

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code:
1484 (Effective Fall
2017 – Summer
2022)

Industrial Maintenance Technician C.A. Pathway

Semester I	Course Title	Prerequisites	Credit/ Billing Hours
Program of Study Requirements			
METD 150	Industrial Blueprint Reading	None	3 / 3
METS 102	Industrial/Construction Safety	Reading Level 3 and Writing Level 2	2 / 3
Trade Electives - <i>Select 1-2 courses for a minimum of 4 credits</i> <i>16 elective credits are required for this certificate. Courses may not be duplicated.</i>			
ELTE 108	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	2 / 3
ELTE 109	Practical Electricity II	Minimum 2.0 in ((ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and (ELTE 108 or ELTE 118 or concurrently)) and Reading Level 3 and Writing Level 2 and Math Level 3	2 / 3
ELTE 131	Machine Controls I	Minimum 2.0 in (ELTE 110 or ELTE 108 or ELTE 118) and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 5
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

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
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
METM 190	Metallurgy and Heat Treatment	Reading Level 5 and Writing Level 6 and Math Level 4	4 / 6
METS 110	Mechanical Power Transmissions	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	4 / 6
METS 120	Industrial Pneumatics	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	4 / 6
METS 210	Lubrication and Bearings	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	4 / 6
WELD 105	Advanced ARC Welding	Minimum 2.0 in WELD 103 and Reading Level 3 and Writing Level 2	4 / 6
WELD 111	Gas Tungsten ARC Welding	Minimum 2.0 in (WELD 103 or AUTO 100 or AUTO 114) and Reading Level 3 and Writing Level 2	4 / 6
Credits			9 / 10-12

Semester II	Course Title	Prerequisites	Credit/Billing Hours
Program of Study Requirements			
METS 130	Industrial Hydraulics	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 4 and Writing Level 4 and Math Level 4	4 / 6
METS 140	Rigging	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	3 / 4.5
WELD 103	Combination Welding	Reading Level 3 and Writing Level 2	4 / 6
Credits			11 / 16.5
Semester III	Course Title	Prerequisites	Credit/Billing Hours
Trade Electives - <i>Select at least 3 courses for a minimum of 12 credits</i> <i>16 elective credits are required for this certificate. Courses may not be duplicated.</i>			
ELTE 108	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	2 / 3
ELTE 109	Practical Electricity II	Minimum 2.0 in ((ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and (ELTE 108 or ELTE 118 or concurrently)) and Reading Level 3 and Writing Level 2 and Math Level 3	2 / 3

ELTE 131	Machine Controls I	Minimum 2.0 in (ELTE 110 or ELTE 108 or ELTE 118) and Reading Level 3 and Writing Level 2 and Math Level 3	4 / 5
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
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
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
METM 190	Metallurgy and Heat Treatment	Reading Level 5 and Writing Level 6 and Math Level 4	4 / 6
METS 110	Mechanical Power Transmissions	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	4 / 6
METS 120	Industrial Pneumatics	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	4 / 6
METS 210	Lubrication and Bearings	Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4	4 / 6

WELD 105	Advanced ARC Welding	Minimum 2.0 in WELD 103 and Reading Level 3 and Writing Level 2	4 / 6
WELD 111	Gas Tungsten ARC Welding	Minimum 2.0 in (WELD 103 or AUTO 100 or AUTB 114) and Reading Level 3 and Writing Level 2	4 / 6
Credits			12 / 17-18
Total Credits			32 / 43.5-46.5