



Associate Degree Program

# ELECTRONICS & COMPUTER TECHNOLOGY

## ABOUT THIS DEGREE PROGRAM

Every industry and individual today relies on high-tech electronic and computer devices in order to communicate, create, transport and entertain. DeVry University's associate degree program in Electronics and Computer Technology can prepare you with the skills needed to maintain and repair these vital products and systems. DeVry University has a long history of preparing individuals to work in the electronics industry.

As a student, you can work with the latest technologies and designs, plus test new ones, providing with real-world insight. You can learn key troubleshooting skills and become immersed in today's engineering hardware and software technologies. You can also learn how to lead and/or be a part of a technical team.

Through our TechPath approach, we've put technology at the core of our programs in business, tech and health – including this program. Every TechPath class you take revolves around a unique learning rubric developed at DeVry. We call it People-Process-Data-Devices or P2D2. You'll gain real skills in collaboration, be able to adapt to new structures, and be comfortable working with data and a wide spectrum of tech-forward tools. P2D2 is a key component of what makes TechPath a smart, new way of getting the knowledge you need to be ready to hit the ground running in the way successful companies work today.

## GENERAL EDUCATION COURSEWORK

### Communication Skills

- ENGL112<sup>1</sup>** Composition
- ENGL206** Technical Communication

### Humanities

- ETHC232** Ethical and Legal Issues in the Professions

### Social Sciences

- SOCS185<sup>2</sup>** Culture and Society

### Mathematics and Natural Sciences

- MATH103** Beginning Algebra
- PHYS204** Applied Physics with Lab

### Personal and Professional Development

- CARD205** Career Development
- COLL148** Critical Thinking and Problem-Solving

<sup>2</sup> Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

<sup>1</sup> Students enrolled at a Nevada location must take POLI332 in lieu of this requirement

## CORE-DEGREE COURSEWORK

### Electrical and Electronic Circuits

- ECT122** Electronic Systems I with Lab
- ECT125** Electronic Systems II with Lab
- ECT246** Electronic Systems III with Lab

### Digital and Computer Systems

- CEIS100** Introduction to Engineering Technology and Information Sciences
- CIS115** Logic and Design
- CIS206** Architecture and Operating Systems with Lab
- ECT114** Digital Fundamentals with Lab
- SEC280** Principles of Information Systems Security

### Integrated Electronic Systems

- ECT263** Communications Systems with Lab
- ECT284** Automation and Control Systems with Lab

## DID YOU KNOW?

Cisco Networking Academy courses at DeVry University teach networking and IT skills that can prepare you for industry-recognized certifications.

## DID YOU KNOW?

At DeVry University, you have the option of taking your Electronics and Computer Technology coursework online, on-site or a combination of both. Our qualified practitioner faculty teach your classes whether online or on-site, and you can have regular opportunities for collaboration and interaction with classmates.

Programs, course requirements and availability vary by location. Some courses may be available online only. All students enrolled in site-based programs will be required to take some coursework online and, for some programs and locations, a substantial portion of the program may be required to be completed online. DeVry's academic catalog, available via [devry.edu/catalogs](http://devry.edu/catalogs), contains the most current and detailed program information, including admission, progression and graduation requirements. Information contained herein is effective as of date of publishing.

Courses in blue are part of the DeVry Tech Path



# Associate Degree Program Electronics & Computer Technology

## CAREERS IN ELECTRONICS & COMPUTER TECHNOLOGY

Over the last quarter century, electronics and computer technology have triggered a revolution in communications, bringing the world together as never before. It is now commonplace to play, shop and connect with people around the globe in just fractions of a second. As this technology has grown more common and complex, pouring into every aspect of our lives, it has opened up greater opportunities of tremendous variety, excitement and importance.

DeVry University's Electronics and Computer Technology associate degree program can prepare you with a firm foundation of programming, digital fundamentals, electronic systems, microprocessors, sensors and instrumentation, semiconductor manufacturing and much more.

