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
- Data Security Administrator
- Cyber Security Specialist
- 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 graduation¹

31% GROWTH
nationally from 2019-2029 for Employment of Information Security Analysts²

2 + 8 YEARS + MONTHS
minimum length to graduation³

3-IN-1
Earn two extra credentials with our unique 3-in-1 design. All courses in our Programming Essentials Certificate and Information Technology & Networking associate degree with a specialization in Information Systems and Programming are embedded within this program. So you can earn a certificate and an associate degree on the way to your bachelor’s.

IoT KIT
You can simulate the Internet of Things (IoT) experience wherever you are. With our IoT Kit⁴, you’ll get hands-on experience in how IoT technologies work in the real world. Your kit will include digital devices, sensors and cloud-based tools you will use to build relevant IoT systems.

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.

¹ 127 for students enrolled at a Pennsylvania location
³ Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at https://www.devry.edu/online-programs.html.
⁴ The IoT Kit is a required expense and is not complimentary.
Bachelor’s Degree Program

Computer Information Systems | Cyber Security Programming

**ESSENTIALS**

**COMMUNICATION SKILLS**
- ENGL112\(^2\) Composition
- ENGL135 Advanced Composition
- ENGL216 Technical Writing
- SPC1275 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
- MATH221 Statistics for Decision-Making
- PHYS204 Applied Physics with Lab

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

**SPECIALIZED**

**CYBER SECURITY PROGRAMMING**
- NETW411 Information Security and Mobile Devices
- SEC290 Fundamentals of Infrastructure Security
- SEC310 Principles and Theory of Security Management
- SEC370 Web Security

**TECH CORE**

**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 Security

**INFORMATION SYSTEMS AND PROGRAMMING**
- CEIS236 Database Systems and Programming Fundamentals
- CEIS259 Introduction to Artificial Intelligence and Machine Learning
- CIS170C Programming with Lab
- CIS247C Object-Oriented Programming with Lab
- CIS355A Business Application Programming with Lab

**INFORMATION TECHNOLOGY AND NETWORKING**
- CEIS210 Introduction to Cryptographic Methods
- NETW320 Converged Networks with Lab
- SEC311 Ethical Hacking
- SEC321 Network Security Testing with Lab

**PROGRAM**

**CAREER PREPARATION**
- CEIS299 Careers and Technology
- CEIS499 Preparation for the Profession
- MGMT404 Project Management
- TECH460 Senior Project

**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.

**DEMONSTRATE SKILLS AT EVERY STEP**

**BACHELOR’S ASSOCIATE**

**CERTIFICATE**
- 22 CREDIT HOURS

**ASSOCIATE DEGREE**
- 60 CREDIT HOURS

**BACHELOR’S DEGREE**
- 124 CREDIT HOURS

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1 Students enrolled at a New Jersey location take ENGL108 in lieu of this course.
2 Students enrolled at a Pennsylvania location must take HUMN451 as part 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).
4 Students enrolled at a Nevada location must take POLI332 in lieu of this requirement.

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