TENNESSEE COLLEGE OF APPLIED TECHNOLOGY
PULASKI

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 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

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 5000 Northfield Lane, Spring Hill, TN 37174
Program Cost including Tuition, Fees plus Books/Supplies:	$1,312 per trimester x 4 trimesters=5,248 $2417.74 Books/Supplies; Total Cost $7,665.74* *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

9/2020

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**

NIMS®
National Institutue for Metalworking Skills®

NIMS ACCREDITED PROGRAM

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