

# INFORMATION TECHNOLOGY & NETWORKING

Specialization: Cloud Based Networking and Virtualization



## 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
- 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

- Operation and troubleshooting of data centers
- Deploy cloud-based systems and solutions
- Develop enterprise and cloud-based systems
- Design mobile device applications

## QUICK FACTS

**120**  
CREDIT HOURS  
minimum credit hours  
required for graduation

### SKILLS FOCUSED

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

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.

MINIMUM  
COMPLETION TIME\*

**2 years  
8 months**

OR

NORMAL  
COMPLETION TIME\*\*

**4 years**

#### 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.

# Information Technology & Networking | Cloud Based Networking and Virtualization

## ESSENTIALS

51

CREDIT HOURS

### 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
SOCS185	Culture and Society
SOCS325	Environmental Sociology

### MATHEMATICS AND NATURAL SCIENCES

MATH114	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

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
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 Visualization
SEC290	Fundamentals of Infrastructure Security
SEC305	Cybersecurity and Data Privacy
SEC313	Applied AI for Cybersecurity
SEC399	Cybersecurity Career Preparation

### CAREER PREPARATION

CEIS298	Introduction to Technical Project Management
CEIS499	Preparation for the Profession
TECH408	Applied AI for Management and Technology
TECH460	Senior Project

## SPECIALIZED

13

CREDIT HOURS

### CLOUD BASED NETWORKING AND VIRTUALIZATION

NETW314	Cloud Computing
SEC380	Cloud Computing Security
<b>Select one</b>	
NETW350	Cloud Services
NETW351	Cloud Architecture
<b>Select one</b>	
NETW450	Cloud Development
NETW451	Cloud Operations

### Demonstrate Skills at Every Step

#### BACHELOR'S

#### ASSOCIATE

CERTIFICATE  
23  
CREDIT HOURS

60  
CREDIT HOURS

120  
CREDIT HOURS

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

\*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.

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In New York, DeVry University operates as DeVry College of New York. DeVry University is accredited by The Higher Learning Commission (HLC), [www.hlcommission.org](http://www.hlcommission.org). The University's Keller Graduate School of Management is included in this accreditation. DeVry is certified to operate by the State Council of Higher Education for Virginia. Arlington Campus: 1400 Crystal Dr., Ste. 120, Arlington, VA 22202. DeVry University is authorized for operation as a postsecondary educational institution by the Tennessee Higher Education Commission, [www.tn.gov/thec](http://www.tn.gov/thec). Lisle Campus: 4225 Naperville Rd., Ste. 400, Lisle, IL 60532. Unresolved complaints may be reported to the Illinois Board of Higher Education through the online complaint system <https://complaints.ibhe.org/> or by mail to 1 N. Old State Capitol Plaza, Ste. 333, Springfield, IL 62701-1377. Program availability varies by location. In site-based programs, students will be required to take a substantial amount of coursework online to complete their program. ©2025 DeVry Educational Development Corp. All rights reserved. Version 3/2025