

MISSION STATEMENT

The Tennessee Colleges of Applied Technology serve as premier suppliers of workforce development throughout Tennessee. The colleges fulfill their mission by:

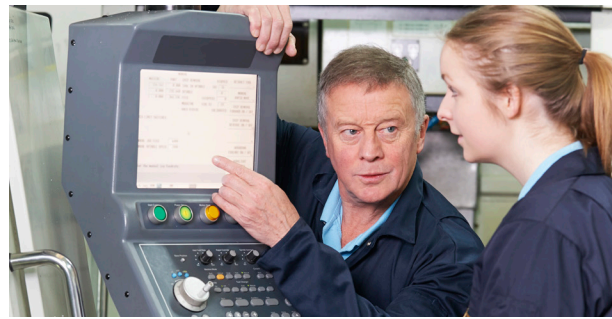
- Providing competency-based training through superior quality, traditional and distance learning instruction methods that qualify completers for employment and job advancement;
- Contributing to the economic and community development of the communities served by training and retraining employed workers;
- Ensuring that programs and services are economical and accessible to all residents of Tennessee; and
- Building relationships of trust with community, business and industry leaders to supply highly skilled workers in areas of need.



A **Tennessee Board of Regents** Institution
AA/ADA/EEO Training Institution

Accredited by **Council on Occupational Education**
7840 Roswell Road, Building 300, Suite 325
Atlanta, GA. 30350 • 770-396-3898

TCAT Upper Cumberland is an equal access, equal opportunity organization. More: tbr.edu/nds. 2026/09/P65-26/2



CLASS SCHEDULES

Full-time day classes are offered Monday through Friday between the hours of 7:45 a.m. and 2:30 p.m.

Part-time class schedules may vary according to local needs.

This program is offered at the TCAT Upper Cumberland at Cookeville campus.

STUDENT COST

Cost can be found on our website:
www.tcatuppercumberland.edu/programs.

FINANCIAL AID

Financial aid is available to those students who are eligible. Students can be assessed for eligibility for Federal Pell Grants, Federal SEOG, TN Student Assistance Award, Wilder-Naifeh Technical Skills Grant, TN Promise, TN Reconnect, and Federal Work Study. The school also coordinates efforts with the Department of Veteran's Affairs, Voc. Rehabilitation, WIOA, TRA and TOPS.

LOCAL HIGH SCHOOL ARTICULATION

TCAT Upper Cumberland may have an articulation agreement with local high schools in the school's service area. These agreements establish guidelines by which high school students may receive advanced placement in programs for skills acquired in high school. For more information on how to receive advanced placement, contact your high school guidance counselor or the Student Services Office at TCAT Upper Cumberland.

