INFOGRAPHIC

BACHELOR’S DEGREE PROGRAM | TECH - INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY & NETWORKING
Specialization: Cyber Security

ABOUT THIS DEGREE PROGRAM

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
- 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
- Apply behavioral analytics to networks and devices to prevent, detect, and counter cybersecurity threats through continuous security monitoring
- Develop a balanced perspective on the administrative and technological elements of information security
- Apply principles of technology in the building, testing, operation and maintenance of connected and distributed digital-based systems and networks

QUICK FACTS

120 CREDIT HOURS
minimum credit hours required for graduation

32% GROWTH
nationally from 2022-2032 for Employment of Information Security Analysts

NICCS VERIFIED CURRICULUM
DeVry University’s cybersecurity curriculum is acknowledged and verified as an approved provider by the National Initiative for Cybersecurity Education (NICCS).

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 AT YOUR PACE
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.

*Per 12-month period, assumes completion of 3 semesters, enrollment in 12-19 credit hours per semester and continuous, full-time year-round enrollment with no breaks.

**Per 12-month period, assumes completion of 2 semesters and full-time enrollment in 12-19 credit hours per semester.

1https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm. Growth projected on a national level. Local growth will vary by location. BLS projections are not specific to DeVry University students or graduates and may include earners at all stages of their career and not just entry level.
# Bachelor's Degree Program | Tech - Information Technology

**Information Technology & Networking | Cyber Security**

## Essentials

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<th>Communication Skills</th>
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<td>Discrete Math in Information Technology</td>
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<td>Data-Driven Decision - Making</td>
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<td>COLL148</td>
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### Tech Core

**TECH CORE** | **CREDIT HOURS**
---|---
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 Security

### Specialized

**Cyber Security** | **14 Credit Hours**
---|---
SEC290 | Fundamentals of Infrastructure Security
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

### Program

**Information Systems and Programming**

- CEIS150 | Programming with Objects
- CEIS236 | Database Systems and Programming Fundamentals
- SEC313 | Applied AI for Cybersecurity

**Network Systems Administration**

- 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
- TECH408 | Applied AI for Management and Technology

### Career Preparation

- CEIS298 | Introduction to Technical Project Management
- CEIS499 | Preparation for the Profession
- MGMT404 | Project Management
- TECH460 | Senior Project

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**Demonstrate Skills at Every Step**

**BACHELOR'S**

**ASSOCIATE**

**CERTIFICATE** | **23 Credit Hours**
---|---
**DEGREE** | **60 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. So you can earn a certificate and an associate degree on the way to your bachelor’s degree.

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). 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. 320, Arlington, VA 22202. DeVry University is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission, www.tn.gov/thec. Lisle Campus: 4225 Naperville Rd., Ste. 400, Lisle, IL 60532. Unsolved 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. ©2024 DeVry Educational Development Corp. All rights reserved. Version 3/11/2024