Networking and Information Security
College of Engineering & Information Sciences

Careers That Fit You
Build a career

around your interests and talents

Do you like figuring out how things work? Solving complex problems? Networking and communications services are among the fastest growing occupations nationwide, and the jobs are all about getting the pieces to fit together. With the right education, you could land at a major telecommunications, cable or computer company helping build the networks that connect our lives. Or you could use your knowledge to pursue the field of information security to help businesses, government agencies, hospitals or the military protect information and information systems from unauthorized access, use, disruption and destruction. You could even start your own consulting company helping businesses of all kinds connect to their customers and each other.

Let nothing stand in your way of pursuing a career in networking and information security

New opportunities emerge every day in this field. Consider these statistics reported from the Bureau of Labor Statistics for the years 2010–2011:

• The increasing adoption of mobile technologies means that more establishments will use the Internet to conduct business online. This growth translates into a need for systems administrators who can help organizations use technology to communicate with employees, clients and consumers.1

• Because so much business is carried out over computer networks, security will continue to be an important issue for businesses. Firms will increasingly hire security experts because the integrity of their computing environments is of utmost importance.1

• Demand for network architects and engineers will increase as organizations continue to upgrade their IT capacity and incorporate the newest technologies. Employment of network systems and data communications analysts is projected to increase by 53 percent from 2008 to 2018, this growth is much faster than the average and places it among the fastest growing of all occupations.2

Find a career path that’s right for you

If you’ve thought about creating, maintaining or protecting the high-tech networks that allow you to do everything from texting a friend to making a purchase online, you can turn your interests into the career of your dreams. We can help you develop the knowledge and skills you need to succeed. Plus, you can prepare to test for industry certifications, such as the Cisco Certified Network Associate (CCNA). With the right education, you can be prepared to pursue any of these careers.

Computer Digital/Forensic Investigators recover, analyze and report on data found in computers for investigations and trials. They determine how systems are hacked, and recover data that has been encrypted or erased. They have excellent logic skills and use their analytical talents to understand the criminal mind.

Computer Security Specialists install and train users on various computer security systems. They monitor for security breaches and promote best practices for security within the organization. A combination of analytical and communication skills is required.

Computer Support Specialists provide technical assistance and advice to customers or staff. They need to quickly analyze and troubleshoot problems, often guiding users remotely. They use diagnostic software to assess user hardware, software or systems, and uncover problems and supply solutions. Successful individuals in these careers combine technical expertise with excellent people skills.

Corporate Security Managers implement policies for a range of security concerns, from computer security to crisis management to environmental safety. These individuals must be well versed in a variety of risk management techniques and have excellent interpersonal skills, as they work with other departments and individuals to make organizations safe.

Database Administrators create, implement and test stores of information contained in databases. Some of this information may be highly personal, such as account numbers, health records or financial transaction data. Administrators must coordinate security efforts to safeguard data while allowing for flexible storage and retrieval of the information. Logic skills are a must, as is knowledge of business ethics.

Disaster Recovery Analysts perform risk analyses and identify areas of vulnerability within systems. They ensure that data and networks are recoverable in the event of natural or manmade disasters and perform disaster simulations to test their plans and backups. These individuals are calm under pressure and have excellent planning skills.

Information Systems Security Specialists develop, implement and maintain security procedures, standards and policies to help their organizations prepare for, react to and recover from security threats. Team management skills help them to supervise and audit practices to maintain proper security.

Network and Telecommunications Managers design voice and data systems, and oversee their installation in devices and at businesses. Responsibilities may include monitoring and providing support for systems usage. Communication and management skills are key for these professionals.

Network Engineers design and build the networks that we use to communicate, share information, learn and do business. These individuals have excellent math and organizational abilities and use them in their quest to design more robust, efficient and effective networks.

Network or Computer Systems Administrators install, configure and support local and wide area networks, Internet connections and other data networks. They maintain and upgrade hardware and software, and implement security measures, all while seeking to provide optimal network availability and performance to users. Specialized software and/or hardware certifications may be recommended or required.

Network Security Administrators maintain firewalls and security measures for businesses and government organizations with highly confidential information. Knowledge of firewall software and computer hardware is key, as are organizational skills. Problem-solving skills are a must for these individuals.

Network Security Consultants are called upon by a variety of industries to assess and design security solutions for computer and data networks. These individuals combine business savvy with computer skills to offer an in-demand service to their clients. Consultants have the ability to recognize issues and communicate them in an understandable manner and offer solutions.

Network Systems or Data Communications Analysts design, test and assess networks to measure their performance and usability. They may work on local area networks (LANs), wide area networks (WANs), Internet or intranet systems, or other data communications systems, recommending upgrades as necessary. In addition to an excellent knowledge of existing systems, these individuals must be committed to lifelong learning, as new technology is constantly emerging.

