WELDING TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #6410

Effective May 2022

Division of Engineering, Business and Information Technologies (http://catalog.lorainccc.edu/academic-programs/engineering-business-information-technologies/)

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		**Hours**
MTHM 155	TECHNICAL MATHEMATICS I	4
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY [2]	1
TECN 111	TECHNICAL PROBLEM SOLVING	3
WTEC 108	OXY-FUEL WELDING AND CUTTING [3]	2
WTEC 111	WELDING SPECIFICATIONS/PRINT READING	2
WTEC 116	BASIC SHIELDED METAL ARC WELDING [3]	3
	Hours	**15**
Spring Semester		
CADD 111	INTRODUCTION TO COMPUTER AIDED DRAFTING [3]	2
EMCH 112	ENGINEERING MATERIALS	3
ENGL 161	COLLEGE COMPOSITION I	3
TECN 131	MANUFACTURING PROCESSES I [3]	3
Social Science Elective		3
	Hours	**14**
Summer Semester		
WTEC 112	WELDING CODES AND STANDARDS	2
WTEC 212	WELDING FABRICATION, LAYOUT/DESIGN	4
	Hours	**6**
Second Year		
Fall Semester		
AETC 111	ROBOTICS/AUTOMATED MANUFACTURING	3
ENGL 164	COLLEGE COMPOSITION II WITH TECHNICAL TOPICS [1]	3
PHYC 150	GENERAL PHYSICS I [1]	4
Arts and Humanities Elective		3
	Hours	**13**
Spring Semester		
WTEC 216	WIRE FED PROCESSES [1]	3
WTEC 217	GAS TUNGSTEN ARC WELDING [1]	3
WTEC 219	ADVANCED ARC WELDING [1,4]	3
WTEC 221	WELD QUALITY INSPECTION [1,4]	3
	Hours	**12**
	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 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).

Arts and Humanities Electives

Code	Title	Hours
ARTS 243G	ART HISTORY I	3
ARTS 244G	ART HISTORY II	3
ARTS 245G	WORLD ART	3
ARTS 246	HISTORY OF PHOTOGRAPHY	3
ARTS 254	HISTORY OF AMERICAN ARCHITECTURE	3
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

Code	Title	Hours
HSTR 151G	CIVILIZATION I	3
HSTR 152G	CIVILIZATION II	3
HSTR 161	UNITED STATES I	3
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

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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/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