



Bachelor's Degree Program INFORMATION TECHNOLOGY AND NETWORKING

Specialization: **Cloud Based Networking and Virtualization**

TECHNOLOGY
INFORMATION TECHNOLOGY

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

Gain exposure to cloud computer, information storage and enterprise network design and management in this specialization. You'll also prepare to design and implement systems that transmit, store and analyze data and information passing through shared resources, to help businesses operate economically.

Is This Program for You?

Interested in a career in information technology (IT) and helping businesses improve and expand computing power to become more profitable, then this specialization, focused on cloud-based networking and virtualization, may be the right fit for you.

CAREER OPPORTUNITIES

Graduates of DeVry's Information Technology and Networking degree program with a specialization in Cloud Based Networking and Virtualization may consider, but are not limited to, the following careers:

- Cloud Computing Technologist
- Cloud & Workspace Administrator
- Computer Network Support Specialist
- Computer Systems Analyst
- Information Security Analysts
- Server Hardware Technologist
- Virtualization Specialist

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

- Operation and troubleshooting of data centers
- Deploy cloud-based systems and solutions
- Apply tax planning principles
- Develop enterprise and cloud-based systems

QUICK FACTS

121
CREDIT HOURS
minimum credit hours required for graduation

28%
GROWTH
nationally from 2016-2026 for Employment of Information Security Analysts¹

2 + 8
YEARS MONTHS
minimum length to graduation²

TWO IN ONE

2-IN-1

Earn an extra credential with our unique 2-in-1 design. All courses in our, Information Technology & Networking Associate degree are embedded within this program. So you can earn an associate degree on the way to your bachelor's.

PORTABLE IOT KIT

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

IoT KIT

UP TO **\$300**

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.

What are your career goals?

“I would like to start my own IT firm. DeVry is helping me achieve this by giving me the foundation and tools I need.”

- Katherine G.,
2016 DeVry Graduate, Computer Information Systems

DeVry 
University

¹<https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>. Data reflects a national projected percentage change in employment from 2016-2026 and may not reflect local economic conditions.

²Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at <https://www.devry.edu/degree-programs.html>.



ESSENTIALS

51
CREDIT HOURS

Communication Skills

- ENGL112 Composition¹
- ENGL135 Advanced Composition
- ENGL216 Technical Writing
- SPCH275 Public Speaking

Humanities²

- ETHC232 Ethical and Legal Issues in the Professions
- LAS432 Technology, Society, and Culture

Social Sciences

- ECON312 Principles of Economics
- SOCS185 Culture and Society
- SOCS325³ Environmental Sociology

Mathematics and Natural Sciences

- MATH114 Algebra for College Students
- MATH190 Pre-Calculus
- MATH221 Statistics for Decision-Making
- PHYS204 Applied Physics with Lab

Personal and Professional Development

- CARD405 Career Development
- COLL148 Critical Thinking and Problem-Solving

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 Nevada location must take POLI332 in lieu of this requirement.

TECH CORE

21
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
- NETW190 Fundamentals of Information Technology and Networking I
- NETW200 Fundamentals of Information Technology and Networking II
- SEC285 Fundamentals of Information Security

PROGRAM

36
CREDIT HOURS

Information Systems and Programming

- CEIS236 Database Systems and Programming Fundamentals
- CIS170C Programming with Lab

Network Systems Administration

- NETW250 Voice/VoIP Administration with Lab
- NETW260 Intermediate Information Technology and Networking I
- NETW270 Intermediate Information Technology and Networking II
- SEC290 Fundamentals of Infrastructure Security

Information Technology and Networking

- CEIS305 Operating Systems
- NETW315 Wireless Technologies
- NETW320 Converged Networks with Lab

Senior Project

- CEIS392 Product, Project, and People Management
- CEIS494 Senior Project I
- CEIS496 Senior Project II

Technology Career Preparation

- CEIS299 Careers and Technology
- CEIS499 Preparation for the Profession

SPECIALIZED

13
CREDIT HOURS

Cloud Based Networking and Virtualization

- NETW404 Data Center Virtualization
- NETW414 Cloud Computing Fundamentals
- NETW432 Information Storage and Management
- NETW440 Enterprise Network Design and Management