point average of 2.0 (C) or higher in both the degree area and on all graded coursework which includes SDEV 101 (College 101) and ENGL 161 (College Composition I) (or earlier equivalents for students admitted before fall semester 1998).
2. Successfully complete at least 20 LCCC credit hours, exclusive of college preparatory courses, Credit by Examination, Prior Learning Assessment credits, and transfer credit, with at least a 2.0 (C) cumulative point average at the College.
3. Complete the requirements of one of the degree programs as outlined.

4. Complete all incomplete (I) work.

5. Complete an application for associate degree (graduation candidacy request) and submit it to the Enrollment, Financial and Career Services division no later than Friday of the eighth week of the semester in which graduation requirements will be completed or anytime during the preceding semester.

6. Attend the May commencement exercises when possible. Caps and gowns must be picked up during the published dates/times prior to Commencement in the Bookstore.

7. Students who have not completed a graduation candidacy request, but at the end of a semester meet all qualifications to graduate, may be automatically graduated effective the following term. Students will graduate based on the declared program of study recorded in LCCC’s Student Information System.

The College will award one diploma per student for an earned associate of arts or associate of science degree. Any student may pursue any number of areas of concentration in the associate of arts or associate of science degree area, but can receive no more than one associate of arts and one associate of science diploma from LCCC.

Universal Requirements for a One-Year Technical Certificate

1. Earn a minimum 30 semester hours of credit with a total cumulative GPA of 2.0 (C) or higher in both the certificate area and on all graded coursework.

2. Successfully complete at least 10 LCCC credit hours, exclusive of college preparatory courses, Credit by Examination, Prior Learning Assessment credits, and transfer credit, with at least a 2.0 (C) cumulative point average at the College, and be officially registered in the College during the final semester.

3. Complete the requirements of one of the certificate programs as outlined.

4. Complete all incomplete (I) work.

5. Complete an application for a one-year technical certificate (graduation candidacy request) and submit it to the Enrollment, Financial and Career Services division no later than Friday of the eighth week of the semester in which graduation requirements will be completed or anytime during the preceding semester.

6. Attend the May commencement exercises when possible. Caps and gowns must be picked up at least one week prior to Commencement in the Bookstore.

7. Students who have not completed a graduation candidacy request, but at the end of a semester, meet all qualifications to graduate, may be automatically graduated effective the following term. Students will graduate based on the declared program of study recorded in LCCC’s student information system.

Universal Requirements for a Short-Term Technical Certificate

1. Complete all required hours of coursework (16-29) for the specific short-term technical certificate.

2. Successfully complete at least 50 percent of the required certificate coursework at LCCC.

3. Have an earned cumulative GPA of 2.0 or higher at LCCC.

4. Complete all incomplete (I) coursework.

5. Complete an application for a short-term technical certificate (graduation candidacy request) and submit it to the Enrollment, Financial and Career Services division no later than Friday of the eighth week of the semester in which graduation requirements will be completed or anytime during the preceding semester.

6. Students who have not completed a graduation candidacy request, but at the end of a semester, meet all the requirements of a short-term technical certificate, may be automatically graduated effective the following term. Students will graduate based on the declared program of study recorded in LCCC’s Student Information System.

Universal Requirements for Completion Certificates

1. Complete all required hours of course work for the specific completion certificates.

2. Successfully complete at least 50% of the required certificate coursework at LCCC.

3. Have an earned cumulative GPA of 2.0 or higher on all required certificate coursework.

4. Complete all incomplete (I) coursework.

5. Complete an application for a certificate of completion and submit it to the Enrollment, Financial and Career Services division no later than Friday of the eighth week of the semester in which graduation requirements will be completed or anytime during the preceding semester.

6. Students who have not completed a graduation candidacy request, but at the end of a semester, meet all the requirements of a completion certification, may be automatically graduated effective the following term. Student will graduate based on the declared program of study recorded in LCCC’s Student Information System.

Graduation with Honors

To qualify for graduation with honors, a student must have an overall cumulative GPA of 3.5 for all courses taken at LCCC exclusive of college preparatory courses. This GPA will then be recalculated to include the original grades for all forgiven and repeated courses and all grades from all institutions where the student was previously enrolled, exclusive of college preparatory courses, to determine eligibility for graduation with honors. An overall cumulative GPA of 3.5 for all courses included in this recalculation is REQUIRED for graduation with honors. A student deemed ineligible for honors designation has the right to appeal in writing to the Committee on Scholastic Standing. Appeals must be received no later than six weeks after the student’s date of graduation.
Grade Options

Satisfactory/Unsatisfactory

Certain courses (including some developmental education courses and some practical) are graded S/U only and are so indicated in the course descriptions. S means satisfactory and indicates that course credit was earned. U means unsatisfactory and indicates no credit was earned. A student may also elect the S/U grading option in no more than three courses for the associate degree and not more than one course a semester. Any S/U hours beyond this limit will not count toward graduation. The S/U grade option must be declared at the Enrollment, Financial and Career Services division by Friday of the eighth scheduled week of the semester. A student must confirm S/U availability and get the signature of the appropriate academic division dean. The S/U option cannot be reversed to a letter grade once the semester is in session. The S/U option for credit may be used only for electives within a degree or certificate program.

