

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Mechatronics – Multi-Skilled Maintenance Technology
Associate in Applied Science Degree

Curriculum Code: 1780 (Effective Fall 2016 – Summer 2021)

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.

PREREQUISITES

Students should see [Course Descriptions](#) for course prerequisite information. See [Academic Assessment and Placement Testing for Student Success](#) for skills assessment and advising information.

INFORMATION

Contact the Manufacturing Engineering Technologies Program, West Campus Building, Room M103, telephone number (517) 483-5338 (Website: <http://www.lcc.edu/manufacturing/>) or Student Services West Campus, West Campus Building, room M106, telephone number (517) 267-5452.

REQUIREMENTS

TOTAL: 66 CREDITS

CODE	TITLE	CREDIT HOURS
ELTA 120	AC Fundamentals – Electrician	2
ELTA 160	PLC Overview for Electricians	1
ELTE 108	Electric Circuits Study	2
ELTE 131	Machine Controls I	4
ELTE 261	Programmable Logic Controllers II	6
MATH 115	Technical Math II	4
METD 105	PC Applications for Technology	3
METD 150	Industrial Blueprint Reading	3
METM 110	Intro to Precision Machining	4
METS 102	Industrial Construction Safety (See Note 1)	2
METS 110	Mechanical Power Transmissions	4
METS 125	Intro Hydraulics/Pneumatics	4
METS 145	Integrated Systems	3
METS 160	Introduction to Robotics	3

METS 250	General Preventative/Predictive Maintenance	4
MGMT 234	Diversity in the Workplace	3
PHYS 200	Intro Physics With Application	4
SPCH 110	Oral Communication in the Workplace	3
WELD 108	Mechatronics Welding	4
WRIT 124	Technical Writing	3

LIMITED CHOICE REQUIREMENTS

TOTAL: 0 CREDITS

Complete the indicated number of credits from **EACH CHOICE** listed below.

CHOICE 1: [General Education Core Areas](#)

0 Credits

See *General Education Core Requirements* for information on how to fulfill these requirements.

Core area proficiency exams, where appropriate, are available for each core area.

Communication Core Area (See Note 2)	0
Global Perspectives and Diversity Core Area (See Note 2)	0
Mathematics Core Area (See Note 2)	0
Science Core Area (See Note 2)	0
Writing Core Area (See Note 2)	0

MINIMUM TOTAL

66

NOTES:

- 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 ELTE 108, METS 110, METS 125, METS 145, METS 150, METS 160, and METS 250.
- Students completing "REQUIREMENTS" have fulfilled the requirements for this Core area.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

I	II	III	IV
ELTA 120	ELTE 131	ELTA 160	ELTE 261
ELTE 108	METD 105	METM 110	METS 250
MATH 115	METS 110	METS 160	MGMT 234
METD 150	METS 145	PHYS 200	WELD 108
METS 102	WRIT 124	SPCH 110	
METS 125			