

## LANSING COMMUNITY COLLEGE

### CURRICULUM GUIDE

Industrial Maintenance Technician  
Certificate of Achievement

Curriculum Code: 1484 (Effective Fall 2015 – Summer 2020)

This certificate is designed for an apprentice, pre-apprentice, or person interested in advancing his/her skill set in the industrial maintenance trade. Technical math, blueprint reading, welding, and basic electricity are just some of the skills that are necessary for this type of work. Ideally, this curriculum should be taken concurrently with an industry-based work experience or apprenticeship or in preparation for an apprenticeship in industrial or machine maintenance and repair.

#### 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/](http://www.lcc.edu/manufacturing/met_systems/)) or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

#### REQUIREMENTS

REQUIREMENTS		TOTAL: 20 CREDITS
CODE	TITLE	CREDIT HOURS
MATH 114	Technical Math I	4
METD 150	Industrial Blueprint Reading	3
METS 102	Industrial/Construction Safety (See Note 1)	2
METS 130	Industrial Hydraulics (See Note 1)	4
METS 140	Rigging (See Note 1)	3
WELD 103	Combination Welding	4

#### LIMITED CHOICE REQUIREMENTS

TOTAL: 15-16 CREDITS

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

#### CHOICE 1: Trade Related

15-16 Credits

ELTE 110	Practical Electricity (See Note 1)	3
ELTE 131	Machine Controls I	4

MATH 115	Technical Math II	4
METM 110	Intro to Precision Machining	4
METM 120	Effective Use/Machine Handbook	4
METM 190	Metallurgy and Heat Treatment	4
METS 110	Mechanical Power Transmissions (See Note 1)	4
METS 120	Industrial Pneumatics (See Note 1)	4
METS 210	Lubrication and Bearings (See Note 1)	4
WELD 105	Advanced ARC Welding	4
WELD 111	Gas Tungsten ARC Welding	4
<b>MINIMUM TOTAL</b>		<b>35</b>

**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, METS 110, METS 120, METS 130, METS 140 and METS 210.
2. To receive a certificate of achievement from Lansing Community College, a student must maintain a grade point average of 2.0 or above in the courses required for the certificate.
3. Course substitutions may be made to this curriculum based on industry education and experience. For more information, please see a program advisor.
4. Students enrolled in this curriculum should also pursue a concurrent industry-based work experience or apprenticeship.

**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.

<b>I</b>	<b>II</b>	<b>III</b>
MATH 114	METS 130	Lim. Ch.
METD 150	METS 140	Lim. Ch.
METS 102	WELD 103	
Lim. Ch.	Lim. Ch.	