

# INFORMATION TECHNOLOGY & NETWORKING

Specialization: Cyber Security



## 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 work to become the first line of defense against online attacks by learning to build defense mechanisms to protect applications, systems and networks. Explore network security testing, including countermeasure testing and the risk factor analysis needed to design a flexible and comprehensive security plan. Gain advanced skills to provide 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 Analyst
- Vulnerability Assessor

## WHAT YOU'LL LEARN

### ESSENTIALS

- Communicate methods and findings
- Collaborate in dynamic work environments
- Analyze numerical data

### 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

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program discipline.
- Use systematic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.
- Apply cybersecurity principles and practices to create and maintain secure operations.

### SPECIALIZED

- Deploy strategies for cybercrime investigation and for forensic analysis and incident response
- Apply cybersecurity skills needed to secure in-house, cloud-centric and hybrid IT environments
- Simulate a security operations center (SOC) team applying core competencies to detect, analyze, respond to, and mitigate security incidents
- Maintain network security by leveraging an attacker's knowledge on exploiting vulnerabilities
- Utilize appropriate tools and techniques to perform penetration testing and analyze testing results

## QUICK FACTS

**120**  
CREDIT HOURS  
minimum credit hours  
required for graduation

**33%**  
GROWTH  
nationally from 2023-2033  
for Employment of  
Information Security Analysts<sup>1</sup>

**NICCS™**  
NATIONAL INITIATIVE FOR  
CYBERSECURITY CAREERS AND STUDIES

### NICCS VERIFIED CURRICULUM

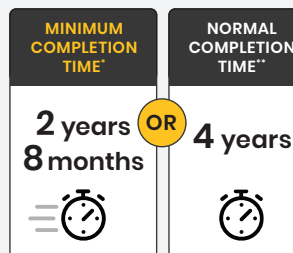
DeVry University's cybersecurity curriculum is acknowledged and verified as an approved provider by the National Initiative for Cybersecurity.

**SKILLS  
FOCUSED**

### SKILL FOCUSED CURRICULUM

Elements of our technology curriculum help prepare you to pursue certification opportunities that can validate your knowledge and skills.

- CompTIA Security +
- CompTIA PenTest+
- CompTIA CySA+
- EC-Council CEH



### ACCELERATE ON YOUR SCHEDULE

Choose the schedule that best fits your goals and commitments. You can earn your **Bachelor's Degree** in as little as **2 years 8 months**.

Or, follow a normal schedule and complete your program in 4 years.

\* Minimum completion time does not include breaks and assumes 3 semesters of year-round, full-time enrollment in 12-19 credit hours a semester per 12-month period.

\*\* Normal completion time includes breaks and assumes 2 semesters of enrollment in 12-19 credit hours per semester per 12-month period.

# Information Technology & Networking | Cyber Security

## ESSENTIALS

**51**  
CREDIT HOURS

### COMMUNICATION SKILLS

ENGL112	Composition
ENGL135	Advanced Composition
ENGL216	Technical Writing
SPCH275	Public Speaking

### HUMANITIES

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

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society
SOCS325	Environmental Sociology

### MATHEMATICS AND NATURAL SCIENCES

MATH114	Algebra for College Students
MATH234	Discrete Math in Information Technology
TECH204	Everyday Physics
TECH221	Data-Driven Decision -Making

### PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405	Career Development
COLL148	Critical Thinking and Problem-Solving

## 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
NETW212	Introduction to Cloud Computing
SEC285	Fundamentals of Information System Security

## PROGRAM

**36**  
CREDIT HOURS

### PROGRAM FOCUS

CEIS236	Database Systems and Programming Fundamentals
NETW260	Intermediate Information Technology and Networking I
NETW270	Intermediate Information Technology and Networking II
NETW310	Wired, Optical and Wireless Communications with Lab
NETW404	Data Center Virtualization
SEC290	Fundamentals of Infrastructure Security
SEC305	Cybersecurity and Data Privacy
SEC313	Applied AI for Cybersecurity
SEC399	Cybersecurity Career Preparation

### CAREER PREPARATION

CEIS298	Introduction to Technical Project Management
CEIS499	Preparation for the Profession
TECH408	Applied AI for Management and Technology
TECH460	Senior Project

## SPECIALIZED

**14**  
CREDIT HOURS

### CYBER SECURITY

SEC335	Incident Response and Digital Forensics
SEC395	Cybersecurity Architecture and Engineering
SEC399	Cybersecurity Career Preparation

#### One of:

SEC311	Ethical Hacking
SEC322	Penetration Testing

#### One of:

SEC305	Cybersecurity and Data Privacy
SEC340	Business Continuity
SEC380	Cloud Computing Security
SEC440	Information Systems Security Planning and Audit
SEC455	Security Operations Center

### Demonstrate Skills at Every Step

#### BACHELOR'S

#### ASSOCIATE

**CERTIFICATE**  
**23**  
CREDIT HOURS

**60**  
CREDIT HOURS

**120**  
CREDIT HOURS

### EMBEDDED PROGRAMS

Earn two additional credentials with our unique 3-in-1 design. All courses in our Networking Essentials certificate and Information Technology and Networking associate degree are embedded within this program.<sup>2</sup> So you can earn a certificate and an associate degree on the way to your bachelor's degree.

<sup>2</sup> Future programmatic changes could impact the ability to earn additional credentials en route to an eligible degree program. Refer to the academic catalog for details. The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements.

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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). The University's Keller Graduate School of Management is included in this accreditation. DeVry is certified to operate by the State Council of Higher Education for Virginia. Arlington Campus: 1400 Crystal Dr., Ste. 120, Arlington, VA 22202. DeVry University is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission, [www.tn.gov/thec](http://www.tn.gov/thec). Lisle Campus: 4225 Naperville Rd., Ste. 400, Lisle, IL 60532. Unresolved complaints may be reported to the Illinois Board of Higher Education through the online complaint system <https://complaints.ibhe.org/> or by mail to 1 N. Old State Capitol Plaza, Ste. 333, Springfield, IL 62701-1377. Program availability varies by location. In site-based programs, students will be required to take a substantial amount of coursework online to complete their program. ©2025 DeVry Educational Development Corp. All rights reserved. Version 3/2025