

Electronics and Computer Engineering Technology

ELECTRICAL ENGINEERING TECHNOLOGY OPTION

As an electronics or electrical engineering technician, you will use test equipment to analyze, diagnose and troubleshoot electronic circuits and systems in a wide variety of applications. You will use the principles of science, engineering and mathematics to solve technical problems. You could work with electronic or electrical engineers in manufacturing and assembly operations, research and development laboratories, service organizations or various government operations. The variety of electronics applications for business, industry and home life has created a strong demand for specialists in this field.

You'll Learn

- DC and AC circuit theory and applications
- Microprocessor programming and interfacing
- Computer techniques for circuit analysis and design
- Analog and digital circuits
- Programming in C++ language
- Computer operating systems, hardware, and networking fundamentals
- Additional knowledge, skills and abilities essential to your success on the job

You'll Earn

- A starting salary which is typically among the highest paid to associate degree holders
- The flexibility to choose among a variety of specialties including manufacturing, maintenance, research, design and development
- The ability to advance to higher level positions due to your strong background
- Local employment opportunities in international companies such as DuPont, Agilent, and Dade Behring
- Strong status in the job market—this field is growing rapidly, therefore, trained specialists are constantly in demand

You'll Succeed

- More than half of all new jobs require education beyond high school.
- Employees with degrees have better chances for promotion.
- Associate degree holders generally earn 30 percent more than high school graduates (according to the U.S. Department of Commerce, Census Bureau).
- College credit or advanced placement may be given for relevant work experience.
- Many credits from an associate degree can be applied toward a bachelor's degree.

Get in, Get smart, Get going. . .

You can enroll in the Electrical Engineering Technology Option of the Electronics and Computer Engineering Technology Program as a full- or part-time student. Day and evening courses are offered. 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 sessions beginning in late August and mid-January, plus summer sessions beginning at the end of May and in mid-June. You can start taking courses any semester or summer session; however, all technical courses may not be offered every session. Counselors and advisors are available to help you schedule your courses.

TECHNICAL COURSES

Technical courses in the Electronics and Computer Engineering Technology Program are heavily laboratory oriented, with 2-3 hours of hands-on experience for every 3-4 hours of classroom instruction. Because mathematical principles are used to analyze circuit performance, an interest or background in mathematics is important.

Analog Electronics I covers the fundamentals of applied electronic circuits including diodes and transistors.

Analog Electronics II studies amplifier frequency response, decibels, Miller effect, Miller's theorem, operational amplifier circuits and various forms of communications systems.

Computer Assembly & Maintenance provides the installation and trouble-shooting fundamentals of computer operating systems, hardware and networks.

Digital Electronics I & II study basic to more advanced digital logic.

Introduction to Circuit Analysis studies the analysis of current, voltage, power in series, parallel, series-parallel and non series-parallel DC circuits.

Introduction to Microprocessors introduces the electronic technician to the microprocessor, concentrating on programming and hardware fundamentals.

Network Analysis studies AC circuits with an emphasis on applied use of fundamental theorems.

Programming for Technology introduces object-oriented programming using electronics and computer technology related examples.

Your choice of:

Industrial Electronics is an applications treatment of industrial electronic components.

Or

Programmable Logic Controllers provides a hands-on learning experience to understand programming, function and installation of PLCs.

SUPPORT COURSES

Algebra & Trigonometry I, II

Calculus I

Composition

Electricity & Magnetism

Social Science Electives (2)

Technical Writing & Communication

TO APPLY FOR ADMISSION

1. Obtain a College Admissions Application by calling (302) 283-3100. Admission applications are also available online at www.dtcc.edu/all/forms/. Complete and return the application to the Stanton campus with a \$10 fee.
2. Request that your high school and/or college transcripts be sent to the Stanton Admissions Office.
3. Arrange to take the Computerized Placement Test (CPT) *unless you have already completed college-level math and English courses with a "C" grade or better*. The CPT is administered by both the Stanton (302-454-3954) and Wilmington (302-571-5343) Admissions Offices and is used to determine appropriate course placement.
4. Meet with a Delaware Tech counselor to discuss your CPT results and select your course schedule.
5. Remember to apply and register early for the best selection of courses.