



TENNESSEE COLLEGE OF APPLIED TECHNOLOGY

PULASKI

1233 East College Street, Pulaski, TN 38478
931-424-4014 www.tcatpulaski.edu

INDUSTRIAL MAINTENANCE TECHNOLOGY

Career Training
Administrative Office
Technology
Advanced Manufacturing
Education
Building Construction
Technology
CNC Machining Technology
Computer Operating Systems
and Network Technology
Electrical and Plumbing
Construction Technology
HVAC/R
Industrial Electricity
Industrial Maintenance
Technology
Patient Care Technology/
Medical Assisting
Pharmacy Technology
Practical Nursing
Residential/Commercial
Wiring and Plumbing
Welding Technology

Campus Locations
Lawrenceburg Instructional
Service Center
North Lawrence Instructional
Service Center
Northfield Instructional
Service Center
South Lawrence Instructional
Service Center

The mission of the Industrial Maintenance Technology Program is to train students with the broad range of skills to compete in today's technological environment as a multi-craft maintenance technician. Trainees learn the fundamentals of electricity, welding, and mechanical. Students are being trained for work with electric motor control, automated machine control, circuits, conveyors, pumps, pneumatic and hydraulic systems, test equipment, production equipment (electrical, electronic, and mechanical), welding, HVAC/R, plastics and injection molding, programmable controllers and automation. In the last phase of the course, students combine all their newly acquired skills in overall systematic troubleshooting and interfacing systems to qualify for an Industrial Maintenance Technician Diploma.

Employment Opportunities:

- Manufacturing Industries
- Industrial Maintenance
- Welding Industries

Program Instructors:

Electrician Helper & PLCs - Chris Adcock
chris.adcock@tcatpulaski.edu
931-424-2418

Gas Metal Arc Welding - Josh Hughes
Heating & AC - Chris Perkins
Robotics & Injection Molding - Dalton Palfrey

ENROLLMENT INFORMATION

Classes Offered:	Full-Time: Monday - Friday 8 to 2:30 Part-Time: Mon - Fri 8 to 11 or 11:30 to 2:30
Program Length:	1728 Hours (4 Trimesters)
Program Location:	Pulaski Main Campus 1233 East College St., Pulaski, TN 38478
Program Cost including Tuition, Fees plus Books/Supplies	\$1,312 per trimester x 4 trimesters = 5,248 \$2,646 Book/Supplies; Total Cost \$7,894* *These costs are subject to change
Requirements:	Complete the Admissions Process Checklist
Financial Aid:	Available to those who qualify

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website: www.tcatpulaski.edu

IMT Day Course Outline

First Trimester (Module I)	
Worker Characteristics	6 Hours
Orientation Safety Alcohol Edu & Haven Training	6 Hours
Technology Foundations	24 Hours
Electrical Safety	20 Hours
Related Math for Electricians	60 Hours
Electrical Principles	134 Hours
Digital Multimeter Principles	60 Hours
Printreading for Electro-Mechanical Systems	122 Hours
First Trimester (Module I) Electrician Helper Certificate	432 Hours

Second Trimester (Module II)	
Worker Characteristics	6 Hours
Welding Safety	6 Hours
Basic Blueprint Reading	36 Hours
Oxyacetylene Cutting and Welding	18 Hours
Basic GMAW and Flux Core	150 Hours
Second Trimester (Module II) Gas Metal Arc Welding Helper Certificate	648 Hours

Second Trimester (Module II)	
Industrial Safety	18 Hours
Basic Industrial Mechanics	30 Hours
Basic Industrial Hydraulics	30 Hours
Basic Industrial Pneumatics	18 Hours
Introduction to Electrical Motor Control	18 Hours
Machining Operations (Lathe and Mill)	42 Hours
Troubleshooting Mechanical Systems	60 Hours
Second Trimester (Module II) Mechanical Technician Helper Certificate	864 Hours

Third Trimester (Module III)	
Worker Characteristics	6 Hours
Introduction to Robotics	44 Hours
Electrical Motor Control Systems	194 Hours
Programmable Logic Controllers Concepts	188 Hours
Third Trimester (Module III) Programmable Logic Controller Helper Certificate	
After completion of modules I & II = Industrial Maintenance Apprentice (864 Hours) Certificate	
Completion of modules I II & III = Electro-Mechanical Maintenance Diploma (1296 Hours) Diploma	1296 Hours
After completion of modules I, II, III, and IV (choose elective) = Industrial Maintenance Technician Diploma	1728 Hours

IMT Day Course Outline

Fourth Trimester (Module IV)	
Worker Characteristics	6 Hours
OSHA 10	10 Hours
Shop Safety	24 Hours
Refrigeration Fundamentals	100 Hours
Tools Equipment and Shop Practices	30 Hours
Electricity and Controls I	130 Hours
Installation	76 Hours
Green Awareness	14 Hours
Employment Readiness Exam	12 Hours
EPA 30 Hours (must pass EPA certification exam)	30 Hours
Fourth Trimester (Module IV) HVAC Mechanic Assistant Certificate	432 Hours
Industrial Maintenance Technician Diploma	1728 Hours

Fourth Trimester (Module IV)	
Worker Characteristics	6 Hours
Basic Mechanical Theory and Lab I	66 Hours
Basic Hydraulic Theory and Lab I	66 Hours
Robotic Theory and Lab I	120 Hours
Robotic Theory and Lab II	174 Hours
Fourth Trimester (Module IV) Robotics Automation Helper Certificate	432 Hours
Industrial Maintenance Technician Diploma	1728 Hours

Fourth Trimester (Module IV)	
Worker Characteristics	6 Hours
Injection Molding Machine Safety	20 Hours
Basic Operation of the Injection Molding	70 Hours
Types of Injection Molding Machine Power	75 Hours
Installation of the Injection Molding Machine	40 Hours
Preventive Maintenance Procedures	79 Hours
Injection Molding Machine Repair Procedures	82 Hours
Auxiliary Equipment Maintenance and Repair	60 Hours
Fourth Trimester (Module IV) Injection Molding Maintenance Certificate	432 Hours
Industrial Maintenance Technician Diploma	1728 Hours