



# Bachelor's Degree Program INFORMATION TECHNOLOGY AND NETWORKING

Specialization: **Cyber Security**

TECHNOLOGY  
INFORMATION 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

In this specialization, you'll become the first line of defense against online attacks by learning to build defense mechanisms to protect applications, systems and networks. You'll also explore network security testing, including countermeasure testing and the risk factor analysis needed to design a flexible and comprehensive security plan, and gain advanced skills in providing for business continuity and disaster recovery.

#### Is This Program for You?

If you're interested in a career in information technology (IT) and have a passion for keeping data and networks secure from cyber criminals, this IT degree focused on cyber security may be the right fit for you.

## CAREER OPPORTUNITIES

Graduates of DeVry's Information Technology and Networking degree program with a specialization in Cyber Security may consider, but are not limited to, the following careers:

- Computer Network Support Specialist
- Computer Systems Analyst
- Information Security Analyst
- Penetration Tester (Ethical Hacker)
- Security Administrator
- Security Analyst
- Vulnerability Assessor (Vulnerability Assessment Analyst)

## 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

- Develop applications in an IDE framework
- Design LANs and VLANs
- Understand architecture and design
- Understand operation, regulation and trends

### Specialized

- Select and deploy network media
- Deploy defensive countermeasures
- Test and secure networks
- Analyze and mitigate security risks

## QUICK FACTS

**121**  
CREDIT HOURS  
minimum credit hours required for graduation

**28%**  
GROWTH  
nationally from 2016-2026 for Employment of Information Security Analysts<sup>1</sup>

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

**TWO IN ONE**

#### 2-IN-1

Earn an extra credential with our unique 2-in-1 design. All courses in our, Information Technology & Networking Associate degree are embedded within this program. So you can earn an associate degree on the way to your bachelor's.

#### 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.

**IoT KIT**

UP TO **\$300**

#### 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.

#### What are your career goals?

“I would like to start my own IT firm. DeVry is helping me achieve this by giving me the foundation and tools I need.”

- Katherine G.,  
2016 DeVry Graduate, Computer Information Systems

DeVry   
University

<sup>1</sup><https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>. Data reflects a national projected percentage change in employment from 2016-2026 and may not reflect local economic conditions.

<sup>2</sup>Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/degree-programs.html>.



## ESSENTIALS

51  
CREDIT HOURS

### Communication Skills

ENGL112 <sup>1</sup>	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing
SPCH275	Public Speaking

### Humanities<sup>2</sup>

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

### Social Sciences

ECON312	Principles of Economics
SOCS185	Culture and Society
SOCS325 <sup>3</sup>	Environmental Sociology

### Mathematics and Natural Sciences

MATH114	Algebra for College Students
MATH190	Pre-Calculus
MATH221	Statistics for Decision-Making
PHYS204	Applied Physics with Lab

### Personal and Professional Development

CARD405	Career Development
COLL148	Critical Thinking and Problem-Solving

<sup>1</sup> Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

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

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

## 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
NETW190	Fundamentals of Information Technology and Networking I
NETW200	Fundamentals of Information Technology and Networking II
SEC285	Fundamentals of Information Security

## PROGRAM

36  
CREDIT HOURS

### Information Systems and Programming

CEIS236	Database Systems and Programming Fundamentals
CIS170C	Programming with Lab

### Network Systems Administration

NETW250	Voice/VoIP Administration with Lab
NETW260	Intermediate Information Technology and Networking I
NETW270	Intermediate Information Technology and Networking II
SEC290	Fundamentals of Infrastructure Security

### Information Technology and Networking

CEIS305	Operating Systems
NETW315	Wireless Technologies
NETW320	Converged Networks 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

## SPECIALIZED

13  
CREDIT HOURS

### Cyber Security

NETW310	Wired, Optical and Wireless Communications with Lab
SEC311	Ethical Hacking
SEC321	Network Security Testing with Lab
SEC440	Information Systems Security Planning and Audit