The grade of S will equal an A, B or C. The grade of U will equal a D or F.

Audit

Students choosing to audit a course will pay instruction, general and any special fees, but receive no academic credit or quality assignment grade. The student must attend and participate in class, laboratories, if applicable and examinations. Courses taken on this basis are not included in the computation of cumulative grade point average and are not applicable to graduation requirements or other purposes requiring completion of a course under credit status. Certain courses may not be available under audit status.

Students may file an audit request form in the Enrollment, Financial and Career Services division at the time of registration but must file no later than Friday of the second week of the semester in which the course is being taken. The audit option cannot be reversed to credit once the semester is in session.

Students are cautioned that changing a credit course to audit status may adversely affect financial aid benefits, veterans benefits and graduation status. Students should inquire at the appropriate office regarding potential impact to benefits and/or graduation status.

Audits for credit courses offered differently than the traditional semester calendar will be calculated proportionately to and consistent with institutional policy.

Repeating a Course

A student may repeat a course one time after earning a grade of D, F, FAW, U or W. Before a third attempt, a student must obtain division approval before enrolling in the course. If the subsequent course was taken at LCCC, the grade received for the repeated course will thereafter be substituted for the former grade in calculating the student’s cumulative GPA. If the original grade was an F and a subsequent equivalent course was taken at another institution, the original grade will be treated as a repeated course which will not be included in GPA calculation. However, all original grades will be included when computing cumulative grade point average for graduation with honors. Courses in which a grade of C or better was earned may be repeated for audit only. No credit will be awarded. A course repeated will be considered as any other course in determining the credit hour load to be carried by the student in a semester.

Students using veterans benefits may repeat courses under certain circumstances. Refer to Veterans Standards of Progress (p. 353) or contact the veterans’ certifying team in the Enrollment, Financial and Career Services division for further information.

Request approval to repeat a course at www.lorainccc.edu/repeat (https://www.lorainccc.edu/repeat/).

Schedule Adjustments

Registered students may attend the first class meeting of a course before deciding to complete a schedule adjustment (drop/add), but must make the schedule adjustment prior to the start of the second class meeting and prior to the end of the schedule adjustment period. Students may be subject to fees based on the refund policy.

Administrative Causes for Change of Schedule

If the College causes a change of schedule to be necessary, the student will not be charged. Those instances include courses which are canceled by the College and courses which are altered by the College in respect to meeting time.

Definition of change of schedule: After initial registration for any given semester, any of the following will cause the schedule to be changed at the request of the student – one or more courses are added to the schedule (add); one or more courses are deleted from the schedule (drop); one or more courses are changed from one section to another section (drop/add); upon processing by the Enrollment, Financial and Career Services division, a change of schedule occurs.

Withdrawal

The last day to withdraw from a regularly scheduled semester class is Friday of the 12th week of the semester. The intent to withdraw notification must be submitted via Canvas by the last day to withdraw from the term (published in the academic calendar and typically the 75% point of time in the course). Students in special populations (e.g. students enrolled in allied health and nursing clinicals, College Credit Plus students etc.) may have different withdrawal procedures and should consult with Enrollment Services. Withdrawal from the College consists of withdrawing from all enrolled courses. Students who withdraw from all courses cease to be LCCC students for the semester from which they have withdrawn.

A student who stops attending any class without following the withdrawal procedure continues to be enrolled with the exception of those students who have been issued a failure administrative withdrawal (FAW) grade. For withdrawn classes, a grade of W will be assigned and no refund of instructional or of any other fees will be considered.

Withdrawals from credit courses offered differently than the traditional semester calendar will be calculated proportionately to and consistent with institutional policy.

Impact of Withdrawals

Withdrawal from class(es) may reduce a student’s financial aid funding, veteran’s funding, student account balance or academic plan. Students should check with the following to determine financial and academic impact of a course withdrawal.
Administrative Withdrawal

Students with documented, extenuating circumstances may be eligible for an administrative withdrawal by the dean of the division in which the course or courses are taught. The request for an administrative withdrawal must be made in writing to the dean of the division with any supporting documentation. This must occur before the last official day of the semester. After the last official day of the semester, the registrar will review withdrawal requests.

Aligned with LCCC's records retention policy, administrative withdrawals can be requested within three years of the term in which the course(s) were taken. Per LCCC's records retention policy a student's final transcript is considered final and indisputable within three years following any term of enrollment.

