

## Industrial Maintenance Technician Program 2024-2025

September 16, 2024-May 27, 2025

Course Title	Description	Course Dates	Times	Certification Date	Days off
<b>IMT Welding</b>	In Maintenance Welding students will adhere to welding safety rules; use an acetylene torch; explain welding theory, equipment, and selection process; prepare parts to be welded; use a SMAW Welder to make basic welds on flat stock; inspect welds; and use a plasma cutter to cut flat stock. Upon completion, students will sit for the NIMS Maintenance Welding credential. Students will learn to perform machine maintenance procedures, preventative maintenance and predictive maintenance, selecting and safety using of proper hand tools for a task; moving, handling, and storming materials and equipment; and selecting systems troubleshooting methods. Students will also learn fundamental machine shop safety, math, and measurement. Upon completion, students will sit for the NIMS Machine Maintenance credential and OSHA 10 credential	9/16/24-10/9/24	Mon-Thurs, 5:30p-9:30p	10/10/2024	no class on 9/25
<b>IMT Maintenance Operations and Shop Basics</b>	In Basic Hydraulic Systems students will learn to adhere to fluid power systems safety rules; interpret basic fluid power schematics; start up and shut down a hydraulic system and adjust system pressure; adjust hydraulic actuator speed using a flow control valve; service hydraulic fluid and a hydraulic filter; install hydraulic conductors and install and test components in a basic hydraulic circuit; and troubleshoot a basic hydraulic circuit. Upon completion, students will sit for the NIMS Basic Hydraulic Systems credential.	10/15/24-11/25/24	Mon-Thurs, 5:30p-9:30p	11/26/2024	no class on 10/16, 11/6-11/7, 11/13
<b>IMT Basic Hydraulics</b>	In Basic Pneumatic Systems students will adhere to fluid power systems safety rules; adjust pneumatic system branch operating pressure using a regulator and pneumatic actuator speed using a flow control valve; service a pneumatic filter and pneumatic lubricator; install pneumatic conductors; start up and shut down a reciprocating air compressor and adjust operating pressure; and install and test components in pneumatic circuits. Upon completion, students will sit for the NIMS Basic Pneumatic Systems credential.	12/2/24-2/4/25	Mon-Thurs, 5:30p-9:30p	2/5/2025	no class 12/23-1/2, 1/20, 1/22, 1/29
<b>IMT Basic Pneumatics</b>	In Electrical Systems students will adhere to electrical power and control systems safety rules; interpret electrical control and power schematics; adjust limit switches and electronic sensors; measure voltage, current, and resistance in an electrical circuit; select, install, and test fuses and circuit breakers; install and test AC and DC electric motors, electrical relay control components and circuits, and electro-fluid power components and circuits; test and repair a machine's electrical ground; troubleshoot an electrical motor relay control circuit and a solenoid-operated fluid power relay control circuit; replace electrical control wiring using terminal and solder attachments; and test and replace transformers. Upon completion, students will sit for the NIMS Electrical Systems credential.	2/10/25-3/12/25	Mon-Thurs, 5:30p-9:30p	3/13/2025	no class on 2/17
<b>IMT Electrical Systems</b>		3/17/25-5/27/25	Mon-Thurs, 5:30p-9:30p	5/28/2025	no class 4/17-4/25; 5/26