Security Architects design and build the security for systems or particular pieces of hardware or software. They assess and determine security needs and balance them with user needs. They may set policy for security or access levels and work with others to ensure compliance with laws, industry regulations and standards. These individuals are top-notch programmers who also possess good communication skills.
Resources

Make an educated decision about your career. You can learn more about the careers we’ve featured by visiting these websites.

- American Society for Engineering Education
  www.asee.org
- Association for Computing Machinery (ACM)
  www.acm.org
- Association of Information Technology Professionals
  www.aitp.org
- Bureau of Labor Statistics
  www.bls.gov
- Electronics Technicians Association
  www.eta-i.org
- IEEE Computer Society
  www.computer.org
- The League of Professional System Administrators
  www.lopsa.org
- National Workforce Center for Emerging Technologies
  www.nwcet.org
- Network Computing
  www.networkcomputing.com
- Network and Systems Professionals Association
  www.naspa.com
- Salary Information
  www.salary.com
- Software & Information Industry Association
  www.siia.net
- Tech America
  www.techamerica.org
- Telecommunications Industry Association
  www.tiaonline.org
- The Wireless Association®
  www.ctia.org

Websites current at time of publication.
Earn a degree
that can work
for a lifetime

We can help you every step of the way
at DeVry University

At DeVry University, you can find what you need to succeed – flexible schedules, personal attention, hands-on learning and professors with real, practical experience. Plus, you can obtain the ongoing support you need to pursue a career path that’s right for you.

You can learn the technical network skills that can provide you an edge in your career. And you can develop the critical business skills that can help you succeed in many environments. Our career-focused learning can prepare you with the knowledge and skills many employers demand – and the education they respect. Coursework in our bachelor’s degree programs culminates with the completion of a Senior Project, which addresses real business needs.

As a student, you can build your understanding of current industry knowledge and train on modern equipment in technologies as varied as wireless, VoIP and security. You can be prepared with the skills and experience you need to jump right into your new role in your dream career.

Holding a DeVry University diploma also means you’ve earned a degree from an institution that is accredited by The Higher Learning Commission of the North Central Association (ncahlc.org), a significant mark of institutional quality and integrity.
Intrigued by the possibilities? Learn as much and make an

Begin your path to a successful career at DeVry University

DeVry University offers a variety of degree programs* and specializations through the College of Engineering & Information Sciences to help start you on the right path to a successful career in networking and information security.

**Network Systems Administration**
**Associate Degree Program**
Use leading tools and technologies to maintain existing systems and to design and develop new ones. Learn how to activate accounts and security controls, install and configure routers and switchers, monitor network performance and troubleshoot problems.

**Network & Communications Management**
**Bachelor’s Degree Program**
Study a variety of Ethernet-enabled technologies and communications hardware and software, including Voice-over-IP, security firewalls, databases and next-generation administration tools. Learn the business and network design skills that can help you solve real-world problems.

Cisco® Networking Academy® courses at DeVry University teach networking and IT skills to help prepare you for industry-recognized certifications.

**Computer Information Systems**
**Bachelor’s Degree Program**
Explore and examine innovative technologies and discover new ways the industry is implementing and leveraging information systems and networks. We offer specializations that can help focus your studies for the career you want to pursue.

- **Computer Forensics** – Study how to acquire, investigate and report on electronic evidence. Recover deleted and damaged data, and break encryption codes. Explore how to work with law enforcement personnel and government systems that rely on the evidence that computer forensics discover.

- **Information Systems Security** – Develop and implement security procedures, standards and policies, and ensure compliance with laws and regulations.

**Business Administration, Management and Technical Management Degree Programs**

**Security Management Specialization**
Focus your business or management degree with our Security Management Specialization. Study how to recognize security issues and how to develop integrated security solutions to protect assets, information, individuals, businesses, government and public settings.

*Program availability varies by location.*
Some coursework may be available online only.
Cisco® Networking Academy® is a registered trademark of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.
Choose the course of study that’s right for your career goals

Use this quick-reference chart to find which DeVry University degree program and specialization is right for your career choice in the field of network and information security.

<table>
<thead>
<tr>
<th>Degree Programs</th>
<th>Network Systems Administration</th>
<th>Network &amp; Communications Management</th>
<th>Computer Information Systems</th>
<th>Business Administration/Management/Technical Management</th>
</tr>
</thead>
</table>

### Career Opportunities

- **Computer Forensics Investigator**
- **Computer Security Specialist**
- **Computer Support Specialist**
- **Corporate Security Manager**
- **Database Administrator**
- **Disaster Recovery Analyst**
- **Information Systems Security Specialist**
- **Network and Telecommunications Manager**
- **Network Engineer**
- **Network or Computer Systems Administrator**
- **Network Security Administrator**
- **Network Security Consultant**
- **Network Systems or Data Communication Analyst**
- **Security Architect**

Answer the call to a career in networking and information security.
Visit devry.edu or call 888.DEVRY.04 to learn how you can make it happen.
Visit devry.edu or call 888.DEVRY.04

For comprehensive consumer information, visit devry.edu/studentconsumerinfo

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