



# TENNESSEE COLLEGE OF APPLIED TECHNOLOGY

**PULASKI**

1233 East College Street, Pulaski, TN 38478  
931-424-4014 [www.tcatpulaski.edu](http://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  
**Gas Metal Arc Welding** - Josh Hughes  
**Heating & AC** - Chris Perkins  
**Robotics & Injection Molding** - Dino Owen

### 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	\$1,246 per trimester x 4 trimesters \$2,646 Book/Supplies; Total Cost \$7,630* *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](http://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](mailto: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  
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

<b>First Trimester</b>	
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
<b>First Trimester (Module I) Electrician Helper Certificate</b>	<b>432 Hours</b>
<b>Second Trimester</b>	
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
<b>Second Trimester (Module II) Gas Metal Arc Welding Helper Certificate</b>	<b>648 Hours</b>
<b>Second Trimester</b>	
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
<b>Mechanical Technician Helper Certificate</b>	<b>864 Hours</b>
<b>Third Trimester</b>	
Worker Characteristics	6 Hours
Introduction to Robotics	44 Hours
Electrical Motor Control Systems	194 Hours
Programmable Logic Controllers Concepts	188 Hours
<b>Third Trimester (Module III) Programmable Logic Controller Helper Certificate</b>	
<b>After completion of modules I &amp; II = Industrial Maintenance Apprentice (864 Hours) Certificate</b>	
<b>Completion of modules I II &amp; III = Electro-Mechanical Maintenance Diploma (1296 Hours) Diploma</b>	<b>1296 Hours</b>

# IMT Day Course Outline

<b>Fourth Trimester</b>	
Worker Characteristics	6 Hours
Technology Foundations	30 Hours
OSHA	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
<b>Pass EPA Certification Exam</b>	
<b>Fourth Trimester (Module IV) HVAC Mechanic Assistant Certificate</b>	<b>432 Hours</b>
<b>Industrial Maintenance Technician Diploma</b>	<b>1728 Hours</b>

<b>Fourth Trimester</b>	
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
<b>Fourth Trimester (Module IV) Robotics Automation Helper Certificate</b>	<b>432 Hours</b>
<b>Industrial Maintenance Technician Diploma</b>	<b>1728 Hours</b>

<b>Fourth Trimester</b>	
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
<b>Fourth Trimester (Module IV) Injection Molding Maintenance Certificate</b>	<b>432 Hours</b>
<b>Industrial Maintenance Technician Diploma</b>	<b>1728 Hours</b>