

Bachelor's Degree Program

ELECTRONICS ENGINEERING TECHNOLOGY

Specialization: Standard Option

TECHNOLOGY ENGINEERING TECHNOLOGY

ABOUT THIS DEGREE PROGRAM

TECH CORE

A Foundation in Technology

This program is anchored with Tech Core, curriculum designed to help you build a foundation of interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. You'll learn relevant skills in

operating systems, programming, hardware, connectivity and security – giving you a hands-on foundation in engineering technology, information technology and software and information systems.

A Program to Fuel Your Future

Learn how devices are networked and connected via communications technologies, how industrial control systems work to monitor, collect, exchange and analyze data, and how embedded microcomputer systems are created for electro-mechanical and automation application.

Is This Program for You?

Want to pursue a career in working with automated, digital systems? This program, which gives you hands-on experience with microprocessors, signal processing, control systems and mechatronics, may be the right fit for you.

CAREER OPPORTUNITIES

Graduates of DeVry's Electronics Engineering Technology degree program may consider, but are not limited to, the following careers:

- Electrical Engineering Technician
- Electro-mechanical Technician
- Electronics Engineering Technician
- Electronics Technologist Field Technical Specialist
- Hardware Systems Technologist
- Test Systems Technologist

WHAT YOU'LL LEARN

Essentials

- Communicate methods and findings
- Collaborate in dynamic work environments
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies

Tech Core

- Produce, secure, operate and troubleshoot small enterprise networks
- Network, secure and deploy digital devices and sensors into the IoT ecosystem
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using command-line interface (CLI)

Program

- Install and upgrade networked, computercontrolled systems
- Test and measure electronic systems
- Troubleshoot automation and control
- Work with programmable logic controller as they applied to commercial, motor and industrial control
- Design and simulate analog and digital communications systems
- Execute designs for electronic control of mechanical systems
- Evaluate transmission media as sources of system security vulnerability
- Create embedded microcomputer systems for control electro-mechanical applications.

OUICK FACTS

140 CREDIT HOURS

minimum credit hours required for graduation^{3,4} **14.7**% GROWTH

nationally from 2016-2026 for Employment of electrical/electronics engineering technicians in Construction field⁵

3 YEARS

Minimum length to graduation⁶



Engineering Technology Accreditation Commission

ACCREDITATION MATTERS

ETAC of ABET promotes technical education excellence by offering programmatic accreditation to Institutions that meet their quality standards. This is a global mark of quality that is valued by employers and professional associations within the field Engineering Technology.

The Electronics Engineering Technology and Engineering Technology – Electronics degree programs are accredited, by location, by The Engineering Technology Accreditation Commission of ABET (ETAC of ABET) www.abet.org.



PORTABLE IOT KIT

You can simulate the Internet of Things (IoT) experience wherever you are. With our portable IoT Kit, you'll get hands-on experience in how IoT technologies work in the real world. Your kit will include digital devices, sensors and other tools you will use to build relevant IoT systems.



CERTIFICATION EXAM REIMBURSEMENT

We reimburse qualified students up to \$300 for the cost of one industry certification exam attempt across a wide range of fields.



Electronics Engineering Technology | Standard Option



ESSENTIALS

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Communication Skills

ENGL112¹ Composition
ENGL135 Advanced Composition
ENGL216 Technical Writing
SPCH275 Public Speaking

Humanities²

LAS432 Technology, Society and Culture ETHC232 Ethical and Legal Issues in the Professions

Professions

PHYS204

Social Sciences

ECON312 Principles of Economics SOCS185 Culture and Society SOCS325³ Environmental Sociology

Mathematics and Natural Sciences

ECET345 Signals and Systems with Lab MATH114 Algebra for College Students MATH190 Pre-Calculus MATH260 Applied Calculus I MATH270 Applied Calculus II

Personal and Professional Development

CARD405 Career Development

COLL148 Critical Thinking and Problem Solving

Applied Physics with Lab

TECH CORE

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Tech Core	
CEIS101	Introduction to Technology and
	Information Systems
CEIS106	Introduction to Operating Systems
CEIS110	Introduction to Programming
CEIS114	Introduction to Digital Devices
NETW190	Fundamentals of Information Technology
	and Networking I
NETW200	Fundamentals of Information Technology
	and Networking II
SEC285	Fundamentals of Information Security

What's your experience with professors?

A lot of them worked in the field. In electrical engineering and computer engineering they have the knowledge about what they are teaching.

- Kristian R.,

Computer Information Systems student

PROGRAM

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Automation and Electrical Systems

ECT222	Circuit Analysis Fundamentals
ECT225	Electronic Devices and Systems

ECT284 Automation and Control Systems with Lab

Information Systems and Programming

CIS170C	Programming with Lab	
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# CIS247C Object-Oriented Programming with Lab

#### **Application Development**

CIS355A Business Application Programming with Lab

#### **Senior Project**

CEIS392 Product, Project, and People Management

CEIS494 Senior Project I CEIS496 Senior Project II

#### **Technology Career Preparation**

CEIS299 Careers and Technology CEIS499 Preparation for the Profession

## **Engineering Technology Foundations:**

Operating Systems

### **Electronic and Electrical Systems**

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ECET310	Communications Systems with Lab
ECET340	Microprocessor Interfacing with Lab
ECET350	Signal Processing with Lab
ECET365	Embedded Microprocessor Systems with Lab
ECET402	Mechatronics with Lab
NETW310	Wired, Optical and Wireless Communications with Lab
REET425	Electric Machines and Power Systems with Lab



CEIS305



Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

² Students enrolled at a Pennsylvania location must take HUMN451 as part of this requirement.

³ Students enrolled at a Nevada location must take POLI332 in lieu of this requirement.