



Industrial Maintenance Technician C.A.

Curriculum Code: 1484

Effective: Fall 2021 – Summer 2026

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.

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

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 102 | Industrial/Construction Safety | 2 / 3 |
| METS 130 | Industrial Hydraulics | 4 / 6 |
| METS 140 | Rigging | 3 / 4.5 |
| 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 |
| 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 |

Total Credit Hours

32 credits / 43.5-46.5 billing hours

Recommended Course Sequence

| Semester I | Semester II |
|----------------|-------------|
| METD 150 | METS 130 |
| METS 102 | METS 140 |
| Limited Choice | WELD 103 |

| Semester III |
|----------------|
| Limited Choice |
| Limited Choice |
| Limited Choice |