

# COMPUTER INFORMATION SYSTEMS - SOFTWARE DEVELOPMENT, ASSOCIATE OF APPLIED BUSINESS

Curriculum Code #6618

Effective May 2023

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

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		Hours
CISS 121	MICROCOMPUTER APPLICATIONS I	3
CISS 125	OPERATING SYSTEM INTERFACES <sup>1</sup>	3
CMMC 151	ORAL COMMUNICATION	3
ENGL 161	COLLEGE COMPOSITION I	3
Select one from the following list:		3-4
MTHM 155	TECHNICAL MATHEMATICS I	
MTHM 158	QUANTITATIVE REASONING <sup>5</sup>	
MTHM 171	COLLEGE ALGEBRA <sup>5</sup>	
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY <sup>3</sup>	1
<b>Hours</b>		<b>16-17</b>

Spring Semester		Hours
CISS 145	LOCAL AREA NETWORKS <sup>2</sup>	4
CISS 160	INTRODUCTION TO PROGRAMMING IN C# <sup>2</sup>	4
CISS 216	WEB DEVELOPMENT <sup>2</sup>	3
Science elective (from Transfer Module) <sup>5</sup>		3-4
<b>Hours</b>		<b>14-15</b>

## Second Year

Fall Semester		Hours
ACTG 151	ACCOUNTING I - FINANCIAL	4
BADM 155	INTRODUCTION TO BUSINESS	3
or BADM 171	ADMINISTRATION or INTRODUCTION TO E-COMMERCE	
CISS 143	DATABASE DESIGN AND IMPLEMENTATION <sup>2</sup>	3
CISS 222	ADVANCED PROGRAMMING IN C# <sup>2</sup>	3
PSYH 151	INTRODUCTION TO PSYCHOLOGY	3
or SOC 151G	or INTRODUCTION TO SOCIOLOGY	
<b>Hours</b>		<b>16</b>

## Spring Semester

ACTG 152	ACCOUNTING II - MANAGERIAL <sup>2</sup>	4
CISS 226	INTRODUCTION TO PROGRAMMING IN JAVA <sup>2</sup>	3
CISS 243	WEB DATABASE INTEGRATION <sup>2</sup>	4
CISS 247	SYSTEMS DEVELOPMENT <sup>2</sup>	3
CISS 287	WORK-BASED LEARNING I - CISS <sup>4</sup>	1
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>61-63</b>

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.

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 174 or MTHM 155 & MTHM 156 for the bachelor degree.

Program Contact(s):

**Mark Harms**

440-366-7023

[jharms@lorainccc.edu](mailto: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/programming-and-software-development/associate-of-applied-business-in-software-development/>)

Program Learning Outcomes

1. Design software solutions for business applications
2. Develop software programs and components
3. Demonstrate fundamental techniques and skills utilizing business computer applications, software development, and database management systems
4. Demonstrate Information Technology infrastructure knowledge, techniques, and fundamental skills utilizing operating systems and networks