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
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
- 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

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

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

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

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.

CERTIFICATION EXAM REIMBURSEMENT
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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

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.

2 Not including breaks. Assumes year-round, full-time enrollment. Additional program information may be found at https://www.devry.edu/degree-programs.html.
### Bachelor's Degree Program
**Information Technology and Networking | Cloud Based Networking and Virtualization**

#### Essentials

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL112</td>
<td>Composition¹</td>
</tr>
<tr>
<td>ENGL315</td>
<td>Advanced Composition</td>
</tr>
<tr>
<td>ENGL216</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>SPC1075</td>
<td>Public Speaking</td>
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</tbody>
</table>

**Humanities**¹  
ETHC232 Ethical and Legal Issues in the Professions  
LAS432 Technology, Society, and Culture

**Social Sciences**  
ECON312 Principles of Economics  
SOCS315 Culture and Society  
SOCS325 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

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>CEIS101</td>
<td>Introduction to Technology and Information Systems</td>
</tr>
<tr>
<td>CEIS106</td>
<td>Introduction to Operating Systems</td>
</tr>
<tr>
<td>CEIS110</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>CEIS114</td>
<td>Introduction to Digital Devices</td>
</tr>
<tr>
<td>NETW190</td>
<td>Fundamentals of Information Technology and Networking I</td>
</tr>
<tr>
<td>NETW200</td>
<td>Fundamentals of Information Technology and Networking II</td>
</tr>
<tr>
<td>SEC285</td>
<td>Fundamentals of Information Security</td>
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</table>

#### Program

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CEIS236</td>
<td>Database Systems and Programming Fundamentals</td>
</tr>
<tr>
<td>CIS170C</td>
<td>Programming with Lab</td>
</tr>
</tbody>
</table>

**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

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