

# ELECTRONICS TECHNOLOGY

## Is Electronics Technology for me?

*The field is for you if you have ...*

- Above average mathematical ability.
- Creativity for design work.
- Mechanical and science aptitude.
- The ability to get along well with others and work as part of a team.
- Analytical ability.
- The ability to do precision work such as soldering and performing tests on microcircuitry.

## What skills will I need for this field?

- Electronics and electrical technicians use principles and theories of science, engineering, or mathematics to solve problems.
- They develop, manufacture, and service equipment and systems like sonar, TV's, industrial and medical measuring or control devices, navigational equipment, and computers.
- They use measuring and diagnostic devices to test, adjust and repair equipment.
- They assist engineers and scientists in research and development.
- Those in manufacturing prepare specifications and run tests as directed by engineers.
- Those who work with field representatives help customers install, operate and maintain complex technical equipment.

## What is the work atmosphere like?

Electronics and electrical technicians typically work in companies that manufacture electrical and electronic equipment and machinery. They also work in service industries and government. They work in laboratories, offices, electronics shops, or industrial plants. Service technicians usually spend much of their time working in customers' establishments. Electronics and electrical technicians begin doing routine work under close supervision of an experienced technician, engineer or scientist. As they gain experience, they are given

assignments with less supervision, and some may be promoted to supervisory positions. With further education, technicians may become engineers and work for cable companies, radio stations and manufacturing firms.

## What are my degree options?

### **Certificates**

Electronics Manufacturing  
Electronics Technology  
Industrial Controls and Automation

### **Associate's Degree**

Associate in Applied Science (AAS)

### **Bachelor's Degree**

Bachelor's degrees are available by transferring to four-year colleges and universities. For example: DeVry Institute of Technology, Southern Illinois University and Northern Illinois University.

### **Professional Certification**

Some electronics and electronics and electrical technicians who test transmitters must possess a radio-telephone operator license issued by the U.S. Federal Communications Commission. The following state governments require licensing and testing: Connecticut, Indiana, Louisiana, Massachusetts and Oregon.

## What are my career opportunities?

According to the U. S. Department of Labor, employment of electronic technicians is expected to grow 25 to 34 percent through the year 2005 due to the expected continued rapid growth in technical products. Opportunities will be best for those who graduate from a two-year post-secondary school technical training program.

## What can I do with these degrees?

*If you have completed ...*

### **High School Diploma**

Electrician Apprentice

### **Certificate**

Installer of mobile phones and audio systems, Electronics Salesperson, Computer Technician, Electrical Technician, Electronics Assembler (Developmental), Electronics System Tester, Electronics Technician

### **Bachelor's Degree**

Electrical Engineer, Electronics Engineer, Management Supervisor

## How can I prepare now?

*Recommended Courses ...*

### **Math**

Two years Algebra

### **Science**

Computer Applications and Physics

### **Communications**

Composition

### **Occupational Electives**

Electricity/Electronics courses, CAD

### **Recommended Supporting Electives**

Keyboarding

## What about my articulated credit?

Check with your high school coordinator to see if you are eligible for articulated credit at College of DuPage.

### **Associate in Applied Science Degree**

Aircraft Electronics Technician, Audio and Sound Specialist, Automated Equipment Technician, Biomedical Technician, Broadcast Technician, Calibration Laboratory Technician, Guided Missile Technician, Industrial Electronic Maintenance, Instrumentation Technician, Microelectronics Technician, Photo-Optics Technician, Quality Control Technician, Technical Writer

## What should I take in my first semester at C.O.D.?

ET 1100: Electricity and Electronics Fundamentals

ET 1120: Electronic Documentation

ET 1147: Digital Fundamentals

Eng 1101: Composition I

Math 1115: Technical Mathematics

## Whom can I talk to for more information?

Natural Sciences Division  
(630) 942-2010

For more information on the Associate in Applied Science Degree curriculum, see your program coordinator or go to [www.cod.edu](http://www.cod.edu).