Extenuating circumstances should meet one of the following criteria:

1. Those that interfere with a student's ability to attend class resulting in an inordinate number of absences, or
2. Prevent a student from withdrawing from the class before the withdrawal deadline

Extenuating circumstances should be supported with appropriate documentation, and should follow these guidelines:

- Documentation should be signed, dated, and on organization (employer, doctor, court, etc) letterhead
- Can include (but are not limited to):
  - Court documents
  - Medical documents
  - Signed and dated letter from employer
  - Signed and dated letter from doctor
  - Document issued by a third-party, such as school, hospital, company, etc

Documents that are handwritten and from friend, coworker, neighbor, etc are not accepted as support for an administrative withdrawal. Documents provided must align with the dates and extenuating circumstances stated in this form.

Failure Administrative Withdrawal (FAW)

Students are expected to be “actively pursuing course completion” and participating in the class throughout the semester. Through the midterm grade process, faculty may initiate a failure administrative withdrawal grade of FAW for those students who are not actively participating in the course and who are not providing evidence of course completion. “Active pursuit of course completion” is a combination of attendance, participation, completion of assignments and other activities outlined in the course syllabus. Please note: The “pursuit” measure only applies to effort, not grades — so a student who is showing up and taking tests, but failing them, would not receive an FAW grade and would remain in the class.

Students who receive the FAW grade will have failed the course, owe the course tuition and fees and be administratively withdrawn from the course once midterm grades are posted. The FAW grade will be reflected on the student's official LCCC transcript and will be calculated as an F grade with 0.00 credit point per semester hour. Students who believe they have received the FAW grade in error should contact the course instructor. Students have the right to appeal all grades and details on the appeal process can be found in Grade and Course Expectation and Appeals section of the Catalog.
FINANCIAL AID AND SCHOLARSHIPS

Financial Aid

Financial aid is any form of funding that helps students pay for college. Financial aid consists of federal and state grants, scholarships, incentive awards, student loans and federal work-study. To apply for financial aid, students need to complete and submit the Free Application for Federal Student Aid (FAFSA) annually.

Financial Aid for Part-Time Students

Financial assistance for part-time students (less than 12 credit hours) is available in the forms of federal and state grants, loans and scholarships, including Federal Pell Grant, Federal Direct Loan program (PLUS Loans), LCCC Trustee Scholarship, LCCC Presidential Scholarship and LCCC Incentive Award for non-traditional students.

Applying for Financial Aid

To be considered for federal financial aid programs including the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work-Study and Federal Direct Loans, students must complete the FAFSA.

The FAFSA is available at www.fafsa.gov annually on October 1 for the following award year. LCCC's financial aid award year starts with the summer term, followed by fall and spring. Students are encouraged to complete the FAFSA as early as possible. Some forms of federal need-based financial aid is awarded to eligible students on a first-come, first-served basis. Therefore, LCCC has priority FAFSA filing dates: June 1 for fall semester and October 1 for spring semester.

Eligibility for need-based financial aid programs is determined by household and financial information reported on the student’s FAFSA. Upon successful submission of the FAFSA, the student’s expected family contribution (EFC) will be used to determine the student’s eligibility for the Federal Pell Grant and the Federal Supplemental Educational Opportunity Grant (FSEOG). Students may request to have their eligibility for the Federal Work-Study program and Federal Student Loan(s) by the Financial Services Center.

Once Financial Services receives a complete and valid FAFSA, students are notified. If additional documentation is required by the U.S. Department of Education before financial aid eligibility can be determined, the student will be notified via their LCCC email address. Students are encouraged to review their To Do list in the student center to ensure completion of all financial aid requirements. Monitoring the To Do list will help students avoid untimely delays.

Computers and advice from experts in the Financial Services Center are available on the first floor of the Bass Library. Students and parents can receive assistance with the following: completing the FAFSA on line, Federal Loan requirements, financing options and scholarship information. Detailed information on eligibility for financial aid, the student’s rights and responsibilities, eligible academic programs and other financial aid requirements is available in the Financial Services Center.

Students should follow these steps to apply for financial aid at LCCC:

1. Apply for an FSA-ID (consisting of a username and password) which will serve as your electronic signature. Dependent students will also need to have one parent apply for an FSA-ID (the parent’s information must be reported on the FAFSA).
2. Complete the Free Application for Federal Student Aid.
3. Keep copies of all applications, tax forms and financial documents. (required for all)
4. Check for accurate information on the Student Aid Report (SAR). (required for all)
5. Provide verification documents. (if REQUIRED). (students for whom this is required will be notified via LCCC email and student center to-do list)
6. Submit other requested documents as soon as possible. (as applicable – review Student Center To Do list)

Grants from Federal and State Agencies

Grants are free dollars given to college students by the U.S. Department of Education or the State of Ohio and are awarded based on financial need (as determined by the FAFSA application). LCCC participates in the Federal Pell Grant and the Federal Supplemental Educational Opportunity Grant (FSEOG) programs. FSEOG is awarded to student’s with the highest need (zero EFC) and those who apply earliest for the award year. Students must be enrolled for a minimum of six credit hours in the term for which FSEOG has been awarded. FSEOG is awarded on first-come, first-served basis (based on the current year FAFSA completion date) for those who meet the eligibility criteria.

