

# 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
- 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
- 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**

NORMAL COMPLETION TIME\*\*

**4 years**

OR

#### 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

**Select one**

SPCH275	Public Speaking
SPCH276	Intercultural Communication ☺

### HUMANITIES

LAS432	Technology, Society, and Culture ☺
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**Select one**

ETHC232	Ethical and Legal Issues in the Professions
ETHC334	Diversity, Equity and Inclusion in the Workplace ☺

### SOCIAL SCIENCES

ECON312	Principles of Economics
SOCS185	Culture and Society ☺

**Select one**

SOCS325	Environmental Sociology
SOCS350	Cultural Diversity in the Professions ☺

### 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

#### BE AN ACTIVE PART OF AN INCLUSIVE FUTURE



Customize your curriculum by choosing Diversity, Equity and Inclusion (DE&I) course alternates for your Communication Skills, Humanities and Social Science courses. These course options - denoted by this icon - highlight relevant topics to help empower you to promote an inclusive workplace.

## 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 Systems Security

## PROGRAM

**36**  
CREDIT HOURS

### INFORMATION SYSTEMS AND PROGRAMMING

CEIS150	Programming with Objects
CEIS236	Database Systems and Programming Fundamentals
SEC313	Applied AI for Network Security

### NETWORK SYSTEMS ADMINISTRATION

NETW260	Intermediate Information Technology and Networking I
NETW270	Intermediate Information Technology and Networking II
NETW310	Wired, Optical and Wireless Communications with Lab
NETW404	Data Center Visualization
TECH408	Applied AI for Management and Technology

### CAREER PREPARATION

CEIS298	Introduction to Technical Project Management
CEIS499	Preparation for the Profession
MGMT404	Project Management
TECH460	Senior Project

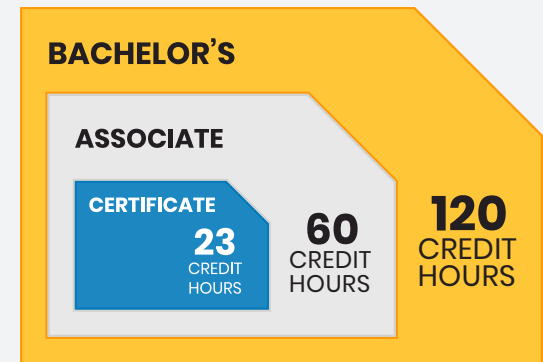
## SPECIALIZED

**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



### 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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