

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code:
1359 (Effective Fall
2017 – Summer
2022)

**Manufacturing Engineering Technology A.A.S.
Pathways**

Students in this program **choose either Design & Engineering or Precision Machining pathway** to determine the courses to take each semester.

DESIGN & ENGINEERING PATHWAY

Semester I	Course Title	Prerequisites	Credit/ Billing Hours
Math Core Area - <i>Select 1</i>			
MATH 115	Technical Math II	(Minimum 2.0 in MATH 114 within 2 years or Math Level 5 within 2 years) and Reading Level 5	4 / 4
Program of Study Requirements			
METD 105	PC Applications for Technology	None	3 / 4
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	4 / 6
METM 100	Manufacturing Processes	Reading Level 3 and Writing Level 4	3 / 4.5
METS 115	Intro to Mechanical Systems	Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
Credits			18 / 24.5

Semester II	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
METD 111	Mechanical CAD Drafting II	Minimum 2.0 in METD 110 and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
METD 130	Geometric Dimension/Tolerance	Minimum 2.0 in (METD 100 or Mechanical Drafting Placement Test 80%) and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
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 108	Machine Tool Operations	Minimum 2.0 in (METD 100 or METD 150 or Drafting Placement Test 80%) and Reading Level 3 and Writing Level 4 and Math Level 4	4 / 6
Credits			16 / 24
Semester III	Course Title	Prerequisites	Credit/Billing Hours
Writing Core Area - <i>Select 1</i>			
ENGL 124 (formerly WRIT 124)	Technical Writing	(Reading Level 5 and Writing Level 6) or AASD 105 concurrently	3 / 3
Science Core Area - <i>Select 1</i>			
METM 190	Metallurgy and Heat Treatment	Reading Level 5 and Writing Level 6 and Math Level 4	4 / 6

Program of Study Requirements			
METD 250	Detailing Assembly Drawings	Minimum 2.0 in METD 130 and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
METM 195	Quality/Metrology/Inspection	Minimum 2.0 in (METD 130 and (METM 108 or METM 110)) and Reading Level 4 and Writing Level 4 and Math Level 4	2 / 3
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
Credits			17 / 24
Semester IV	Course Title	Prerequisites	Credit/Billing Hours
Communication Core Area - <i>Select 1</i>			
COMM 110 (formerly SPCH 110)	Oral Comm in the Workplace	(Reading Level 5 and Writing Level 6) or AASD 104 concurrently	3 / 3
Global Perspectives and Diversity Core Area - <i>Select 1</i>			
MGMT 234	Diversity in the Workplace	Reading Level 5 and Writing Level 6	3 / 3
Program of Study Requirements			
METD 221	Advanced Unigraphics/NX	Minimum 2.0 in METD 220 and Reading Level 4 and Writing Level 4 and Math Level 5	4 / 6
METD 260	Jigs and Fixture Design	Minimum 2.0 in (METD 250 and (METM 108 or METM 110)) and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
Credits			14 / 18
Total Credits			65 / 90.5

PRECISION MACHINING PATHWAY			
Semester I	Course Title	Prerequisites	Credit/ Billing Hours
Program of Study Requirements			
METD 105	PC Applications for Technology	None	3 / 4
METM 100	Manufacturing Processes	Reading Level 3 and Writing Level 4	3 / 4.5
METM 108	Machine Tool Operations	Minimum 2.0 in (METD 100 or METD 150 or Drafting Placement Test 80%) and Reading Level 3 and Writing Level 4 and Math Level 4	4 / 6
METS 102	Industrial/Construction Safety	Reading Level 3 and Writing Level 2	2 / 3
METS 115	Intro to Mechanical Systems	Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
Credits			16 / 23.5
Semester II	Course Title	Prerequisites	Credit/ Billing Hours
Math Core Area - <i>Select 1</i>			
MATH 115	Technical Math II	(Minimum 2.0 in MATH 114 within 2 years or Math Level 5 within 2 years) and Reading Level 5	4 / 4

Program of Study Requirements			
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	4 / 6
METD 130	Geometric Dimension/Tolerance	Minimum 2.0 in (METD 100 or Mechanical Drafting Placement Test 80%) 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
Credits			16 / 22
Semester III	Course Title	Prerequisites	Credit/Billing Hours
Writing Core Area - <i>Select 1</i>			
ENGL 124 (formerly WRIT 124)	Technical Writing	(Reading Level 5 and Writing Level 6) or AASD 105 concurrently	3 / 3
Science Core Area - <i>Select 1</i>			
METM 190	Metallurgy and Heat Treatment	Reading Level 5 and Writing Level 6 and Math Level 4	4 / 6
Program of Study Requirements			
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 195	Quality/Metrology/Inspection	Minimum 2.0 in (METD 130 and (METM 108 or METM 110)) and Reading Level 4 and Writing Level 4 and Math Level 4	2 / 3
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
Credits			17 / 24

Semester IV	Course Title	Prerequisites	Credit/ Billing Hours
Communication Core Area - <i>Select 1</i>			
COMM 110 (formerly SPCH 110)	Oral Comm in the Workplace	(Reading Level 5 and Writing Level 6) or AASD 104 concurrently	3 / 3
Global Perspectives and Diversity Core Area - <i>Select 1</i>			
MGMT 234	Diversity in the Workplace	Reading Level 5 and Writing Level 6	3 / 3
Program of Study Requirements			
METM 150	Advanced CNC Machining	Minimum 2.0 in (METM 110 or METM 112) and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
METM 221	Advanced Mastercam	Minimum 2.0 in METM 220 and Reading Level 3 and Writing Level 4 and Math Level 4	4 / 6
Credits			14 / 18
Total Credits			63 / 87.5