

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 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 Analyst
- Vulnerability Assessor

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

120
CREDIT HOURS
minimum credit hours required for graduation

31%
GROWTH
nationally from 2019-2029 for Employment of Information Security Analysts¹

2 + 8
YEARS MONTHS
minimum length to graduation²

**THREE
IN
ONE**

3-IN-1

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

**IoT
PROJECTS**

WORK WITH IOT TECHNOLOGIES & SYSTEMS

Immerse yourself in the Internet of Things (IoT) world and obtain hands-on experience with IoT, cloud, software and security technologies and systems.

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.

**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.

¹ <https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>. Growth projected on a national level. Local growth will vary by location.

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

Information Technology & Networking | Cyber Security

ESSENTIALS

51
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 ☺

MATHEMATICS AND NATURAL SCIENCES

MATH114	Algebra for College Students
MATH221	Statistics for Decision-Making
MATH234	Discrete Math in Information Technology
PHYS204	Applied Physics with Lab

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 Systems Security

PROGRAM

36
CREDIT HOURS

INFORMATION SYSTEMS AND PROGRAMMING

CEIS150	Programming with Objects
CEIS236	Database Systems and Programming Fundamentals
CEIS312	Introduction to Artificial Intelligence and Machine Learning

NETWORK SYSTEMS ADMINISTRATION

MGMT408	Management of Technology Resources
NETW260	Intermediate Information Technology and Networking I
NETW270	Intermediate Information Technology and Networking II
NETW310	Wired, Optical and Wireless Communications with Lab
NETW320	Converged Networks with Lab

CAREER PREPARATION

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

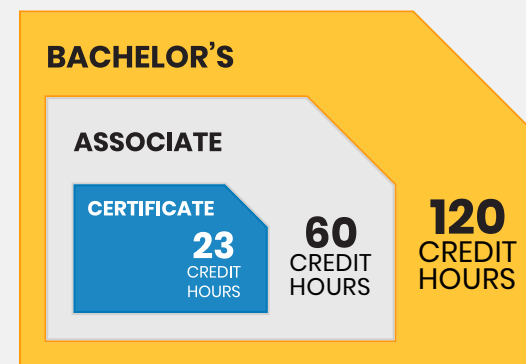
SPECIALIZED

13
CREDIT HOURS

CYBER SECURITY

SEC290	Fundamentals of Infrastructure Security
SEC310	Principles and Theory of Security Management
SEC311	Ethical Hacking
SEC321	Network Security Testing with Lab

Demonstrate Skills at Every Step



EMBEDDED PROGRAMS

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