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

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

CNC MACHINING TECHNOLOGY

The mission of the CNC (Computer Numerical Control) Machining Program is to provide the student with a broad range of experience of all machine tools that one will come in contact with after graduation and throughout their career. Machinists, tool and die makers, industrial maintenance employees and machine operators all require skills in the machining of metal by machine tools. The CNC Program includes instruction relating to safety, blueprint reading, mathematics, manual milling and turning machines, drill presses, grinders, wire EDM machines, CNC lathes, and CNC milling equipment. Other areas include layout work, precision measuring and metallurgy. A wide range of opportunities await graduates of the CNC Machining Technology Program.

Employment Opportunities:

- Machine Shops
- Tool and Die Maker
- Industrial Maintenance

Program Instructor:

David Kimbrell david.kimbrell@tcatpulaski.edu 931-489-5974

ENROLLMENT INFORMATION

| Classes Offered: | Full-Time: Monday- Friday 8-2:30 Part-Time: Monday-Friday 8-11 or 11:30-2:30 |
|---|---|
| Program Length: | 1,728 Hours (4 Trimesters) |
| Program Location: | Northfield Instructional Service Center 1800 Saturn Parkway, Spring Hill, TN |
| Program Cost including Tuition, Fees plus Books/Supplies: | \$1,246 per trimester x 4 trimesters \$1,879 Books/Supplies; Total Cost \$6,863* *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 931-424-2420 or mike whitehead@tcatpulaski.edu.

CNC Machining Technology Course Outline

| First Trimester | |
|--|-----------|
| Worker Characteristics | 6 Hours |
| Orientation Safety Alcohol Education and Haven Training | 6 Hours |
| Technology Foundations | 24 Hours |
| Related Mathematics | 45 Hours |
| Basic Blue Print Reading | 60 Hours |
| Shop Safety | 15 Hours |
| Hand Tools | 20 Hours |
| Measuring Tools | 10 Hours |
| Drill Presses and Sharpening Drills | 20 Hours |
| Materials and Heat Treating | 10 Hours |
| Layout | 20 Hours |
| Preparation for Machining Operators | 10 Hours |
| How to Use the Haring Speed and Feed Calculator | 10 Hours |
| Sawing Machines | 16 Hours |
| Turning Machines | 20 Hours |
| Tool Materials and Single Point Cutting Tools | 10 Hours |
| Manual Lathe Projects | 85 Hours |
| Milling Cutters and Milling | 25 Hours |
| Tramming Milling Head and Vise | 20 Hours |
| Pass Measurement Materials and Safety Certification (NIMS) | 432 Hours |

| Second Trimester | |
|--|-----------|
| Worker Characteristics | 6 Hours |
| Manual Mill Projects Combined with Lathe Projects | 180 Hours |
| Grinding and Abrasive Machining Processes | 30 Hours |
| Advanced Blue Print Reading | 50 Hours |
| Advanced Mathematics | 50 Hours |
| Advanced Machining Processes | 10 Hours |
| Wire EDM Basic Machine Functions | 23 Hours |
| Wire EDM Projects | 63 Hours |
| EDM Die Sinking | 20 Hours |
| Pass Job Planning, Benchwork & Layout Certification (NIMS) | |
| Production Machine Tender Certificate | 864 Hours |

please see curriculum continued on page 3

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

CNC Machining Technology Course Outline

| Third Trimester | |
|-------------------------------------|------------|
| Worker Characteristics | 6 Hours |
| Basic CNC Programming | 105 Hours |
| CNC Lathe Machine Functions | 53 Hours |
| CNC Lathe Projects | 150 Hours |
| Manual Lathe and Mill Projects | 118 Hours |
| Machine Set-Up Operator Certificate | 1296 Hours |

| Fourth Trimester | |
|--|------------|
| Worker Characteristics | 6 Hours |
| Geometric Dimensioning and Tolerance | 64 Hours |
| Master Cam and CNC Communications | 120 Hours |
| Master Cam Generated Programs for CNC Machines | 134 Hours |
| Comprehensive Practical Applications | 48 Hours |
| Internship/Final Project | 60 Hours |
| Machinist I Diploma | 1728 Hours |