



Mechatronics - Multi-Skilled Maintenance Technology A.A.S.

Curriculum Code: 1780

Effective: Fall 2019 – Summer 2024

Description

A Mechatronics—Multi-Skilled Maintenance Technician will have knowledge of electrical, electronic, computer, mechanical, fluid power, robotic and programmable logic controller systems. Mechatronics Technicians install, maintain, troubleshoot, test, and repair technologically diverse equipment in industries such as manufacturing, aerospace, automotive, medical, material processing, consumer products, and defense systems.

Additional Information

Students who have already completed DCTM 102, ELTE 102, HVAC 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for METS 102. Any of these courses may also be used to fulfill the prerequisite for the ELTE and METS courses.

Contact Information

Visit the Center for Manufacturing Excellence website, or in person at West Campus Building, 5708 Cornerstone Drive, Lansing MI 48917, Room M103, telephone number 517-483-1104 or by email at manufacturing@lcc.edu.

General Education Core Courses, Recommended Choices

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

- Communication – *Select one*
COMM 110, Communication in the Workplace, 3 credits / 3 billing hours
- Global Perspective and Diversity – *Select one*
MGMT 234, Diversity in the Workplace, 3 credits / 3 billing hours
- Math – *Select one*
MATH 115, Technical Math II, 4 credits / 4 billing hours
- Science – *Select one*
PHYS 200, Intro to Applied Physics, 4 credits / 5 billing hours
- Writing – *Select one*
ENGL 124, Technical Writing, 3 credits / 3 billing hours

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
ELTE 108	Practical Electricity I	2 / 3
ELTE 109	Practical Electricity II	2 / 3

Course Code	Course Title	Credit / Billing Hours
ELTE 131	Machine Controls I	4 / 5
ELTE 260	Programmable Controllers I	4 / 6
METD 150	Industrial Blueprint Reading	3 / 3
METM 108	Machine Tool Operations	4 / 6
METS 102	Industrial/Construction Safety	2 / 3
METS 110	Mechanical Power Transmissions	4 / 6
METS 125	Intro to Hydraulics/ Pneumatics	4 / 6
METS 145	Automated Systems	3 / 4.5
METS 160	Introduction to Robotics	3 / 4.5
METS 250	Gen. Prevent/Predictive Maint	3 / 4.5
METS 260	Advanced Robotics	3 / 4.5
WELD 110	Gas Metal ARC Welding	4 / 6

Total Credit Hours

62 credits / 83 billing hours

Recommended Course Sequence

Semester I	Semester II
Math Core	ELTE 131
ELTE 108 (First 8 weeks)	METS 110
ELTE 109 (Second 8 weeks)	METS 125
METD 150	METS 145
METS 102	
METS 160	

Semester III	Semester IV
Science Core	Communication Core
Writing Core	Global Perspectives and Diversity Core
ELTE 260	METS 250
METM 108	WELD 110

Semester V (Summer)
METS 260