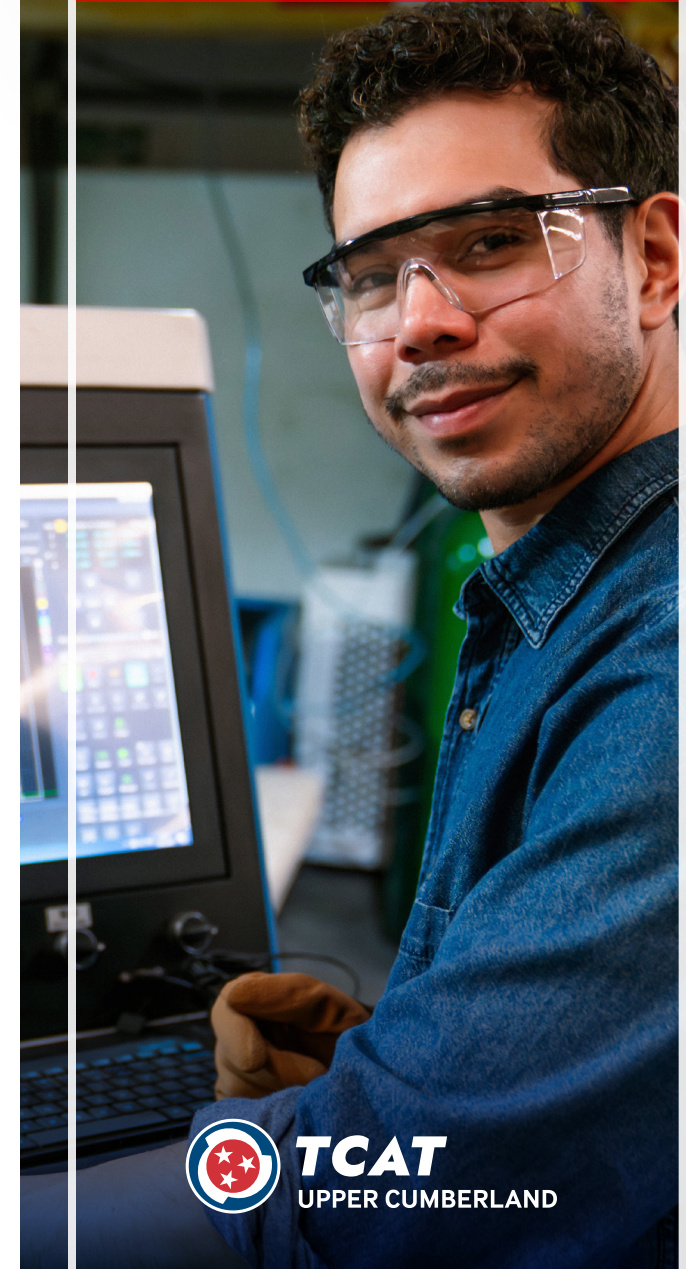
**TCAT UPPER CUMBERLAND AT COOKEVILLE
HIGHER EDUCATION CENTER
1000 NEAL ST.
COOKEVILLE, TN 38501**

931-520-4640

TCATUPPERCUMBERLAND.EDU

CNC MANUFACTURING

WE BUILD CAREERS.



TCAT
UPPER CUMBERLAND



WHAT YOU'LL LEARN

Shape your future in advanced manufacturing with hands-on training in computer numerical control (CNC) manufacturing. Students learn the fundamentals of operating CNC equipment while developing skills in interpreting part prints, using precision measuring tools and producing parts to exact specifications. Training builds the technical knowledge and practical skills needed for today's modern production environments. Graduates are prepared for opportunities as CNC machine operators, machinists, tool and die makers, industrial maintenance machinists and other manufacturing occupations that rely on precision machining technology.

You will learn how to:

- Understand manufacturing math and shop theory
- Practice orientation, safety and workforce fundamentals
- Read blueprints and interpret part prints
- Use computer-aided design tools
- Build foundational skills in CNC operations
- Learn additive manufacturing concepts
- Work with computer-aided design and computer-aided manufacturing (CAD/CAM) processes
- Perform CNC machining operations
- Understand CNC lathe programming
- Learn CNC mill programming
- Develop employability skills for manufacturing environments
- Use precision measuring tools in machining applications

ADMISSION POLICY

A. Applicants Not Enrolled in High School

Applicants not enrolled in high school are eligible for admission provided that:

1. They are at least 18 years of age or have a high school diploma or equivalent.
2. They declare an occupational objective or demonstrate through testing or counseling reasonable potential for achieving that objective.

B. Applicants Enrolled in High School

Applicants enrolled in high school are eligible for admission provided that:

1. An agreement authorizing such admission concluding between the local Board of Education and the Tennessee College of Applied Technology. Such agreements are subject to the approval of the chancellor or his designee.
2. Admission of Foreign Non-Immigrants. Foreign non-immigrant applicants are eligible for admission if they meet the same conditions required for other applicants.

ADMISSION PROCEDURES



COURSES

First Trimester

Worker Characteristics 1
Technology Foundations
Orientation and Safety
Math for Manufacturing
Shop Theory
Blueprint Reading and CAD
Intro to CNC
Additive Manufacturing

Second Trimester

Worker Characteristics 2
Employability Skills
CAD/CAM
CNC Manufacturing
CNC Lathe Programming
CNC Mill Programming

CERTIFICATES & DIPLOMAS

Certificates

CNC Technician Certificate 432 hours

Diplomas

CNC Programmer Diploma 864 hours

