

# ENGINEERING TECHNOLOGY



## ABOUT THIS PROGRAM

### IS THIS PROGRAM FOR YOU?

Want to pursue a career in working with automated, digital systems? This program may be the right fit for you.

### A PROGRAM TO FUEL YOUR FUTURE

Develop a basic understanding of engineering principles and apply your knowledge in the implementation of systems, processes and technical operations. Students have the opportunity to customize their program with electives focused on specific technologies of interest and/or business management coursework aligned to their career interests.

## CAREER OPPORTUNITIES

Graduates of DeVry's [Engineering Technology bachelor's degree program](#) may consider, but are not limited to, the following careers:

- Electrical Engineering Technologist
- Engineering Technician I/II
- Manufacturing Engineering Technician
- Entry-level Project Engineer
- Maintenance Tech Engineer

## WHAT YOU'LL LEARN

### ESSENTIALS

- Communicate methods and findings
- Collaborate in a dynamic work environment
- Solve complex problems
- Analyze numerical data
- Apply appropriate technologies
- Interactive problem solving and data modeling
- Apply technical writing skills to develop
- Explore and apply basic elements of effective documentation relevant to the workplace communication including public speaking

### TECH CORE

- Produce, secure, operate and troubleshoot a small enterprise network
- Network, secure and deploy digital devices and sensors into the Internet of Things 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

- Design and analyze circuits ensuring proper construction, voltage and currents
- Understand the essential components of control systems designs and how to apply ladder logic to debug or maintain applications
- Apply knowledge of industrial processes toward the design and implementation of an integrated industrial IoT system
- Explore basic engineering technology concepts related to communication, problem-solving, design and ethics
- Understand various types of media used to connect computing and digital devices to secure networks
- Explore fundamental concepts of signals and systems as applied to image processing, energy systems, networks, communications and controls
- Analyze a technology based problem, utilize engineering principles to form a solution and apply project management skills to implement those solutions

## QUICK FACTS

**126**  
CREDIT HOURS  
minimum credit hours  
required for graduation

**40**  
COURSES

**2 + 8**  
YEARS MONTHS  
minimum length to graduation<sup>1</sup>



### 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 Engineering Technology field.

The Bachelor's in Engineering Technology degree program is accredited by The Engineering Technology Accreditation Commission of ABET (ETAC of ABET) [www.abet.org](http://www.abet.org).

### 3-IN-1

Earn two additional credentials with our unique 3-in-1 design. All courses in our Information Technology (IT) Essentials certificate program and Associate in Engineering Technology degree program are embedded in this program. So, you can earn a certificate and an associate degree on the way to your bachelor's degree at DeVry.

**THREE  
IN  
ONE**

**SKILLS  
FOCUSED**

### CERTIFICATION EXAM ALIGNED CURRICULUM

Experience elements of our technology curriculum focused on real-world industry standards and prepare for certification opportunities that help validate your knowledge and skills.

- CompTIA A+
- CompTIA Network+
- CompTIA Security+
- PCEP Certified Entry-Level Python Programmer
- CompTIA ITF+
- CompTIA Cloud+
- CompTIA Linux+
- Autodesk Certified User

**DIVERSITY,  
EQUITY &  
INCLUSION**

### BE AN ACTIVE PART OF AN INCLUSIVE FUTURE

Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These options highlight relevant topics to help empower you to promote an inclusive workplace.

<sup>1</sup>Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/online-programs.html>.

# Engineering Technology

## ESSENTIALS

**35**  
CREDIT HOURS

### COMMUNICATION SKILLS

ENGL112	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing

*Select one*

SPCH275	Public Speaking
SPCH276	Intercultural Communication ☼

### HUMANITIES

LAS432	Technology, Society, and Culture ☼
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*Select one*

ETHC232	Ethical and Legal Issues in the Professions
ETHC334	Diversity, Equity and Inclusion in the Workplace ☼

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society ☼

*Select one*

SOCS325	Environmental Sociology
SOCS350	Cultural Diversity in the Professions ☼

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405	Career Development
COLL148	Critical Thinking and Problem-Solving

☼ This icon indicates Diversity, Equity & Inclusion Courses

## TECH CORE

**21**  
CREDIT HOURS

### TECH CORE

CEIS101	Introduction to Technology and Information Systems
CEIS106	Introduction to Operating Systems
CEIS110	Introduction to Programming
CEIS114	Introduction to Digital Devices
NETW191	Fundamentals of Information Technology and Networking
NETW211	Fundamentals of Cloud Computing
SEC285	Fundamentals of Information System Security

## PROGRAM

**57**  
CREDIT HOURS

### MATHEMATICS AND NATURAL SCIENCES

CEIS301	Engineering Technology Fundamentals
ECT345	Signals and Systems
MATH114	Algebra for College Students
MATH190	Pre-Calculus
MATH221	Statistics for Decision Making
MATH265	Applied Calculus
PHYS204	Applied Physics with Lab

### AUTOMATION AND ELECTRONIC SYSTEMS

ECT226	Electronic Device and System Foundations
ECT286	Automation and Control
ECT315	Industrial IoT
NETW310	Wired, Optical and Wireless Communications with Lab

### ANALYSIS AND DESIGN

CEIS308	Systems and Computer Aided Design
CEIS310	Process Improvement with Machine Learning
CEIS312	Introduction to Artificial Intelligence and Machine Learning

### CAREER PREPARATION

CEIS299	Careers and Technology
CEIS499	Preparation for the Profession
MGMT404	Project Management
TECH460	Senior Project

## TECHNICAL & BUSINESS SELECTION **13** CREDIT HOURS

Student's select applicable courses from the College of Engineering & Information Sciences and the College of Business & Management provided prerequisites are met. At least two courses must be at the 300-level or higher

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