State of Ohio funding includes The Ohio College Opportunity Grant (OCOG), Ohio War Orphans Scholarship, Choose Ohio First, Nursing Education Loan Program and Ohio National Guard. Information about these programs, eligibility criteria and application process can be obtained at the Ohio Department of Higher Education website, www.ohiohigherered.org (http://www.ohiohigherered.org/).

Scholarships and Incentive Awards

See a complete list of LCCC scholarships and incentive awards (https://www.lorainccc.edu/paying-for-college/scholarship-programs/).

Federal Work-Study Program

The Federal Work-Study (FWS) program provides the opportunity for students to earn money through federally sponsored part-time employment. Employment sites are available at LCCC and off-campus. Eligibility for Federal Work-Study is determined by the results of the FAFSA. Students interested in a FWS position must complete the FAFSA, and apply online via LCCC’s Human Resources website (https://www.lorainccc.edu/human-resources/employment-opportunities-at-lccc/). More information is available at Career Services (https://www.lorainccc.edu/career-services/student-employment/).

Student Loans

LCCC participates in the William D. Ford Federal Direct Loan Program.

Steps for Borrowing a Federal Direct Loan

• Complete current year Free Application for Federal Student Aid (FAFSA).
• Sign the Federal Direct Loan Master Promissory Note (MPN) at www.studentaid.gov (http://www.studentloans.gov/). (http://studentaid.gov)
  • The Master Promissory Note contains important information regarding the student's rights and responsibilities as a federal student loan borrower. Please read all sections, including Section D which contains the promise to pay.

Additional eligibility requirements for Federal Direct Loan borrowers are:

• Must be enrolled (with reported attendance) for a minimum of six credit hours for each semester the student intends to borrow funds.
  • Student loan borrowers who graduate or drop below six credit hours in a term are required to complete a Federal Direct Loan exit counseling session at http://www.studentaid.gov/. (http://www.studentloans.gov/)
  • Must be meeting the College's satisfactory academic progress (https://www.lorainccc.edu/paying-for-college/every-student-should-know/satisfactory-academic-progress-requirements/) standards.
  • Must be meeting all other U.S. Department of Education eligibility requirements.
  • The length of time students have access to subsidized (need-based) loans is limited for new borrowers. Students cannot borrow more than 150 percent of a student's program length. For example, students who enroll in a two-year degree program can only borrow subsidized loans for three years total. Once that limit has been reached, a student may borrow only unsubsidized loans, and will begin to accrue interest on outstanding subsidized loans. For more information, please visit: https://studentaid.gov/understand-aid/types/loans/subsidized-unsubsidized/is-there-a-time-limit-on-how-long-i-can-receive-loans (https://studentaid.gov/understand-aid/types/loans/subsidized-unsubsidized/#is-there-a-time-limit-on-how-long-i-can-receive-loans).

Pell Grant Lifetime Eligibility Used (LEU)

Students are limited to the equivalent of six, full-time years of Pell Grant eligibility. This federal law monitors students’ Pell Grant Lifetime Eligibility Used (referred to as LEU). The Pell Grant LEU calculations apply to all undergraduate coursework including other schools the student attended or will transfer to. More information is available: https://studentaid.gov/understand-aid/types/grants/pell/calculate-eligibility (https://studentaid.gov/understand-aid/types/grants/pell/calculate-eligibility/).

Financial Aid Disbursement and Refund Policies

Recipients of Title IV financial aid (Federal Pell Grant, Federal Direct Loan program, Federal Supplemental Educational Opportunity Grants, Federal Work-Study) must enroll in courses for credit that apply to the student's program of study (audit enrollments are not eligible for funding) and must be LCCC degree-seeking students.

Attendance will be verified for each credit class in which a student is enrolled before any Title IV financial aid is disbursed.

Financial aid will not be disbursed for any credit hours for which class attendance cannot be verified or that do not count towards the student's program of study. The student will be responsible for payment for all charges for which financial aid cannot be applied.

Pell Grant Disbursement

For Pell Grant recipients, enrollment status for each semester is determined by combining the total number of credit hours enrolled that apply to the student's program of study for all sessions in the semester on the 14th calendar day from the start of the semester. Classes that do not count towards the student's program of study or that added after the 14th calendar day from the start of the semester will not count towards the student's enrollment status and are not eligible for Pell Grant payment.

Enrollment status is defined as follows.

• Full-time (12 credit hours or more).
  • Three-quarter-time (9, 10 or 11 credit hours).
  • Half-time (6, 7 or 8 credit hours).
  • Less than half-time (5 credit hours or less).

Student Loan Disbursement

In an effort to incent student success and completion of courses, student loans will be disbursed in two payments during each term. The payments will be based on commencement of attendance and the midterm grades. For full-term classes, the disbursements will occur about the fifth and 10th week of fall and spring semesters. At the first disbursement, student attendance must be reported by the instructor and the student must currently be enrolled in a minimum of six credit hours. To receive the second loan disbursement, students must be currently enrolled and actively pursuing course completion in a minimum of six credit hours. Final grades of W, F, U or a midterm/final grade of FAW will not be counted towards the total hours for the minimum six credit hour disbursement requirement. For more information: (https://www.lorainccc.edu/paying-for-college/loans/#disbursement).

