

# Electronics and Computer Engineering Technology

## **COMPUTER ENGINEERING TECHNOLOGY OPTION**

*Computer Engineering Technology can prepare you for an interesting and exciting career working with computer hardware and software. You will learn electrical and electronic theory; to install new computer equipment; to program computers; to repair computer electronic hardware; and to design, install and administer networks. You may work as a team member in computer service, marketing, system administration or design. Many positions require contact with customers, members of other computer professions, engineers and/or scientific personnel.*

### **You'll Learn**

- Installing, maintaining and trouble-shooting computer systems
- Network implementation, support and trouble-shooting
- Network and computer security
- 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

### **You'll Earn**

- A competitive salary with opportunities for advancement
- Employment opportunities in computer installation and trouble-shooting
- Employment opportunities in installation and management of computer networks
- The credentials to advance in this field
- Strong status in the job market – computer engineering technology graduates are 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 Computer Engineering Technology of the Electronics and Computer Engineering Technology Program on either a full- 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. Diploma and certificate programs are also available in this technology.

## TECHNICAL COURSES

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

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

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

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

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

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

**Introduction to Network Security** covers the basics of network security, vulnerabilities of operating systems, network security objectives, architecture and risk management models.

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

**Computer Networks** provides a study of computer interface and networking through simulations and observation as well as hands-on installations.

## SUPPORT COURSES

Algebra & Trigonometry I, II

Calculus I or Discrete Math

Composition

Electricity and 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/](http://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.