

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

AUTOMATION, PROCESS & PRODUCTION SYSTEMS

To increase the number of available skilled workers for existing/emerging manufacturing jobs, enhance worker skills, knowledge in manufacturing technologies and processes, help improve the productivity of the region's manufacturing industry, increase manufacturer's global competitive advantage, and provide manufacturing related technical assistance to local business and industry. This program offers three career paths: Robotics Automation, Additive Manufacturing, and Plastic Injection Molding. Training in these areas is related to the high-tech manufacturing industry of today's economy. Completion of the program yields a Technician Diploma for the selected career path.

Employment Opportunities:

- Manufacturing Industries
- Injection Molding Industries
- Robotic Industries

Program Instructor: Dalton Pelfrey dalton.pelfrey@tcatpulaski.edu 931-424-2416

ENROLLMENT INFORMATION		
Classes Offered:	Full-Time: Monday - Friday 8 to 2:30	
Program Length:	1296 Hours (3 trimesters)	
Program Location:	Pulaski Main Campus 1233 East College Street, Pulaski, TN 38478	
Program Cost including Tuition, Fees, plus Books/Supplies	\$1,440 per trimester x 3 trimesters =\$4,320 \$587.00 Books/Supplies; Total Cost \$4,907.00* *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 at www.tcatpulaski.edu		

Tennessee College of Applied Technology-Pulaski does not discriminate on the basis of race, color, religion, creed, ethnicity 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 non-discrimination policies: Christa Williams, VP Student Services; christa.williams@tcatpulaski.edu; 931-424-2404. The TCAT-Pulaski policy on non-discrimination can be found at 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 Digital Agronomy 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 Service Center South Lawrence Instructional Service Center

APPS Course Outline

First Trimester	Hours
Worker Characteristic	6
Technology Foundations	24
Principles of Lean Manufacturing/Six Sigma	72
OSHA and Safety Fundamentals	30
Essentials Fundamentals of Industry	42
Quality Fundamentals and Measurements	72
Introduction to CAD	30
Introduction to 3D Printing	30
Metrology Equipment Fundamentals	72
Industrial Components	54
Production Technician Certificate	432 Hours

Second Trimester	Hours
Worker Characteristic	6
Basic Mechanical Theory and Lab	42
Basic Hydraulics Theory and Lab	72
Basic Pneumatics Theory and Lab	48
Industry 4.0 Fundamentals	30
Applied Principles of Industry 4.0	78
Advanced Hydraulics and Pneumatics	78
Manual Machining Fundamentals	78
Mechanical Systems Technician Certificate	864 Hours

ELECTIVES—THIRD TRIMESTER

Third Trimester ELECTIVES	Hours
Worker Characteristic	6
Injection Molding Theory and Lab	240
Advanced Molding Theory and Lab	108
Tool and Die	78
Injection Molding Technician Diploma	1296 Hours

Third Trimester ELECTIVES	Hours
Worker Characteristic	6
Fundamentals of Materials	30
Technical Drawing Fundamentals	60
Data Processing for Manufacturing	30
CAD for 3D Printing	120
3D Scanning	30
Industrial 3D Printing	120
Design Project	36
Additive Manufacturing Technician Diploma	1296 hours

Third Trimester ELECTIVES	Hours
Worker Characteristic	6
Industrial Robotic Theory and Lab	210
Advanced Robotic Programming &	
Troubleshooting	156
Industrial Robotic Maintenance	60
Robotic Automation Technician Diploma	1296 Hours

For More Information Please Contact Student Services Department P.O. Box 614, Pulaski, TN 38478 931-424-4014 Accredited Member Commission of the Council on Occupational Education 7840 Roswell Road, Building 300 Suite 325 Atlanta, GA 30350 Phone: (770) 396-3898 * (800) 917-2081