



## 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](http://tbr.edu/nds). 2024/07/1701



## CLASS SCHEDULES

Full-time day classes are offered Monday through Friday between the hours of 7:45 a.m. and 2:15 p.m.

Full-time evening classes are offered Monday through Thursday between the hours of 1 and 9 p.m.

Part-time class schedules may vary according to local needs.  
This program is offered at the main campus.

## STUDENT COST

Cost can be found on our website:  
[www.tcatuppercumberland.edu/programs](http://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

The Tennessee College of Applied Technology Upper Cumberland has articulation agreements 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.

910 MILLER AVE  
CROSSVILLE, TN 38555  
931-484-7502

**TCATUPPERCUMBERLAND.EDU**

# WELDING TECHNOLOGY

**WE BUILD CAREERS.**



**TCAT**  
UPPER CUMBERLAND



## MISSION STATEMENT

The mission of the Welding Technology program is to provide students with the fundamentals for success in the ever-changing welding industry. Providing access to the equipment, materials, metallurgical theory and sound hands-on instruction needed for entry-level employment in the welding field and its numerous facets.

## COURSE DESCRIPTION

The Welding Technology program is designed to give the students the necessary classroom instruction, hands-on training and practical application needed for entry-level job performance. Knowledge of fundamental welding techniques and industry-proven skills are gained by shop practice, student projects, and hands-on implementation. Oral instructions, written, and performance tests are given to measure the student's proficiencies.

Most instruction is given on an individual basis, thus allowing the student to progress at his/her own pace.

## OVERVIEW

Basic practical experience is gained by shop practice, student projects, and certain repair work. Oral, written, and performance tests are given to measure the student's proficiencies. Most instruction is given on an individual basis, thus allowing the student to progress at his/her own pace.

Welding is a multi-faceted craft and each area of the state has specific processes and skills needed for their industry base. Instructors concentrate on specific area needs, and prepare students with the skills and knowledge necessary to succeed in any area of welding. American Welding Society (AWS) Certification testing is available for those that wish to pursue that option.

## JOB OPPORTUNITIES

Welders are employed in many industries such as construction, automotive, industrial automation, bridge building/infrastructure, ship building, aerospace industries, nuclear energy, manufacturing, public utilities, and the petroleum industry.

*TCAT Upper Cumberland host job fairs each year and faculty work very closely with industry to assist a student with placement. Placement is the student's responsibility. However the college will provide many resources during the job search process.*

## 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

### STEPS FOR ENROLLMENT



**1**  
PICK A PROGRAM



**2**  
FILL OUT ONLINE APPLICATION



**3**  
SUBMIT PROGRAM SPECIFIC APPLICATION MATERIALS (IF REQUIRED)



**4**  
REQUEST/SUBMIT TRANSCRIPTS



**5**  
COMPLETE FAFSA



**6**  
SET UP YOUR TCAT STUDENT EMAIL

## COURSES

### First Trimester

Worker Characteristic  
 Technology Foundations  
 Shop Orientation & Safety  
 Cutting Processes  
 Basic Shielded Metal Arc Weld  
 Basic Gas Metal Arc Welding  
 Shielded Metal Arc Welder Certificate

### Second Trimester

Worker Characteristic  
 Blue Print Theory  
 Basic Gas Tungsten Arc Welding  
 Advanced Shielded Metal Arc Welding  
 Advanced Gas Metal Arc Welding  
 Gas Metal Arc Welder Certificate

### Third Trimester

Worker Characteristic  
 Blue Print Theory  
 Advanced Gas Tungsten Arc Pipe Weld  
 Gas Tungsten Arc Welder Certificate  
 Combination Welder Diploma

## CERTIFICATES & DIPLOMAS

### Certificates

Welders Helper	84 hours
Shielded Metal Arc Welder	432 hours
Gas Metal Arc Welder	864 hours
Gas Tungsten Arc Welder	1296 hours

### Diplomas

Combination Welder	1296 hours
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