

## Our Mission

The Tennessee Colleges of Applied Technology continue to serve as the premier providers for workforce development throughout the State of Tennessee. The colleges fulfill the mission by:

- Providing competency-based training through various types of instructional delivery systems of the highest quality that will qualify individuals for employment and/or advancement in jobs.
- Providing high quality training and retraining of employed workers.
- Providing high quality training that is economical and accessible to all residents of Tennessee, thereby contributing to the economic and community development of the communities we serve.

## Tennessee College of Applied Technology Elizabethton

- Accredited by the Commission of the Council on Occupational Education, 7840 Roswell Road, Suite 325, Atlanta, GA 30350, telephone 1-800-917-2081.
- Approved for the training of veterans by the State Office for Veterans' Education and the Tennessee Higher Education Commission.
- Governed by the Tennessee Board of Regents, 1415 Murfreesboro, Road, Suite 350, Nashville, TN 37217, telephone 615-366-4400.

## Tennessee College of Applied Technology Elizabethton

Website address: [www.tcatelizabethton.edu](http://www.tcatelizabethton.edu)

426 Highway 91 North

Elizabethton, TN 37643

Telephone 423-543-0070, Toll Free 1-888-986-2368

Fax 423-547-2587

Office Hours: Monday-Friday 7:30 AM– 4:30 PM ET

**“Workforce development. It’s what we do.”™**

The Tennessee College of Applied Technology Elizabethton, a Tennessee Board of Regents institution, is an AA/EEO/ADA employer and does not discriminate on the basis of race, color, national origin, gender, ability and age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Student Services Coordinator, Tennessee College of Applied Technology Elizabethton, 426 Highway 91 North, Elizabethton, TN 37643, telephone 423-543-0070. Printed by Sabre Printers, 325 West Walnut Street, Johnson City, TN 37604. TBR 260, POE 14200. 1M. 12/13.

**Tennessee College of  
Applied Technology Elizabethton**  
426 Highway 91 North  
PO Box 789  
Elizabethton, TN 37644

**ELECTRICITY–ELECTRONICS**



**TENNESSEE COLLEGE  
OF APPLIED TECHNOLOGY**  
—ELIZABETHTON—



# ELECTRICITY-ELECTRONICS

C.I.P. Code 47.0101

The Electricity/Electronics Program provides students with basic theory, practice, experiments and real work experiences in this field. After completion of basic electrical and electronic curricula, students have the option of specializing in one or more of the following areas: Advanced Digital Electronics, Solid State Motor Controls, Robotics, and Programmable Logic Controllers. Upon completion of the course, students can apply this knowledge to today's ever-changing technological advancement in residential, commercial, industrial electricity and electronics.

## LENGTH OF PROGRAM

The average length of this competency-based program is 1,296 hours (12 months) for full-time students choosing the Electricity field and 1,728 hours (16 months) for the full-time student choosing the Electronics field. Actual time is dependent upon the length of time it takes to achieve each competency. This program contains several completion points designed to prepare students for entry-level jobs within the Electricity/Electronics field.

## ADMISSION REQUIREMENTS

This program operates on an open-entry, open-exit basis. Students may enter the program anytime during the school year. However, entrance is dependent upon space availability. Students must have a high school diploma or equivalent.

## APPLICATION PROCEDURES

Complete an application for admission. The application may be obtained at the Main Campus, 426 Highway 91 North, Elizabethton, from 7:30 AM to 4:30 PM Monday-Friday, Eastern Time, or online at [www.tcatelizabethton.edu](http://www.tcatelizabethton.edu). You must also provide a copy of your high school diploma or equivalent.

## CERTIFICATE AWARDS

- 3 months Electrician Helper
- 3 months Electronics Assembler

## DIPLOMA AWARDS

- 12 months Electrician
- 16 months Industrial Electronics Technician

## UNITS OF STUDY

- Orientation and Safety
- AC/DC Fundamentals
- Residential Wiring and NEC
- Transformer Theory
- Test Equipment & Soldering Techniques
- Blueprint Reading / Symbols / Applied Math
- AC/DC Motors and Controls
- Industrial Wiring
- Semiconductors / Electronic Circuits /  
Circuit Analysis
- Programmable Logic Controllers
- Digital Electronics
- Basic Robotics
- Basic Fiber Optics
- Renewable Energy

## CLASS HOURS

Classes meet from 8:00 AM to 3:00 PM Monday-Friday. A part-time training program is also offered in the evening.

## STUDENT SERVICES

The Student Services Office provides counseling to all students and potential students. Telephone 423-543-0070 to speak with a counselor. For auxiliary aids and services to individuals with disabilities and/or limited English proficiency, contact the Student Services Coordinator, telephone 423-543-0070.

## WEBSITE

[www.tcatelizabethton.edu](http://www.tcatelizabethton.edu)