Graduates of DeVry University's Electronics and Computer Technology associate degree program may consider careers including, but not limited to, the following:

- Computer and Office Machine Repair Specialist
- Computer Automated Teller and Office Machine Technician
- Computer Support Specialist
- Customer Service Engineer
- Electrical and Electronics Installer and Repair Specialist
- Electrical Engineering Technician
- Electronics Technician
- Electronics Engineering Technician
- Engineering Technician
- Equipment Installer/Technician
- Field Service Technician
- Manufacturing Technician
- Telecommunications Systems Installer/Technician
- Test Engineering Technician
- Wide and Local Area Network Installer/Technician

For comprehensive consumer information, visit [devry.edu/studentconsumerinfo](http://devry.edu/studentconsumerinfo). Important information about the education debt, earnings and completion rates of students who attended this program can be found at [devry.edu/aect.ge](http://devry.edu/aect.ge). For additional program information, visit [devry.edu/aect](http://devry.edu/aect).

In New York, DeVry University operates as DeVry College of New York.

DeVry University is accredited by The Higher Learning Commission (HLC), [www.hlcommission.org](http://www.hlcommission.org). DeVry is certified to operate by the State Council of Higher Education for Virginia. Arlington Campus - 2450 Crystal Dr., Arlington, VA 22202. DeVry University is authorized for operation by the THEC. [www.tn.gov/thec](http://www.tn.gov/thec) Nashville Campus - 3343 Perimeter Hill Dr., Nashville, TN 37211. To report unresolved complaints to the Illinois Board of Higher Education, visit their webpage at <http://complaints.ibhe.org/> or by mail to the Illinois Board of Higher Education, 1 N. Old State Capitol Plaza, Suite 333, Springfield, IL 62701-1377. Program availability varies by location. ©2016 DeVry Educational Development Corp. All rights reserved. Version 07/03/17

## KNOWLEDGE AND SKILLS

**PROGRAMMING** — Understand programming logic, including basic control structures, modularization and systems programming. Use high-level languages, such as flowchart-based languages, to apply programming concepts to technical problems in practical situations.

**COMMUNICATIONS AND NETWORKING** — Examine principles of data communications, including noise effects, multiplexing and transmission methods. Discover the underlying technology of local area networks (LANs), wide area networks (WANs) and the Internet. Explore networking media, the Open System Interconnection (OSI) model, transmission control protocol/Internet protocol (TCP/IP), routing and switching, and small network configuration and troubleshooting.

**HARDWARE AND SOFTWARE** — Explore the PC system from the software, hardware and operating system points of view. Cover hardware topics such as system boards, processors, memory, power supplies, input/output (I/O) ports, internal adapters, printers and basic networking devices. Cover software topics including client/server operating systems and installation, as well as software licensing considerations.

**ELECTRONIC SYSTEMS** — Gain proficiency in working with integrated circuits, and building and troubleshooting power supplies and operational amplifier applications. Explore solid-state devices such as diodes, bipolar and field effect transistors, and operational amplifiers, as well as their use in signal processing applications, such as amplification and filtering.

**CONTROLS AND INSTRUMENTATION** — Learn the electronic control of mechanical systems, covering sensors and transducers, signal conditioning, actuators, and Programmable Logic Controllers (PLC).

**MAINTENANCE AND REPAIR** — Service, repair, calibrate, regulate, fine-tune or test machines, devices and equipment that operate primarily on the basis of electrical or electronic (not mechanical) principles.

**COMPUTERS AND ELECTRONICS** — Gain knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

## PROGRAM-SPECIFIC COURSEWORK

### ALL OF

- NETW202** Introduction to Networking with Lab
- NETW204** Introduction to Routing with Lab
- NETW206** Introduction to Switching with Lab

### OR

### ALL OF

- NETW203** Cisco Networking Academy – Introduction to Networking with Lab
- NETW205** Cisco Networking Academy – Introduction to Routing with Lab
- NETW207** Cisco Networking Academy – Introduction to Switching with Lab

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