



TENNESSEE COLLEGE OF APPLIED TECHNOLOGY

PULASKI

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

INDUSTRIAL MAINTENANCE TECHNOLOGY

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 - Dino Owen

ENROLLMENT INFORMATION

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| 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

AA/EEO

The Tennessee College of Applied Technology-Pulaski does not discriminate on the basis of race, color, national origin, sex, veteran status, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Mike Whitehead mike.whitehead@tcatpulaski.edu 931-424-2420.

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 Technician
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

IMT Day Course Outline

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| 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 |

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| 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 |

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| 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 |

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| 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

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| 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 | 30 Hours |
| Pass EPA Certification Exam | |
| Fourth Trimester (Module IV) HVAC Mechanic Assistant Certificate | 432 Hours |
| Industrial Maintenance Technician Diploma | 1728 Hours |

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| 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 |

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| 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 |