

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

### Career Training

**Administrative Office** Technology Automation, Process & **Production Systems Basic Dental Assisting Building Construction** Technology CNC Machining Technology **Computer Operating Systems** Networking & Cybersecurity Criminal Justice: Correctional Officer **Electrical and Plumbing Construction Technology** Heating, Ventilation, Air **Conditioning and Refrigeration Industrial Electricity Industrial Maintenance** Technology Patient Care Technology/ **Medical Assisting Pharmacy Technology Practical Nursing Residential/Commercial** Wiring & Plumbing Welding Technology

### **Training Locations**

Main Campus (Pulaski, TN) Lawrence County Instructional Service Center Lawrenceburg Instructional Service Center North Lawrence Instructional

# 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 - Dalton Palfrey

	Enroi	lment 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 Loca- tion:		Pulaski Main Campus 1233 East College St., Pulaski, TN 38478
Program Cost including Tuition, Fees plus Books/Supplies		<pre>\$ 1,440.00 per trimester x 4 trimesters = \$5,760. \$2,770.00 Book/Supplies; Total Cost \$8,530* *These costs are subject to change</pre>
Requireme	nts:	Complete the Admissions Process Checklist
Financial A	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

Tennessee College of Applied Technology-Pulaski does not discriminate on the basis of race, color, religion, creed, ethnic or national origin, sex, disability, age status as a protected veteran or any other class protected by Federal or State laws and regulations and by Tennessee Board of Regents policies with respect to employment, programs, and activities. The following person has been designated to handle inquiries regarding nondiscrimination policies: Christa Williams, VP Student Services; christa.williams@tcatpulaski.edu; 931-424-2404; P.O. Box 614; Pulaski, TN 38478.

## **IMT Day Course Outline**

18

42

60

216

1296

First Trimester (Module I)		
Worker Characteristics	6	
Orientation Safety Alcohol Edu & Haven Training	6	
Technology Foundations	24	
Electrical Safety	20	
Related Math for Electricians	60	
Electrical Principles	134	
Digital Multimeter Principles	60	
Printreading for Electro-Mechanical Systems	122	
First Trimester (Module I) Electrician Helper Certificate (C1)		

Second Trimester (Module II)	Hours	5
Worker Characteristics	6	
Introduction to Robotics	44	_
Electrical Motor Control Systems	194	
Program Logic Control Concepts	188	
Second Trimester (Module II) Programmabl Logic Controller Helper Certificate (C2)	e 864	
Third Trimester (Module III)	Hours	
Worker Characteristics	6	
Welding Safety	6	
Basic Blueprint Reading	36	
Oxyacetylene Cutting & Welding	18	
Basic GMAW and SMAW	150	
Third Trimester (Module III) Gas Metal Arc		
Welding Helper Certificate (C4)	216	
Third Trimester (Module III)		Hours
Industrial Safety		18
Basic Industrial Mechanics		30
Basic Industrial Hydraulics		30
Basic Industrial Pneumatics		18

Introduction to Electrical Motor Control

Machining Operations (Lathe and Mill)

Troubleshooting Mechanical Systems

Technician Helper Certificate (C3)

Maintenance Diploma (1296 Hours)

Third Trimester (Module III) Mechanical

Completion of modules I, II, and III = Electro-Mechanical

Fourth Trimester (Module IV)	Hours
Worker Characteristics	6
OSHA 10	10
Safety	24
Refrigeration Fundamentals	100
Tools Equipment and Shop Practices	30
Electricity and Controls	130
Installation	76
Green Awareness	14
Employment Readiness Exam	12
EPA	30
Industrial Maintenance Technician/ HVAC Diploma (DPI)	1728
Fourth Trimester (Module IV)	Hours
Worker Characteristics	6
Robotic Maintenance	132
Robotic Theory and Lab I	120
Debetic Theory and Lab U	174
Robotic Theory and Lab II	

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