College of
**Engineering &
Information
Sciences**

Bachelor's Degree Program
Network & Communications Management

ABOUT THIS DEGREE PROGRAM

Today, businesses and individuals demand connectivity 24/7. Communication, information and even entertainment are delivered through "always on" networks that need to be highly accessible and highly secure. Recent advances in wireless and fiber optic technology have made communication faster and clearer than ever before; making possible a range of new mobile devices that allow you to remotely schedule and watch your favorite TV shows, while browsing the web.

A bachelor's degree from DeVry University's Network & Communications Management program can help position you for a career in this rapidly evolving and high growth field. Our degree program can expose you to the next-generation of network tools and prepare for a career connecting people via VoIP, video, smart phones and more.

GENERAL EDUCATION COURSEWORK

At DeVry University, we believe in the value of a comprehensive education. This means broadening your knowledge and skill sets beyond the area of your degree program, to prepare you to succeed in today's diverse and evolving workplace.

From day one, you can learn important analytical and communication skills, such as problem solving, reasoning and analysis, academic and professional writing, and mathematics and statistics skills. These skills can better equip you to work across cultures and understand a wide range of concepts that influence your area of study.

General Education Coursework:
- Communication Skills
- Humanities
- Mathematics
- Natural Sciences
- Personal and Professional Development
- Social Sciences

CORE-DEGREE COURSEWORK

all of these courses

ACCT-301	Essentials of Accounting
BUSN-115	Introduction to Business and Technology
COMP-100	Computer Applications for Business with Lab
COMP-129	PC Hardware and Software with Lab
COMP-230	Introduction to Scripting and Database with Lab
MGMT-404	Project Management
MGMT-408	Management of Technology Resources
SEC-280	Principles of Information Systems Security

General Education Coursework (credit hours)	50
Core-Degree Coursework (credit hours)	+ 26
Career-Focused Coursework (credit hours)	+ 54
Approximate Credit Hours Required for Graduation (Eight Full-Time Semesters to Complete)	130

did you know?
Cisco Networking Academy courses at DeVry University teach networking and IT skills to prepare you for industry recognized certifications.

DeVry University
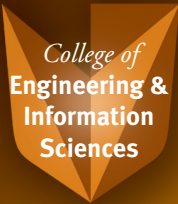
CAREERS IN NETWORK AND COMMUNICATIONS MANAGEMENT

Network and communications managers are employed far beyond the computer and telecommunications industries. Financial firms, insurers, schools and government agencies all employ network and communications specialists to meet their specialized needs for information sharing and communication. Many network and communications professionals are also self-employed as consultants working for a wide variety of companies.

Earning DeVry University's bachelor's degree in Network & Communications Management, you can be prepared to design, build, install and manage voice, video and other data communication systems. You can learn to create backup, security and redundancy measures to ensure the privacy of sensitive information and the ability to access critical information in times of crisis or natural disaster. You can also gain a basic understanding of the regulations that govern this industry allowing you to perform your tasks ethically and conscientiously.

Graduates of DeVry University's Network & Communication Management degree program may consider careers including:

- Computer Security Specialist
- Network and Telecommunications Manager
- Network Engineer
- Network Security Consultant
- Network Systems Analyst
- Security Architect

According to the Bureau of Labor Statistics, employment of network systems and data communications analysts is expected to grow by 53 percent from 2008 to 2018, which is much faster than the average for all occupations and places it among the fastest growing of all occupations. According to its *Occupational Outlook Handbook*, "demand for network architects and engineers will increase as organizations continue to upgrade their IT capacity and incorporate the newest technologies. The growing reliance on wireless networks will result in a need for many more of these workers."[1]

[1]Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2010-11 Edition*, Computer Software Engineers and Computer Programmers, on the Internet at www.bls.gov/oco/ocos303.htm (visited *April 1, 2011*).
[2]DeVry University, on the Internet at www.devry.edu/degree-programs/college-engineering-information-sciences/network-and-communications-management-about.jsp.
[3]O*NET Online, Network Systems and Data Communications Analysts, on the Internet at www.online.onet-center.org/link/summary/15-1081.00 (visited *April 1, 2011*).

KNOWLEDGE AND SKILLS

WIRED, OPTICAL AND WIRELESS COMMUNICATIONS[2] — Examine various signals and their transmission in the network, including codes and numbering systems, data transmissions methods, basic point-to-point networks, error detection and correction, and Internet access technologies.

CONVERGED NETWORKS[2] — Explore current and emerging networks that deliver voice, data and video/imaging through various technologies, including core switching, broadband, edge access, Internet protocol telephony, adding packet capabilities to circuit-switched networks, 3G and 4G solutions, presence-enabled communications, and security and troubleshooting.

WIRELESS TECHNOLOGIES AND SERVICES[2] — Explore wireless technology and how wireless networks operate, including wireless network components, design, security, troubleshooting and regulation.

ADVANCED NETWORKING[2] — Focus on emerging and advanced topics in the networking field, exploring advances in technology and their implications in designing, implementing, securing and managing networks.

ADVANCED NETWORK SECURITY[2] — Develop advanced skills in identifying network security vulnerabilities, including wireless vulnerabilities; conducting risk assessments; preventing, detecting and responding to intrusions; and providing for business continuity and disaster recovery.

ADMINISTRATION AND MANAGEMENT[3] — Gain knowledge of the business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership techniques, production methods, and coordination of people and resources.

SYSTEMS EVALUATION[3] — Identify measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

ATTENTION TO DETAIL[3] — Learn to pay attention to detail and to be thorough in completing work tasks.

INTERACTING WITH COMPUTERS[3] — Use computers and computer systems to program hardware, write software, set up functions, enter data or process information.

CAREER-FOCUSED COURSEWORK

all of these courses

NETW-202	Introduction to Networking with Lab
NETW-204	Introduction to Routing with Lab
NETW-206	Introduction to Switching with Lab
NETW-208	Introduction to WAN Technologies with Lab
NETW-230	Network Operating Systems - Windows, with Lab
NETW-240	Network Operating Systems - UNIX, with Lab
NETW-250	Voice/VoIP Administration with Lab
NETW-310	Wired, Optical and Wireless Communications with Lab
NETW-320	Converged Networks with Lab
NETW-360	Wireless Technologies and Services with Lab
NETW-410	Enterprise Network Design with Lab
NETW-420	Enterprise Network Management with Lab
NETW-471	Advanced Topics in Networking
NETW-490	Senior Project with Lab
NETW-494	Senior Project I with Lab
NETW-497	Senior Project II with Lab
SEC-450	Advanced Network Security with Lab

DeVry University

Visit DeVry.edu or call 888.DEVRY.04