# WELDING TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

#### Curriculum Code #6410

#### Effective May 2024

Division of Engineering, Business and Information Technologies (http:// catalog.lorainccc.edu/academic-programs/engineering-businessinformation-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 <sup>2</sup>	1	
TECN 111	TECHNICAL PROBLEM SOLVING	3	
WTEC 108	OXY-FUEL WELDING AND CUTTING <sup>3</sup>	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 <sup>3</sup>	2	
EMCH 112	ENGINEERING MATERIALS	3	
ENGL 161	COLLEGE COMPOSITION I	3	
TECN 131	MANUFACTURING PROCESSES I <sup>3</sup>	3	
Social Science Elective <sup>5</sup>			
	Hours	14	
Summer Semester			
WTEC 112	WELDING CODES AND STANDARDS	2	
WTEC 212	WELDING FABRICATION, LAYOUT/DESIGN	4	
	Hours	6	
Second Year			
Fall Semester			
ENGL 164	COLLEGE COMPOSITION II WITH TECHNICAL TOPICS <sup>1</sup>	3	
AETC 115	INDUSTRIAL ROBOTICS I	3	
PHYC 150	GENERAL PHYSICS I	4	
Arts and Humanities Elective <sup>4</sup>			

	Total Hours	62
	Hours	13
WTEC 288	WORK BASED LEARNING II - WTEC	1
WTEC 221	WELD QUALITY INSPECTION <sup>1</sup>	3
WTEC 219	ADVANCED ARC WELDING <sup>1</sup>	3
WTEC 217	GAS TUNGSTEN ARC WELDING <sup>1</sup>	3
WTEC 216	WIRE FED PROCESSES <sup>1</sup>	3
Spring Semest	ter	
	Hours	14
WTEC 287	WORK-BASED LEARNING I - WTEC	1

#### 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

4

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

## Select any Arts and Humanities Ohio Transfer 36 (http:// catalog.lorainccc.edu/academic-information/transfer-modulerequirements/) course.

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Select any Social Science Ohio Transfer 36 (http://catalog.lorainccc.edu/ academic-information/transfer-module-requirements/) 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):

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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-andcounseling/).

# 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.

Credit for Prior Learning (PLA) options may be available for your program. For more information, please visit our website: www.lorainccc.edu/PLA (http://www.lorainccc.edu/PLA/)

- 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