

INDUSTRIAL MAINTENANCE-MILLWRIGHT TECHNOLOGY ATC

Industrial Maintenance-Millwright Technology prepares students for work in industrial mills. This is a multi-skilled trade that uses areas of fabrication, electronics, electrical systems, automation, computers, hydraulics, PLC's, and mechanical systems. Conveyor systems, power distribution, and service to all sorts of automated equipment are taught. Rigging, mechanical drive systems, installation and alignment of equipment, and pumps are taught. The Millwright program is designed to prepare graduates for entry-level employment as apprentice-technicians, with emphasis on practical experience in both theory and laboratory settings using lab equipment and assemblies similar to equipment found in industry.

Training begins in the classroom and continues in the shop area. Students complete all lab assignments in accordance with industry standards, using the tools and equipment of the profession with an emphasis on safety and quality. The Industrial Maintenance-Millwright Technology requires tools. Please refer to the Technical & Industrial website for a tool list.

Entrance requirements for students seeking enrollment in the Industrial Maintenance-Millwright Technology program include:

- Students must score a 30 or higher in math on ALEKS and have a 2 or higher score on the Writing Placement Exam, or qualify for MTHPT-137 and ENGL-101.
- Enrollment priority for students seeking entrance into the program is on a first-come first-serve basis as determined by the student's faculty advising date.

Upon completion of the Advanced Technical Certificate, the student will possess the technical skills to:

- Identify PLC hardware; wire up PLC power, inputs and outputs
- Read and write basic ladder logic programs
- Know the theory of DC and AC motors
- Troubleshoot motor control circuits
- Trade skills to include blueprint reading, construction documents, hand tools, fasteners/ anchors, construction equipment, safety, resume building, teamwork, leadership and trade accounting
- Familiar with principles of electricity and how to work safely with electrical devices
- Knowledge of mechanical systems. These include bearings, couplings, motors, pumps, heat exchangers, compressors and methods for the transmission of power
- Ability to construct a power source; how to obtain optimum performance from a power source, and how to troubleshoot a power source

Advanced Technical Certificate Requirements

Code	Title	Credits
General Education Core		
MTHPT-137	MATH FOR TECHNOLOGY	4.00
Technical Core		
IMMTI-108	INTRODUCTION TO PLC'S	4.00
IMMTI-115	BASIC ELECTRICITY	5.00
IMMTI-130	TRADE SKILLS	5.00
IMMTI-140	MECHANICAL SYSTEMS MAINTENANCE	5.00
IMMTI-150	WELDING POWER SOURCES	2.00
IMMTI-155	BASIC WELDING PROCESSES LAB	7.00
IMMTI-165	ADVANCED WELDING PROCESSES	7.00
IMMTI-205	ELECTRIC MOTORS, DRIVES AND CONTROLS	4.00
IMMTI-251	BLUEPRINT READING	2.00
IMMTI-261	BENCHWORK FOR WELDERS	2.00
IMMTI-262	DISTORTION CONTROL	2.00
IMMTI-270	DIRECTED WELDING PROJECTS	4.00
Electives		
IMMTI-294	INTERNSHIP	2.00
Total Credits		55.00