INFORMATION TECHNOLOGY & NETWORKING

Specialization: Mobile and Networked Devices



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

Get hands-on experience working with devices that sense, communicate and control systems found in personal devices, homes, offices, commercial environments and everywhere in between. You'll also explore networking configuration, programming techniques for network devices and information security considerations for mobile and IoT devices.

IS THIS PROGRAM FOR YOU?

Interested in a career in information technology (IT) connecting people and devices to one another through the Internet? This specialization, focused on mobile and networked devices, may be the right fit for you.

CAREER OPPORTUNITIES

Graduates of DeVry's <u>Information Technology and Networking degree program with a Specialization in Mobile and Networked Devices</u> may consider, but are not limited to, the following careers:

- Computer Network Support Specialist
- Computer Systems Analyst
- Information Systems Analysts
- Mobile and Wireless Device Technologist
- Mobile Device Administrator
- Network and Computer Systems Administrator

WHAT YOU'LL LEARN

ESSENTIALS

- Communicate methods and findings
- Collaborate in a dynamic work environment
- Analyze numerical data

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

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program discipline.
- Use systematic approaches to select, develop, apply, integrate, and administer secure computing technologies to accomplish user goals.
- Apply cybersecurity principles and practices to create and maintain secure operations.

SPECIALIZED

- Analyze big data and wireless connectivity
- Program and connect network devices
- Examine and Analyze IoT systems
- Identify and mitigate risks
- Design mobile device applications

QUICK FACTS

120 CREDIT HOURS

minimum credit hours required for graduation

SKILLSFOCUSED

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 Security+
- CompTIA Network+
- CompTIA Project+
- CompTIA Cloud Essentials+
- PCEP Certified Entry-Level Python Programmer



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 ON YOUR SCHEDULE

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.**

- * Minimum completion time does not include breaks and assumes 3 semesters of year-round, full-time enrollment in 12-19 credit hours a semester per 12-month period.
- ** Normal completion time includes breaks and assumes 2 semesters of enrollment in 12-19 credit hours per semester per 12-month period.



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ESSENTIALS

CREDIT HOURS

COMMUNICATION SKILLS

ENGL135	Advanced Composition
ENGL216	Technical Writing
SPCH275	Public Speaking

Composition

HUMANITIES

ENGL112

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
MVIIITTA	Algebra for College Students

MATH234 Discrete Math in Information Technology

TECH204 **Everyday Physics**

TECH221 Data-Driven Decision-Making

PERSONAL AND PROFESSIONAL DEVELOPMENT

CARD405 Career Development

COLL148 Critical Thinking and Problem-Solving

TECH CORE

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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 System Security	

PROGRAM

35 **CREDIT HOURS**

PROGRAM FOCUS	
CEIS236	Database Systems and Programming Fundamentals
NETW260	Intermediate Information Technology & Networking I
NETW270	Intermediate Information Technology & Networking II
NETW310	Wired, Optical and Wireless Communications with Lab
NETW404	Data Center Virtualization
SEC290	Fundamentals of Infrastructure Security
SEC305	Cybersecurity and Data Privacy
SEC313	Applied AI for Cybersecurity
SEC399	Cybersecurity Career Preparation

CAREER PREPARATION

CEIS298

CEIS499	Preparation for the Profession
TECH408	Applied AI for Management and Technology
TECH460	Senior Project

Introduction to Technical Project Management

SPECIALIZED

CREDIT HOURS

MOBILE AND NETWORKED DEVICES

CEIS490	Ecosystem of the Internet of Things
ECT286	Automation and Control

ECT286 ECT315 Industrial IoT

NETW411 Information Security and Mobile Devices

Demonstrate Skills at Every Step



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.² So you can earn a certificate and an associate degree on the way to your bachelor's degree.

² Future programmatic changes could impact the ability to earn additional credentials en route to an eligible degree program. Refer to the academic catalog for details. The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements.