Permission Required to Use Federal Financial Aid for Educationally-Related Activities

Students wishing to use the available balance of their federal financial aid for other educationally-related charges after tuition and fees charges are satisfied may do so by completing an electronic permission slip. These charges may include purchases made in the LCCC Bookstore, graduation fees, child care fees, campus meal tickets, bus passes, emergency loans, non-credit course fees, library fines and parking fines. Students may rescind this authorization at any time during the award year by visiting the LCCC Financial Services Center and completing a "Cancement of Ppermision for Bbookstore and Oother Ocharges" form. The electronic student permission form is found in the student’s MyCampus account and detailed directions can be found at https://www.lorainccc.edu/paying-for-college/financial-aid/using-financial-aid-for-books-and-other-expenses-permission-slips/.

Financial Aid Refunds

Federal financial aid funds are first applied to any unpaid tuition and fees, then to books and supplies and other applicable charges for which the student has given authorization. (See above and “Bookstore Purchases with Financial Aid: https://www.lorainccc.edu/campus-technology/mycampus-login/bookstore-purchases-with-financial-aid/). The balance of the federal financial aid is disbursed to the student in check form after the fifth week of class for Pell Grant and Federal Supplemental Opportunity Grant (FSEOG). Students are responsible for ensuring their contact information, including mailing address, is up-to-date in the student center of MyCampus.
Students may be required to complete their admission application (including all high school and college transcripts) prior to the release of federal refunds. It is recommended that students check their To Do list in the student center of MyCampus for outstanding items.

**Return of Title IV Funds for Students Who Completely Withdraw**

Students who completely withdraw from school or do not successfully complete any courses during a term are subject to a Return of Title IV Funds calculation according to Department of Education regulations.

This policy assumes students earn aid based on the period of time enrolled/attending the semester. Unearned Title IV funds, other than federal work-study, must be returned to the U.S. Department of Education. During the first 60% of the semester, students earn Title IV funds in direct proportion to the length of time each student remains enrolled. Students remaining enrolled beyond the 60% point of the semester earn all aid for the semester.

Students return their share of unearned aid attributable to a loan under the terms and conditions of the promissory note. Students return their share of unearned aid attributable to a grant from the student’s own funds. LCCC may allow students to repay unearned aid attributable to a grant under a payment arrangement satisfactory to the institution. For students officially withdrawing (completely) from LCCC, the withdrawal date determination is the date students initiated the withdrawal. This date is indicated on the withdrawal form.

LCCC’s R2T4 policy can be found online at https://www.lorainccc.edu/paying-for-college/return-title-iv-funds-policy/.

**The Withdrawal Process is Initiated in Canvas (http://canvas.lorainccc.edu/)**

For students not providing notification of a withdrawal, the date of withdrawal determination is the last date of attendance or the midpoint of the semester. Specific examples of the Return of Title IV Funds Policy are available upon request from the financial services representative in the Financial Services Center.

If you withdraw from all courses prior to disbursement, a calculation is completed to determine the amount of earned aid for the term. This disbursement may help to reduce your balance for the withdrawn term. This disbursement is called a post-withdrawal disbursement and will be calculated within 45 days from notification of withdrawal. If you are eligible for a post-withdrawal disbursement, you will have funds applied to your account in this order: Pell, SEOG, Direct Subsidized Loan, Direct Unsubsidized Loan, Direct PLUS Loan. If you qualify for a post-withdrawal disbursement, any funds you are eligible to receive, based on the return calculation, will be applied to your account within 14 days.

**Tuition Reimbursement**

Many employers offer tuition reimbursement programs to their employees, meaning the employer pays for college coursework. Students are encouraged to check with their employer for more information about tuition reimbursement opportunities. For information about transferring tuition reimbursement from your employer to LCCC, please contact the Bursar’s office at (440) 366-4045.

**Satisfactory Academic Progress Requirements**

Students receiving federal financial aid (i.e., Federal Pell Grant, Federal Work Study, Federal Stafford Loan program, Federal Parent PLUS Loan to Undergraduate Students, Federal Supplemental Opportunity Grant) are subject to satisfactory academic progress (SAP) requirements, which are governed by the United States Department of Education.

LCCC’s Satisfactory Academic Progress can also be found online at https://www.lorainccc.edu/paying-for-college/every-student-should-know/satisfactory-academic-progress-requirements/.

Standards of Satisfactory Academic Progress at LCCC are measured using the following criteria:

1. **Credit Hours Completed Requirement**: students must complete a predetermined percentage of the credit hours for which the recipient originally registered. W (withdrawal), I (incomplete), NR (not recorded), U (unsatisfactory), F (failure) and FAW (failure administrative withdrawal) are considered not completed. A repeated course with a grade of D, F, FAW, I, U, NR or W is considered not completed.

