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
- 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

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.

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.

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 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
SOC185 Culture and Society
SOC325 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
COLL418 Critical Thinking and Problem-Solving

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

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

Demonstrate Skills at Every Step

PROGRAM

INFORMATION SYSTEMS AND PROGRAMMING
CEIS236 Database Systems and Programming Fundamentals
CEIS312 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

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

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