



## **Industrial Manufacturing Engineering Technology A.A.S.**

Career Community: Electrical and Manufacturing

Curriculum Code: 0110

Effective: Fall 2023 – Summer 2028

### **Description**

Industrial manufacturing engineering technology is the study of a variety of technologies used in today's industry. Physical and mental skills are required including mechanical skills, problem-solving abilities, and dexterity. Employment opportunities are with industries that have a variety of work processes and/or trades. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

### **Milestone**

In addition to the required General Education courses in Math and English, completion of METM 108 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

### **Contact Information**

For further information, including career options, course substitutions and waivers, etc., contact the Trades Technology Program, West Campus Building, Room M103, telephone number 517-483-5338 or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

### **General Education - Applied Degrees, Recommended Courses**

(For the full list of options, see [General Education](#))

- English Composition or Applied English  
Program of Study Required Courses will meet this requirement
- English Composition (second course) or Communication or Applied Communication  
Program of Study Required Courses will meet this requirement
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences – *Select one*  
GEOG 200, World Regional Geography, 4 credits / 4 billing hours  
HUMS 160, Mythology, 4 credits / 4 billing hours  
POLS 260, Comparative Political Systems, 3 credits / 3 billing hours
- Mathematics or Applied Mathematics  
Program of Study Required Courses will meet this requirement
- Natural Sciences Lab or Applied Science and Technology Lab  
Program of Study Required Courses will meet this requirement

## Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
COMM 130	Fundamentals Public Speaking	3 / 3
COMM 280	Intercultural Communication	3 / 3
ELTE 110	Practical Electricity	4 / 6
ENGL 121	Composition I	4 / 4
ENGL 122	Composition II	4 / 4
MATH 126	Precalculus	5 / 5
METD 100	Basic Mechanical Drafting	3 / 4
METD 110	Mechanical CAD Drafting I	4 / 6
METD 130	Geometric Dimension/Tolerance	4 / 6
METD 220	Basic Unigraphics/NX	4 / 6
METM 108	Machine Tool Operations	4 / 6
METM 112	Introduction to CNC Machining	4 / 6
METM 190	Metallurgy and Heat Treatment	4 / 6
METM 220	Basic Mastercam	4 / 6
METS 115	Intro to Mechanical Systems	4 / 6
TECH 102	General Industry Safety	2 / 3

## Minimum Total Credit Hours

63 credits / 83 billing hours

## Recommended Course Sequence

Semester I
COMM 130
ELTE 110
ENGL 121
METD 100
METD 130
TECH 102

Semester II
COMM 280
METD 110
METD 220
METM 108 - Milestone

Semester III
ENGL 122
MATH 126
METM 112
METM 190

Semester IV
Gen Ed - Humanities and Fine Arts or Social Sciences or Applied Social Sciences
METM 220
METS 115

*LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.*