2. **The completion rate requirement is determined by the cumulative number of semester hours attempted according to the chart below:**

<table>
<thead>
<tr>
<th>Number of Semester Hours Attempted</th>
<th>REQUIRED Minimum Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-29</td>
<td>50%</td>
</tr>
<tr>
<td>30-44</td>
<td>60%</td>
</tr>
<tr>
<td>45 or more</td>
<td>70%</td>
</tr>
</tbody>
</table>

The completion rate is calculated by dividing the completed hours into the attempted hours. A recipient will be determined ineligible for subsequent aid if the recipient does not complete the above minimum required percentage of semester credit hours for each range of completed semester credit hours. A recipient may regain eligibility by completing, at the recipient’s own expense, the required number of credit hours needed to meet the minimum required completion rate for the next semester. This satisfactory progress requirement includes all academic terms a recipient has attended LCCC.

A student may repeat a course in which less than a C grade was earned. If the subsequent course was taken at LCCC, the grade received for the repeated course will thereafter be substituted for the former grade in calculating the students cumulative GPA. The repeated courses will count toward the attempted hours in the completion rate analysis.

LCCC does not round up (i.e. 49.99% does not meet the 50% minimum completion rate).

3. **Maximum Time Frame requirement**: the amount of time in which a student completes his/her educational program must be no longer than 150 percent of the published credit hour length of the educational program.

   Example: a recipient must complete an associate degree requiring 65 credit hours for completion in a maximum time frame of 98 credit hours; a recipient must complete a one-year technical certificate requiring 34 credit hours for completion in
a maximum time frame of 51 credit hours or lose the Title IV financial aid. A recipient may be eligible to complete more than one associate degree and/or certificate program at LCCC pending approval through the appeal process from the Satisfactory Academic Progress Review Committee. There is no limit to how many times a student can change majors as this is evaluated through the appeal process on a case-by-case basis. An evaluation from the LCCC Records office will be completed and the 150 percent time frame will be applied to the remaining credit hours required to complete additional degrees. The time-frame policy includes all academic terms a recipient has attended LCCC plus all transferred credit hours.

**Appeal Process for Students Who Do Not Meet SAP Requirements**

Students who are not meeting the standards of Satisfactory Academic Progress at the conclusion of a term (after final grades are submitted) will be notified of the need for an appeal in order for future financial aid eligibility to be determined. Notification will be sent via email to the student’s LCCC email account. Students are encouraged to respond to the notification and submit their SAP Appeal Request Form as soon as possible, as a delay in submission may delay the committee’s ability to review before the next term starts.

The student must submit a Satisfactory Academic Progress Appeal Request to the Financial Services Center. Students requesting an appeal to the policy are encouraged to submit documentation to support their request, and all relevant information must be included in order to have their situation reviewed by the committee. The committee will determine if the satisfactory academic progress appeal request is approved, denied or if an academic plan is required in order for approval. Students who are given an academic plan are expected to complete the courses as outlined on their plan.

The Satisfactory Academic Progress Appeal Request Form is available at the Financial Services Center on the first floor of Bass Library or online at https://www.lorainccc.edu/paying-for-college/forms-financial-aid/sap-appeal-form/. Please note that an appeal does not indicate approval of Title IV aid. Students are expected to complete their coursework and complete the educational program within the designed time frame for continued receipt of federal aid. Federal aid cannot be released to a student’s account until all components of the satisfactory appeal process are complete, including submitting an appeal, an academic plan (if required) and attending any required workshops.

Failure to complete the SAP process by the end of the term for which the appeal was filed will result in loss of Title IV funding for that term.

**Developmental Education Coursework**

A student enrolled in an eligible program for federal financial aid is permitted to attempt a maximum of 30 academic foundations courses during their enrollment at LCCC for payment under federal financial aid. The academic foundations courses will be counted in the grade point average calculation (except those using a pass/fail grading system), completion rate and towards the maximum time frame.

Academic foundations courses are provided for students who need to refresh or strengthen academic skills. Courses are available in mathematics, English/writing, reading and study skills.

**Tuition and Fees**

Current tuition and fees are published online each semester. Fees are subject to change without prior notice. All debt obligations are payable in full on or before the designated fee due date. Tuition is subject to change. Tuition fee rates vary dependent upon the residency classification of each individual student as defined by the State of Ohio. Categories of residency are:

- Lorain County resident.
- Out-of-county, Ohio resident.
- Out-of-state and/or international resident.

**Blanket Tuition Program**

LCCC’s innovative blanket tuition program provides students with the opportunity to sign up for up to 18 credit hours and pay only for 13 credit hours. Approximately 24 percent of LCCC students use the blanket tuition program.

**Interest-Free Tuition Installment Plan**

The LCCC tuition installment plan allows the student to postpone payment of certain fees. For credit class enrollments the student will be billed for one-third of the total amount, deferred on three separate occasions, after the beginning of the academic term. The first third must be paid by the last day of the fourth week of the academic term; the second third must be paid by the last day of the eighth week of the academic term; and the final third must be paid by the last day of the 12th week of the academic term.

