

# General Information

## Admission Policy

A. Tennessee College of Applied Technology Livingston admits applicants on a 'first-come, first serve' basis.

1. Applicants Not Enrolled in High School

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

1. They are at least eighteen (18) years of age or have a high school diploma or equivalent.
2. Select a program of study
3. Complete an admissions application
4. Submit program specific materials and complete additional requirements of the chosen program (if required).

B. Admission of Church-Related and Home School Students

1. Students who have attended a church-related school or home school as defined by T.C.A § 49-50-801 and T.C.A § 49-6-3050 are eligible for admission

A. Church-Related or Home School Students who do not present valid ACT, SAT or other approved assessment scores at time of admissions may be subject to program assessments to determine program eligibility.

C. Admission of Foreign Non-Immigrants

1. Foreign non-immigrant applicants are eligible for admission if they meet the same conditions required for other applicants as well as the requirements of the U.S. Bureau of Naturalization and Immigration.

D. Standardized Examination Scores

1. Colleges of applied technology may use standardized test scores for advisement and placement purposes.

E. 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.

## Admission Procedures (www.tcatlivingston.edu)

### STEPS FOR ENROLLMENT



Pick A Program



Fill Out Online Application



Submit Program Specific Application Materials, (If Required)



Submit proof of vaccination



Request/Submit Transcripts



Complete FAFSA

## Class Schedules

Full-time 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 Main Campus and the TCAT Livingston extension campus located in Cookeville.**

**TCAT—Livingston at Cookeville Higher Education Campus**

**1000 Neal Street, Cookeville TN 38501**

## Student Cost

A maintenance and technology fee is charged for each trimester of enrollment. Students must provide the following as required by the area of training: textbooks, workbooks, paper, pencil, tools, uniforms (if required), and all parts and materials used on personal projects.

## 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 at Livingston 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 Livingston.

**-For Gainful Employment Information see website**

The Tennessee College of Applied Technology - Livingston is an equal opportunity institution and offers equal opportunity for employment and admission to programs to all qualified persons without regard to race, sex, color, religion, national origin, age, physical disability, or veteran status. TCAT fully support the Americans with Disabilities Act and encourages applicants who may require special assistance under the Act to make it known. TCAT-96-1000-TP-20

# Welding Technology



**TENNESSEE COLLEGE  
OF APPLIED TECHNOLOGY**  
LIVINGSTON

740 Hi Tech Drive  
Livingston, TN 38570  
www.tcatlivingston.edu

Phone: 931-823-5525

# Welding Technology

Approximately: 12 Months

## 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.

## Course Outline

- ◆ Safety
- ◆ Equipment Setup
- ◆ Machine and Accessories
- ◆ Metal Preparation and Identification
- ◆ Selection of Electrodes and Filler Metals
- ◆ Fuel and Shielding Gases
- ◆ SMAW
- ◆ Basic Metallurgy
- ◆ Joints and How to Weld Them
- ◆ Layout and Blueprint Reading
- ◆ GMAW
- ◆ FCAW
- ◆ GTAW
- ◆ Related Equipment
- ◆ Welding Symbols
- ◆ Pipe Cutting and Welding
- ◆ Code Testing
- ◆ Technical Information
- ◆ Technology Foundations

## Certificates and Diplomas

### Certificates

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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## 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.

**Demand:** With an expected shortage of qualified personnel worldwide, the individuals with the skills and knowledge necessary can expect a secure future and financial security.