COLLEGE OF
ENGINEERING & INFORMATION SCIENCES

Associate Degree Program

NETWORK SYSTEMS ADMINISTRATION

ABOUT THIS DEGREE PROGRAM

Computer and communication networks enable everything from long-distance file sharing to instant messaging. Building and maintaining these networks is the responsibility of network systems administrators. A degree in Network Systems Administration from DeVry University can prepare you with the skills need to deal with network and communication technologies while gaining valuable management and communication skills.

In our degree program you have the opportunity to prepare for certifications like the Cisco Certified Network Associate (CCNA). You can also work first-hand with the same technologies that you may experience out in the field.

Through our TechPath approach, we've put technology at the core of our programs in business, tech and health – including this program. Every TechPath class you take revolves around a unique learning rubric developed at DeVry. We call it People-Process-Data-Devices or P2D2. You'll gain real skills in collaboration, be able to adapt to new structures, and be comfortable working with data and a wide spectrum of tech-forward tools. P2D2 is a key component of what makes TechPath a smart, new way of getting the knowledge you need to be ready to hit the ground running in the way successful companies work today.

GENERAL EDUCATION COURSEWORK

Communication Skills

ENGL112[1]	Composition
ENGL135	Advanced Composition
SPCH275	Public Speaking

Humanities

ETHC232	Ethical and Legal Issues in the Professions

Social Sciences

SOCS185[2]	Culture and Society

Mathematics[3]

MATH103	Beginning Algebra
MATH114	Algebra for College Students

Personal and Professional Development

CARD205	Career Development
COLL148	Critical Thinking and Problem-Solving

Business and Computing Applications

CEIS100	Introduction to Engineering Technology and Information Sciences
CIS206	Architecture and Operating Systems with Lab
COMP100	Computer Applications for Business with Lab
COMP230	Introduction to Scripting and Database with Lab
SEC280	Principles of Information Systems Security

Network Operating Systems and Technologies

NETW230	Network Operating Systems – Windows, with Lab
NETW240	Network Operating Systems – UNIX, with Lab
NETW250	Voice/VoIP Administration with Lab

[1] Students enrolled at a New Jersey location take ENGL108 in lieu of this course.

[2] Students enrolled at a Nevada location must take POLI332 in lieu of this requirement.

[3] Students enrolled at a New Jersey location must take one of the following additional natural science courses as part of this requirement for a total of 11-12 credit hours in this course area: BIOS105; BIOS135; PHYS204; SCI200.

CORE-DEGREE COURSEWORK

ALL OF:

NETW202	Introduction to Networking with Lab
NETW204	Introduction to Routing with Lab
NETW206	Introduction to Switching with Lab
NETW208	Introduction to WAN Technologies with Lab

OR

ALL OF:

NETW203	Cisco Networking Academy – Introduction to Networking with Lab
NETW205	Cisco Networking Academy – Introduction to Routing with Lab
NETW207	Cisco Networking Academy – Introduction to Switching with Lab
NETW209	Cisco Networking Academy – Introduction to WAN Technologies with Lab

DID YOU KNOW?

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

Courses in blue are part of the DeVry Tech Path

DeVry University

Associate Degree Program Network Systems Administration

COLLEGE OF
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CAREERS IN NETWORK SYSTEMS ADMINISTRATION

Our reliance on data and our need to access that data quickly and securely, across many different platforms and devices has increased rapidly in the last decade.

DeVry University's Network Systems Administration degree program, can teach you how to build and maintain those data networks, including how to activate accounts and institute security measures, install and configure routers and switches, and monitor the performance of both local and wide area networks. You can learn how to troubleshoot common problems and learn to find quick solutions.

With the knowledge you gain, you can be prepared to set up servers and workstations using operating systems, enable security and access measures, and set up virtual private networks for any organization.

Graduates of DeVry University's Network Systems Administration associate degree program may consider careers including, but not limited to, the following:

- Computer/Digital Forensic Investigator[1]
- Computer Network Support Specialist

[1] Applicants for jobs in the justice administration field may be subject to pre-employment screenings such as, but not limited to, criminal background checks, drug and/or alcohol testing, physical and/or psychological examinations and credit checks. Unsatisfactory screening results may disqualify an applicant for a position in the justice administration field. Additional government-required training programs may be necessary to obtain employment in this field. Employment in this occupation may require years of relevant experience.

Employment in some occupations may require years of relevant experience.

KNOWLEDGE AND SKILLS

NETWORKING — Gain working knowledge of the underlying technology of local area networks (LANs), wide area networks (WANs), and the Internet, including networking media, the Open Systems Interconnection (OSI) model, transmission control protocol/Internet protocol (TCP/IP), routing and switching, and small network configuration and troubleshooting.

ROUTING — Understand router configuration, maintenance and troubleshooting; explore Internet protocol (IP) addressing techniques, routing protocols; IPv4 and IPv6, and access control lists (ACLs), and network address translation(NAT).

SWITCHING — Understand switch configuration, maintenance and troubleshooting; explore Ethernet frame switching techniques, switchport security, virtual area networks (VLANs), and VLAN Trunking Protocol (VTP).

NETWORK OPERATING SYSTEMS — Study the basic operation and management of local and wide area networks using the Microsoft or UNIX network operating systems (NOSs). Learn the installation of server and workstation software, physical network configuration, network security, policy domain controllers, and performance monitoring and troubleshooting techniques.

VOICE/VOIP ADMINISTRATION — Explore technologies and systems that serve voice traffic, including enterprise switches (e.g., private branch exchanges and Centrex), networked telephony solutions, voice over Internet protocol (VoIP), call centers, voice processing and wireless systems.

SYSTEMS ANALYSIS — Determine how a system should work and how changes in conditions, operations and the environment will affect outcomes.

CRITICAL THINKING — Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

INFORMATION ORDERING — Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures or mathematical operations).

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

For comprehensive consumer information, visit devry.edu/studentconsumerinfo. Important information about the education debt, earnings and completion rates of students who attended this program can be found at devry.edu/ansa-ge. For additional program information, visit devry.edu/ansa.

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