**Eligibility**

For a student to be eligible to participate in the plan, the student must:

- Be an LCCC student.
- Have no past due debt with LCCC.
- Be enrolled in a credit course (no minimum required).
- Be enrolled in a non-credit course lasting 10 weeks or longer, with a fee equal to or greater than $800.
- Not have defaulted on the Tuition Installment Plan within one year preceding the current application.

(Note: A default on the tuition installment plan makes an applicant ineligible to participate for one full year following the date of default unless a reinstatement fee of $25 is paid with the new application.)

**Fees Covered by the Tuition Installment Plan**

- Semester hour fees and eligible non-credit course fees.
- General fees.
- Laboratory fees.
- Technology fees.
- Schedule adjustment fees.
- Other special fees associated with course instruction.
- Plan application fee.

**Fees NOT Covered:**

- Reinstatement fees.
- Transcript fees.
- Non-Credit instructional fees (except as indicated above under Eligibility).
Refunds for credit courses offered differently than the traditional semester calendar (noted above) will be calculated proportionately to and consistent with institutional policy.

Cost of the Plan
The Tuition Installment Plan is an interest-free plan. The processing fee for participating is $15 per application.

Transcript Requests
An official transcript of a student’s academic record is issued upon the authenticated request of the student only. Any outstanding obligation due to the College must be satisfied prior to the issuance of a transcript. When prior obligations are settled by check or money order, an official transcript will be issued only after the check or money order has cleared the bank. Official transcripts can be requested online (https://www.lorainccc.edu/campus-technology/mycampus-login/transcript-request-my-campus-instructions/) or in the Enrollment, Financial and Career Services division. Unofficial transcripts are available for students online. Accessing requires appropriate login.

Non-credit transcripts can be printed by logging into Canvas Catalog. In catalog, the learner can view a transcript of all the enrolled information. It will be listed as in progress, completed, and not completed.

Refunds
A refund will first be applied to any outstanding balance owed to the College. All refunds are paid by college check within two to four weeks. No refund will be made in cash. A refund will be issued to the student or the original payer only after the initial check has cleared the bank. To initiate a refund of credit fees paid for any term, a student must complete the withdrawal process as prescribed by the College. Refunds for a complete or partial withdrawal or schedule adjustment will be granted as stated below.

LCCC Checks Reported Missing
The replacement check process will begin up to two weeks from the date of the original check reported as missing.

Fall and Spring (15-week term) Semesters
Refund of fees paid will be calculated on the following basis:

- 100 percent if the class is canceled by the College.
- 100 percent refund if the course is dropped by the student before the first scheduled day of the semester.
- 80 percent refund if the schedule adjustment or withdrawal is initiated during the first eight calendar days of the semester.
- 40 percent refund if the withdrawal is initiated during the period between the ninth and 15th calendar days of the semester.
- No refund if withdrawal is initiated after the 15th calendar day of the semester.

Refunds for credit courses offered differently than the traditional semester calendar (noted above) will be calculated proportionately to and consistent with institutional policy.

Refund calculation for students who adjust their schedule:

- If the schedule adjustment results in an increased number of scheduled credit hours, students will pay the fees for the additional hour(s).
- If the schedule adjustment results in a decreased number of scheduled credit hours, students will be refunded on the differential number of hours at the refund percentage in effect on the calendar day that the schedule adjustment was initiated by the student in the Enrollment, Financial and Career Services division.
- If the schedule adjustment results in no change in the number of scheduled credit hours, there will be no refund nor any additional instructional or general fees charged through the 14th day of the semester. Laboratory and/or special fee adjustments will be similarly calculated.

Summer Terms
Refund of fees will be calculated on the following basis:

- 100 percent if the class is canceled by the College.
- 100 percent if the withdrawal or schedule adjustment is initiated before the first day of the scheduled term.
- 80 percent if the withdrawal or schedule adjustment is initiated during the first four calendar days of the scheduled term (eight-week term).
- 40 percent if the withdrawal or schedule adjustment is initiated during the period between the fifth and seventh calendar days of the scheduled term (eight-week term).
- No refund if withdrawal or schedule adjustment is made after the seventh calendar day of the scheduled term.

Non-credit classes, Workshops, Seminars:
Refund of fees will be calculated on the following basis:

- 100 percent if the class is canceled by the college.
- 100 percent if dropping of a class is seven calendar days before the first class meeting.
- No refund if the drop is initiated six calendar days before the first class meeting or later.
- Non-instructional fees are non-refundable

Definitions for Credit Classes
“Calendar day” is defined as any one of the seven days of the week.

“For first scheduled day of the semester” is defined as the day classes begin as published in the college calendar.

“Schedule adjustment” (drop/add). After registration and before the eighth calendar day of the semester, the following could happen:

- One or more courses are added to the schedule.
- One or more courses are dropped from the schedule.
- One or more courses are changed from one section to another section.
- Schedule adjustment transactions do not result in a transcript notation.

