MANUFACTURING ENGINEERING TECHNOLOGY - COMPUTER AIDED MACHINING MAJOR, ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #6213

Effective May 2024

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

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	
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Fall Semester		Hours
CADD 111	INTRODUCTION TO COMPUTER AIDED DRAFTING $^{\mathrm{1}}$	2
ENGL 161	COLLEGE COMPOSITION I	3
MTHM 155	TECHNICAL MATHEMATICS I	4
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY ³	1
TECN 111	TECHNICAL PROBLEM SOLVING	3
TECN 115	INDUSTRIAL BLUEPRINT READING	2
TECN 131	MANUFACTURING PROCESSES I 1	3
	Hours	18
Spring Semester	r	
CAMM 111	INTRODUCTION TO COMPUTER	2
	NUMERICAL CONTROL ²	
EMCH 112	ENGINEERING MATERIALS	3
ENGL 164	COLLEGE COMPOSITION II WITH TECHNICAL TOPICS ²	3
MTHM 156	TECHNICAL MATHEMATICS II ²	4
QLTY 122	BASIC QUALITY TOOLS AND APPLICATIONS	3
TECN 132	MANUFACTURING PROCESSES II ²	3
	Hours	18
Second Year		
Fall Semester		
CAMM 215	ADVANCED CNC MILLING MACHINES ²	3
PHYC 150	GENERAL PHYSICS I ²	4
TECN 121	FLUID POWER ¹	3
CAMM 287	WORK BASED LEARNING I - CAMM ²	1

Arts and Humanities Elective ⁴		3
	Hours	14
Spring Semest	ter	
CAMM 225	ADVANCED CNC LATHES ²	3
CAMM 235	CAD-CAM GRAPHICS ²	3
ELCT 111	ELECTRICAL CIRCUITS I	3
TECN 245	GEOMETRIC DIMENSIONING AND TOLERANCING ²	2
Social Science	Elective ⁵	3
CAMM 288	WORK BASED LEARNING II - CAMM ²	1
	Hours	15
	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.

4

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

5

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

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-and-counseling/).

More program information can be found on our website. (https:// www.lorainccc.edu/engineering/ manufacturing-engineering/associateof-applied-science-in-manufacturingengineering-technology-computer-aidedmachining/)

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/)

Program Learning Outcomes

- 2 Manufacturing Engineering Technology Computer Aided Machining Major, Associate of Applied Science
- 1. Demonstrate the ability to write and troubleshoot/debug CNC programs for appropriate ET/mechanical design applications.
- 2. Demonstrate the ability to problem solve and make recommendations for improvement, both orally and through written technical reports.
- 3. Demonstrate ability to explore multiple options to achieve design goals.