Turn the switch on a field that offers pay and promise. Our Electronics Engineering Technology degree can help you enter the electronics field, where strong dependence on computers and the widespread use of high-tech equipment have created opportunities and growth.

In this field, you will apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate and modify electrical components, circuitry, controls and machinery. You will provide evaluation and data for engineering staff to aid them in making engineering design decisions. Since projects will vary from day to day, variety is one of the qualities many people enjoy about this profession.

Career Opportunities

Most businesses and industries depend on complex electronic equipment to operate. Opportunities for electrical and electronics technicians are strong and may include:

- technical positions at manufacturing sites for industrial controls, system maintenance, and production processes
- electric power companies, where electronic equipment operates and controls generating plants, substations, and monitoring equipment
- security companies, where electronics technicians install, maintain and repair sophisticated computer-controlled systems
- careers in the medical field, building and servicing biomedical equipment like the ultrasound machine or bedside monitoring systems

Job Outlook

- Job prospects are favorable in South Carolina, especially in the areas of repair and installation. The expected growth rate through the year 2026 is two percent.
- The median annual wage of electrical and electronics engineering technicians was $63,660 in 2017, according to the Bureau of Labor Statistics.
What you’ll learn ...

- DC circuits with emphasis on resistance, voltage, current, power and energy in series, parallel and series-parallel circuits using Ohm’s Law, Kirchhoff’s Laws and circuit theorems.
- AC circuits including capacitive and inductive reactance and impedance in series, parallel and series-parallel circuits.
- Active devices including semiconductor theory and principles, diodes and diode circuits, transistors, transistor circuits, and other components.
- Digital circuits including number systems, basic logic gates, Boolean algebra, logic optimization, flip-flops, counters, registers and other logic circuits.
- Microprocessor fundamentals including operations, architecture, interfacing, and applications.
- Programmable controllers including relay logic, ladder diagrams, theory of operation and application, loading, debugging and troubleshooting techniques.
- Control systems including open and closed loop control system operations and applications with industrial models used to simulate manufacturing system application.

Program Options

- Electronics Engineering Technology Associate Degree
  This degree allows students to enter the workforce after earning an associate degree, or continue on to a bachelor’s through USC Upstate, South Carolina State University, UNC Charlotte or Western Carolina University. Discuss this option with your advisor or the department head before registering for classes.

- Associate in Science/Electrical Engineering or Computer Engineering Transfer Track
  Students who intend to pursue a bachelor’s degree are strongly encouraged to consider the Electrical or Computer Engineering Transfer Track. Check with your advisor to ensure that your chosen courses will apply and transfer smoothly to the four-year college or university of your choice, such as Clemson University or the University of South Carolina. Since requirements can change at other institutions at any time, it is well advised for students to also get in touch with the department head of the program you wish to transfer into to ensure you are meeting the correct requirements for entrance into that program.

Accreditation

Greenville Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award certificates, diplomas and associate degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for questions about the accreditation of Greenville Technical College. (http://www.sacscoc.org)

All associate degrees offered through the Engineering Technologies programs at Greenville Technical College are accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

Visit www.gvtec.edu/gainful-employment/ for important information about the educational debt, earnings, and graduation rates of students who attended this program.