



TENNESSEE COLLEGE OF APPLIED TECHNOLOGY

PULASKI

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

ADVANCED MANUFACTURING EDUCATION

The mission of the Advanced Manufacturing Education Program is to increase the number of available skilled workers for existing and emerging manufacturing jobs, enhance worker skills, and knowledge in manufacturing technologies and processes, help improve the productivity of the regions 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, Programmable Logic Controls (PLC) Automation, and Plastics Injection Molding. Training in these areas are related to the high tech manufacturing industry of today's economy. Completion of the program yields an Engineering Technician Diploma.

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 Part-Time: Mon - Fri 8 to 11 or 11:30 to 2:30
Program Length:	1,728 Hours (4 trimesters)
Program Location:	Pulaski Main Campus 1233 East College Street, Pulaski, TN 38478
Program Cost including Tuition, Fees, plus Books/Supplies	\$1,312 per trimester x 4 trimesters = \$5,248 \$2,084 Books/Supplies; Total Cost \$7332.00* *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	

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

AME Course Outline

First Trimester	
Worker Characteristics	6 Hours
Orientation, Safety, Alcohol Ed and Haven Training	6 Hours
Technology Foundations	24 Hours
CERTIFIED PRODUCTION TECHNICIAN (CPT) Module	
• Safety (CPT Module)	45 Hours
• Quality Practices and Measurements (CPT Module)	45 Hours
• Maintenance Awareness (CPT Module)	45 Hours
• Manufacturing Process & Production (CPT Module)	45 Hours
Root Cause Analysis	45 Hours
6 Sigma Yellow Belt/Green Belt	45 Hours
CAD for 3D Printing	72 Hours
C.M.M. Coordinate Measuring Machine	54 Hours
Quality Assurance Technician Certificate	432 Hours
Second Trimester	
Worker Characteristics	6 Hours
Basic Mechanical Theory and Lab	42 Hours
Basic Hydraulics Theory and Lab	72 Hours
Basic Pneumatics Theory and Lab	46 Hours
Introduction to Electrical Motor Controls	18 Hours
Advanced Hydraulics and Zero Pressure Testing	80 Hours
3D Printing & Scanning	94 Hours
Introduction to Manual Machining Mill and Lathe	74 Hours
Manufacturing Technician Certificate	864 Hours
ELECTIVES Third Trimester Plastics	
Worker Characteristics	6 Hours
Injection Molding Theory and Lab I, Routsis Training	123 Hours
Injection Molding Theory and Lab II, Routsis Training	123 Hours
Advanced Molding Theory and Lab, Routsis Training	120 Hours
Internship/Final Project	60 Hours
Plastics Engineering Technician Certificate	1296 Hours
ELECTIVES Fourth Trimester Plastics	
Worker Characteristics	6 Hours
Tool and Die	102 Hours
PLC Theory and Lab I	108 Hours
PLC Theory and Lab II	108 Hours
Robotic Maintenance	108 Hours
Master Plastics Engineering Technician Diploma	1728 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

please see curriculum continued on page 3

AME Course Outline

ELECTIVES Fourth Trimester PLC	
Worker Characteristics	6 Hours
Robotic Theory and Lab I	108 Hours
Robotic Theory and Lab II	150 Hours
Robotic Maintenance	108 Hours
Robotic Project	60 Hours
Master PLC Automation Engineering Technician Diploma	1728 Hours
ELECTIVES Third Trimester Robotics	
Worker Characteristics	6 Hours
Robotic Theory and Lab I	108 Hours
Robotic Theory and Lab II	150 Hours
PLC Theory and Lab I	108 Hours
Internship/Final Project	60 Hours
Robotic Automation Engineering Certificate	1296 Hours
ELECTIVES Fourth Trimester Robotic Automation Engineering	
Worker Characteristics	6 Hours
Advanced Robotic Theory & Lab	140 Hours
Robotic Maintenance	108 Hours
Advanced Robotic Programming and Troubleshooting	178 Hours
Master Robotic Automation Engineering Technician Diploma	1728 Hours
ELECTIVES Third Trimester PLC	
Worker Characteristics	6 Hours
PLC Theory and Lab I	108 Hours
PLC Theory and Lab II	108 Hours
Advanced PLC Theory and Lab	150 Hours
Internship/Final Project	60 Hours
PLC Automation Engineering Technician Certificate	1296 Hours

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