## LANSING COMMUNITY COLLEGE

**Computer, Engineering/Manufacturing Industrial Technologies** 

Curriculum Code: 0110 (Effective Fall 2018 – Summer 2023)

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

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.

## For More Information

Contact the <u>Trades Technology Program</u>, 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.

Semester I	Course Title	Prerequisites	Credit/Billing Hours		
Communication Core Area - Select 1					
COMM 130	Fund of Public Speaking	Reading Level 5 and Writing Level 6	3/3		
Writing Core Area - Select 1					
ENGL 121	Composition I	Reading Level 5 and Writing Level 6 or (Reading Level 4 and Writing Level 4 and ENGL 099 concurrently)	4 / 4		
Program of Study Requirements					
ELTE 102	Industrial/Construction Safety	Reading Level 3 and Writing Level 2	2/3		
ELTE 108 (1 <sup>st</sup> 8 weeks)	Practical Electricity I	Minimum 2.0 in (ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	2/3		
METD 100	Basic Mechanical Drafting	Reading Level 3 and Writing Level 2 and (Math Level 3 or minimum 2.0 in MATH 105 or MATH 106)	3 / 4		
METD 105	PC Applications for Technology	None	3 / 4		
	17 / 21				

Semester II	Course Title	Prerequisites	Credit/Billing Hours		
Global Perspectives and Diversity Core Area - Select 1					
POLS 260	Comparative Political Systems	Reading Level 5 and Writing Level 6	3/3		
Program of Study Requirements					
COMM 280	Intercultural Communication	Reading Level 5 and Writing Level 6	3/3		
METD 110	Mechanical CAD Drafting I	Minimum 2.0 in (METD 100 or Mechanical Drafting Placement Test 80%) and Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4/6		
METM 108	Machine Tool Operations	Reading Level 3 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4/6		
METM 190	Metallurgy and Heat Treatment	Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4/6		
	18 / 24				
Semester III	Course Title	Prerequisites	Credit/Billing Hours		
Math Core Area - Select 1					
MATH 121	Pracalculus I	(Minimum 2.5 in MATH 109 or MATH 112 within 2 years) OR (SAT Math 550 or ACT Math 22 or CPT College Level Math 55 within 2 years) and Reading Level 5 and Writing Level 4	4 / 4		

	Program of Study Requirements					
ENGL 122	Composition II	Minimum 2.0 in ENGL 121 (formerly WRIT 121) or ENGL 131 (formerly WRIT 131) or (Reading Level 5 and Writing Level 8)	4/4			
METD 220	Basic Unigraphics/NX	Minimum 2.0 in METD 110 and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6			
METM 112	Introduction to CNC Machining	Minimum 2.0 in METM 108 and Reading Level 3 and Writing Level 4 and Math Level 4	4/6			
	16 / 20					
Semester IV	Course Title	Prerequisites	Credit/Billing Hours			
	Science Core	Area - Select 1				
CHEM 135	Chemistry in Society	Reading Level 5 and Writing Level 6 and (Math Level 4 or minimum 2.0 in MATH 105 or minimum 2.0 in MATH 106)	4 / 5			
	Program of Stu	dy Requirements				
MATH 122	Precalculus II	(Minimum 2.0 in MATH 121 within 2 years or Math Level 7 within 2 years) and Reading Level 5 and Writing Level 4	4 / 4			
METM 220	Basic Mastercam	Minimum 2.0 in (METM 108 or METM 110) and Reading Level 4 and Writing Level 4 and Math Level 4	4/6			
METS 115	Intro to Mechanical Systems	Reading Level 4 and Writing Level 4 and (Math Level 4 or minimum 2.0 in MATH 105 or MATH 106)	4/6			
	16 / 21					
Total Credits			67 / 86			