



Industrial Maintenance Technician C.A.

Career Community: Electrical and Manufacturing

Curriculum Code: 1484

Effective: Fall 2022 – Summer 2027

Description

This certificate is designed for an apprentice, pre-apprentice, or person interested in advancing his/her skill set in the industrial maintenance trade. 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.

Milestone

Completion of WELD 103 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in this course is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in this course.

Additional Information

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

Contact Information

Contact the Trades Technology Program, West Campus Building, Room M103, telephone number 517-483-5338 or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

Program of Study Required Courses

Course Code	Course Title	Credit / Billing Hours
METD 150	Industrial Blueprint Reading	3 / 3
METS 130	Industrial Hydraulics	4 / 6
METS 140	Rigging	3 / 4.5
TECH 102	General Industry Safety	2 / 3
WELD 103	Combination Welding	4 / 6

Program of Study Required Courses, Limited Choice – *Select a minimum of four courses, sixteen credits*

Course Code	Course Title	Credit / Billing Hours
ELTE 108	Practical Electricity I	2 / 3
ELTE 109	Practical Electricity II	2 / 3
ELTE 131	Machine Controls I	4 / 5
MATH 115	Technical Math II	4 / 4

Course Code	Course Title	Credit / Billing Hours
METM 108	Machine Tool Operations	4 / 6
METM 112	Introduction to CNC Machining	4 / 6
METM 190	Metallurgy and Heat Treatment	4 / 6
METS 110	Mechanical Power Transmissions	4 / 6
METS 120	Industrial Pneumatics	4 / 6
METS 210	Lubrication and Bearings	4 / 6
WELD 105	Advanced ARC Welding	4 / 6
WELD 111	Gas Tungsten ARC Welding	4 / 6

Minimum Total Credit Hours

32 credits / 43.5 billing hours

Recommended Course Sequence

Semester I
METD 150
TECH 102
Limited Choice

Semester II
METS 130
METS 140
WELD 103 – Milestone course

Semester III
Limited Choice
Limited Choice
Limited Choice

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.