

Electronics/Electrical Engineering Technology

Electronics Engineering

www.dtcc.edu • Delaware Technical & Community College

The Electronics Engineering Technology is a general electronics program. You will develop skills and a practical background in electronics, electricity, computer, and industrial electronics technology. You will find this program valuable if you want to repair commercial and industrial equipment, work with commercial radio and television stations, install a variety of commercial and industrial electrical and electronics systems, or repair and install consumer electronics devices.

What You'll Learn...

- Practical problem-solving and troubleshooting techniques
- Component identification and analysis techniques
- Circuit and systems identification and analysis
- Schematic and diagram analysis
- Test equipment applications

What You'll Earn...

- A competitive salary and excellent opportunities for advancement
- A career focusing on either systems, bench, or field repair
- Employment as an electronics specialist, technical specialist, electrical technician and engineering technician
- The credentials to become an electrical/electronics repair manager/supervisor
- The technical knowledge and ability to succeed in an expanding technical world

Why You'll Succeed...

- Many of the higher paying jobs, now and in the future, will be in a technical career field requiring an education beyond high school
- Employees with degrees tend to be more eligible for promotion*
- Associate degree holders generally earn more than high school graduates*
- College credit may be awarded for relevant work experience
- Many credits from an Associate Degree may be applied toward a Bachelor Degree

**Statistics from U.S. Department of Commerce, Bureau of Census*

Electronics Engineering

You can enroll in the Electronics Engineering Technology on either a full-time or part-time basis. The length of time required to complete an Associate Degree depends on the number of courses you take each semester. Some students may need refresher courses at the basic or pre-tech level; others may receive transfer credit or credit for work experience. Delaware Tech operates on a semester system with new terms beginning in late August and mid-January, plus summer terms beginning at the end of May and in mid-June. You can start taking courses any semester or summer term; however, all technical courses may not be offered every term. A diploma program is also available for this technology.

Required Technical Courses

Introduction to Circuit Analysis is an analysis of current, voltage, and power in series, parallel and series-parallel DC circuits. Use of mesh and network theorem methods to analyze complex DC circuits is covered in addition to capacitance, magnetism, inductance, and DC transient response in capacitive and inductive circuits.

Network Analysis discusses alternating electric currents with emphasis on applied use of fundamental theorems including Kirchoff's Laws, Thevenin and Norton's Theorems, maximum power transfer, and transient circuit effects.

Analog Electronics I & II discusses fundamentals of applied electronic circuits. Amplifier frequency response, decibels, Miller Effect & Theorem, operational amplifier circuits and various forms of communications are also covered.

Digital Electronics I & II explores digital concepts in-

cluding logic levels and pulse waveforms, Boolean algebra, and advanced topics in digital electronics including memory flip-flops and programmable logic arrays.

Programmable Logic Controls is a course in modern control of processes. Programmable controllers, numerical control bar code readers, and static logic control will be covered. An introduction to the field of robotics is included.

Intro to Computers & Technology provides an overview of the computer as used in engineering technologies.

Introduction to Microprocessors is an introduction to the microprocessor for electronic technicians. The course concentrates on programming and hardware fundamentals with emphasis on I/O operations and devices.

Related Courses

Algebra & Trigonometry I & II
Social Science Electives
Physics
Critical Reading & Thinking

Technical Electives
Oral Communications or
Technical Writing & Communication
Composition

Getting Started

1. Obtain an application by calling (302) 857-1020. Complete and return to Terry Campus with a \$10 application fee.
2. Take the College Placement Test (CPT) *unless college-level math, reading, and English courses have been completed with a "C" grade or better*. The CPT will determine appropriate placement and is scheduled by the Admissions Office.
3. Request that high school and/or college transcripts be sent to the Admissions Office.
4. Meet with a Delaware Tech counselor to discuss CPT results.
5. Meet with advisor to plan schedule.
6. Apply and register early for the best selection of courses.

Standards of Excellence

❖ 97% of graduates are employed in their career choice