BACHELOR'S DEGREE PROGRAM | TECH - SOFTWARE AND INFORMATION SYSTEMS

COMPUTER INFORMATION SYSTEMS
Specialization: Cyber Security Programming

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
Learn protocols and techniques necessary to secure and protect sensitive information and financial assets. You’ll also learn how cybersecurity teams work to secure, implement and maintain robust information security systems and networks from cyberattack.

IS THIS PROGRAM FOR YOU?
Want to pursue a career in computer information systems and interested in working to prevent cybercrime? Then this program may be the right fit for you.

CAREER OPPORTUNITIES
Graduates of DeVry’s Computer Information Systems degree program with a specialization in Cyber Security Programming may consider, but are not limited to, the following careers:
- Computer Programmer
- Computer Security Specialist
- Cyber Security Specialist
- Information Security Analyst
- Data Security Administrator
- Software Developer

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
- Use advanced programming techniques
- Develop applications
- Understand network types and designs
- Deploy cryptographic and hacking methodologies

SPECIALIZED
- Understand and mitigate infrastructure security issues
- Develop standards, policies and procedures
- Mitigate web-based security threats
- Assess threats and develop countermeasures

QUICK FACTS

124 CREDIT HOURS
minimum credit hours required for graduation

35% GROWTH
nationally from 2021-2031 for Employment of Information Security Analysts1

SKILL FOCUSED CURRICULUM
Elements of our technology curriculum help prepare you to pursue certification opportunities that can validate your knowledge and skills.
- CompTIA Linux+
- CompTIA Network+
- CompTIA Cloud+
- EC Council Certified Ethical Hacker
- PCEP Certified Entry-Level Python Programmer
- CompTIA Security+
- CompTIA PenTest+
- CompTIA Project+

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.

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.

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. 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.
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Computer Information Systems | Cyber Security Programming

**ESSENTIALS**

**COMMUNICATION SKILLS**
- ENGL112 Composition
- ENGL135 Advanced Composition
- ENGL216 Technical Writing

**Select one**
- SPCH275 Public Speaking
- SPCH276 Intercultural Communication

**HUMANITIES**
- LAS432 Technology, Society, and Culture

**SOCIAL SCIENCES**
- ECON312 Principles of Economics
- SOCS185 Culture and Society

**MATHMATICS AND NATURAL SCIENCES**
- MATH114 Algebra for College Students
- PHYS204 Applied Physics with Lab
- TECH221 Data-Driven Decision-Making

**PERSONAL AND PROFESSIONAL DEVELOPMENT**
- CARD405 Career Development
- COLL148 Critical Thinking and Problem Solving

**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 course options – denoted by this icon – highlight relevant topics to help empower you to promote an inclusive workplace.

**TECH CORE**

**47 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 Security

**TECH CORE**
- CEIS150 Programming with Objects
- CEIS209 Intermediate Programming
- CEIS236 Database Systems and Programming Fundamentals
- CIS313 AI-Driven Business Application Coding
- CIS355A Business Application Programming with Lab

**TECH CORE**
- NETW411 Information Security and Mobile Devices
- SEC380 Cloud Computing Security
- SEC395 Cybersecurity Architecture and Engineering
- SEC440 Information Systems Security Planning and Audit

**BACHELOR’S**

**ASSOCIATE**

**22 CREDIT HOURS**

**60 CREDIT HOURS**

**124 CREDIT HOURS**

**DEMONSTRATE SKILLS AT EVERY STEP**

**EMBEDDED PROGRAMS**
Earn two additional credentials with our unique 3-in-1 design. All courses in our Programming 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.

**1 for students enrolled at a New Jersey location
2 Students enrolled at a Nevada location must take POLI332 in lieu of this requirement.
3 Students enrolled at a New Jersey location must take an additional six semester-credit hours of general education coursework from among the following course areas: communication skills, humanities, social sciences, mathematics and natural sciences. Courses selected in humanities or social sciences should be upper-division coursework (DeVry courses numbered 300-499).