LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Mechanical Systems
Associate in Applied Science Degree

Curriculum Code: 0173 (Effective Fall 2015 – Summer 2020)

Machine maintenance technicians are involved with the repair, maintenance, and installation of industrial equipment. They repair the machinery of industry, solving mechanical problems. The skills necessary for this type of work are many and varied: critical thinking, problem solving, mechanics, math and physics are but a few. Maintenance technicians also need to know how to diagnose hydraulic problems, perform preventative maintenance procedures, and be able to work well with others. Every industrial plant will have one or more machine maintenance technicians. They may have different titles, but the work is the same. **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor before enrolling in any course.

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 Applied Manufacturing Technologies Program, West Campus Building, Room M103, telephone number (517) 483-5338 (Website: www.lcc.edu/manufacturing/met_systems/) or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

REQUIREMENTS — TOTAL: 64 CREDITS

CODE	TITLE	CREDIT HOURS
ELTE 110	Practical Electricity (See Note 1)	3
ELTE 111	Intro to Industrial Automation	4
ELTE 121	Electrical Mathematics (See Note 1)	5
METD 150	Industrial Blueprint Reading	3
METM 110	Intro to Precision Machining	4
METM 120	Effective Use/Machine Handbook	4
METM 190	Metallurgy and Heat Treatment	4
METS 102	Industrial/Construction Safety (See Note 1)	2
METS 105	Handtools and Measurements (See Note 1)	3
METS 110	Mechanical Power Transmissions (See Note 1)	4

METS 120	Industrial Pneumatics (See Note 1)	4
METS 130	Industrial Hydraulics (See Note 1)	4
METS 140	Rigging (See Note 1)	3
METS 210	Lubrication and Bearings (See Note 1)	4
MGMT 234	Diversity in the Workplace	3
SPCH 110	Oral Comm in the Workplace	3
WELD 103	Combination Welding	4
WRIT 124	Technical Writing	3

LIMITED CHOICE REQUIREMENTS **TOTAL: 3-4 CREDITS**

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

CHOICE 1: General Education Core Areas **0 Credits**

(Click the link above 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

CHOICE 2: Technical Related **3-4 Credits**

METM 100	Manufacturing Processes	3
METS 150	Robotics & Automated Control	4
METS 290	Manufacturing Internship	3

MINIMUM TOTAL **67**

NOTES:

1. 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 110, ELTE 121, METS 105, METS 110, METS 120, METS 130, METS 140, and METS 210.
2. 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
ELTE 110	METM 110	METM 120	ELTE 121
ELTE 111	METS 130	METM 190	MGMT 234
METD 150	METS 140	METS 105	SPCH 110
METS 102	METS 210	METS 120	Lim. Ch.2
METS 110	WELD 103	WRIT 124	