“Withdrawal” is defined as the removal of one or more courses from a student’s schedule on or after the eighth calendar day of the semester. A challenge of the refund amount must be made in writing and mailed to
the refund committee or delivered to the Enrollment, Financial and Career Services division.

**Tuition Appeals Policy**

Refunds for special circumstances will be accepted in writing to the LCCC Tuition Appeals Committee. Please provide supporting documentation that supports the request for refund along with the written refund request. Refund appeals can be delivered to the Enrollment, Financial and Career Services division front counter in the LCCC Bass Library Building during open hours or can be mailed to:

Tuition Appeals Committee  
Lorain County Community College  
1005 North Abbe Road  
Elyria, OH 44035

You can submit your request online using this form:

https://www.lorainccc.edu/admissions-and-enrollment/tuition-appeals-request/

**Fees**

**General Fee**

Assessed per credit hour to help defray the cost of the parking lot, roadway maintenance and renovation.

**Career Services Advantage Fee**

In an effort to help students choose a program of study earlier and encourage the completion of associate degrees, Lorain County Community College provides enhanced personalized support services directed at connecting students to career goals.

**Technology Fee**

Assessed per credit hour for the use, maintenance and upgrade of college equipment, systems, materials and supplies.

**Special Fee**

Where laboratory, special facilities or services are **REQUIRED** to accommodate instructional needs, a special fee may be assessed. These fees are listed in each semester’s class schedule.

**Cross Registration Fee**

Tuition fee waivers will be processed on a space-available, first come, first served basis for students participating in the Northeast Ohio Council on Higher Education’s Cross Registration program (page 24). The tuition fee will be waived but a student must pay the general fee, special fees, books and materials.

**Locker Rental Fee**

A fee is charged for locker rental on a per semester or multiple-semester basis, should a student desire a locker.

**Proficiency Examination Fee**

A service fee for each examination equal to one credit hour at the student’s tuition assessment rate must accompany each petition.
**Directory**

**Administration**

**President**
Marcia J. Ballinger

**Vice President, Administrative Services/Treasurer**
Jonathan M. Volpe

**Provost/Vice President for Academic Affairs and University Partnership**
Jonathan N. Dryden

**Vice President, Enrollment Management and Student Services**
Marisa Vernon-White

**Vice President, Strategic and Institutional Development**
Tracy A. Green

**Interim Associate Provost, University Partnership**
Brenda Pongracz

**Academic Deans**

**Dean, Arts and Humanities Division**
Brenda Pongracz

**Dean, Engineering, Business and Information Technologies**
Kelly Zelesnik

**Interim Dean, Health and Wellness Sciences Division**
Lisa T. Augustine

**Dean, Library and eLearning**
Karla Aleman

**Dean, Science and Mathematics Division**
Aaron Weiss

**Dean, Social Sciences and Human Services Division**
Denise M. Douglas

**Full-time Faculty Directory**

For a full listing of faculty and staff visit: [https://apps.lorainccc.edu/faculty_staff/directory.aspx](https://apps.lorainccc.edu/faculty_staff/directory.aspx)

**A**

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ABOUT THE CATALOG

This catalog contains official information for the 2020-21 academic year. While every effort is made to provide accurate and up-to-date information, the College reserves the right to repeal, change or amend rules, regulations, tuition and fees, and may withdraw, add to, or modify the courses listed herein. Courses may be closed because of limited resources or canceled on account of unavailability of faculty or insufficient enrollment.

This catalog is provided for informational purposes and does not constitute a contract with you as a student. Lorain County Community College does not guarantee award of a degree by the mere enrollment in its academic programs. Lorain County Community College will not award a degree absent the successful completion of all requirements as determined in the sole academic judgment of Lorain County Community College. Disputes concerning the College's exercise of its academic judgment must be resolved through the College's internal grievance mechanisms. By enrolling, students agree that the College's internal grievance proceedings are the sole means for resolution of disputes over the College's exercise of its academic judgment, and further agree to abide by the decisions arrived at as a result of that grievance process.

Assignment of Catalog

Each student's academic requirements will be based on the catalog, which is in effect when the student is initially admitted to Lorain County Community College for a maximum of eight years.

Students may elect to complete their work under a more recent catalog than originally assigned, but must comply with all of the new requirements relevant to their program since that time.

Students who extend their study more than eight years from the date of initial admission will be subject to a new Catalog. Upon completion of the eighth catalog year, the student will be assigned to the most recent catalog and an additional eight years to complete their study under this new catalog.

Students who intend to earn a degree from Lorain County Community College are urged to complete their programs within five years from the time they begin. Currency of skill and knowledge is crucial for success. Some technical programs require completion within a shorter period because of accreditation, certification or licensure requirements. Consult with Enrollment Services or the academic division for more information about the time completion requirements for your program.

Students transferring to Lorain County Community College who maintain continuous enrollment (defined as attending at least two terms in an academic year) in a public higher education institution will have the option to select the course equivalencies documented and certified in Transferology (www.transferology.com) as of the point of initial enrollment or at the point of transfer.

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