

Delta-Montrose Technical College

COMPUTER AND NETWORKING TECHNOLOGIES

THE PROGRAM

Our Computer and Networking Technologies program prepares students for a career in computer repair or networking. Students may choose to pursue courses toward an occupation in computer repair, networking, or Cisco networking. Upon successful completion, students can enter the workforce or continue their education in the computer field.

The computer repair course covers the basic knowledge students need to pass the CompTIA A+ Core Hardware and A+ Operating System Technologies Examinations. Students will gain basic knowledge in installing, configuring, upgrading, troubleshooting and repairing microcomputer systems, Command Line Prompt, Windows 9x and Windows 200x for installing, configuring, upgrading, troubleshooting and repairing microcomputer systems.

The networking course covers the basic knowledge students need to pass the CompTIA Network+ examination. Students will learn the layers of the OSI model, the features and functions of network components, and how to install, configure, and troubleshoot basic networking hardware peripherals and protocols.

We are a member of the Cisco Networking Academy. The Cisco Networking Academy Cisco Certified Network Associate (CCNA) exam prep program gives students background information and knowledge regarding networking computer systems using Cisco technology. Cisco is the worldwide leader in networking for the Internet. Through Cisco's online course, in a lab setting, students will develop the skills needed to design, build, and maintain small to medium sized networks.

CAREER OPPORTUNITIES

A student who successfully completes Computer Repair, Networking, or Cisco Network Associate course and passes the associated certification examination has proof of his/her skills. The practical experience gained as an intern gives him/her the edge over other candidates when applying for a job in the computer technology field.

PREREQUISITES

Students must meet the minimum required TABES levels. Students must also have a basic familiarity with computer terminology and hardware and software operating skills.

Students must complete Computer Repair, or have equivalent experience and/or training to be accepted in the Networking course.

Students planning to take the Cisco Network Associate course must complete both Computer Repair and Networking or have equivalent experience and/or training.

CONTINUING EDUCATION

There are currently no continuing education requirements.

COOPERATIVE EDUCATION

DMTC works in cooperation with local high schools, the DMTC Technical Department, and area business partners to provide students with internship opportunities. An agreement is in place to provide for Mesa State College to accept Computer and Networking Technologies course credit earned in the Computer and Networking Technologies program at DMTC. The credits will satisfy part of the AAS Technology Integration Cluster degree requirements at MSC. Further information about transfer of credits is available on request.

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COURSE AVAILABILITY

The Computer and Networking Technologies courses are available in an evening format. Computer Repair and Networking are each one semester courses. Cisco Network Associate is a two-semester course.

Program information, courses, and credit hours are subject to change.

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COMPUTER REPAIR CREDITS

CNG121 Computer Technician I: A+	4
CNG122 Computer Technician II: A+	3
CNG120 A+ Certification Preparation	4
Total Credits	11

NETWORKING CREDITS

CNG124 Networking I: Network+	3
CNG125 Networking II: Network+	3
CNG255 Industry Certification	3
Total Credits	9

CISCO NETWORK ASSOCIATE 1ST SEM. CREDITS

CNG260 CISCO Network Associate I	5
CNG261 CISCO Network Associate II	5
Total 1 st Semester Credits	10

CISCO NETWORK ASSOCIATE 2ND SEM. CREDITS

CNG262 CISCO Network Associate III	5
CNG263 CISCO Network Associate IV	5
Total 2 nd Semester Credits	10
Total Credits	20

COURSE DESCRIPTIONS

CNG120 A+ Certification Preparation 4 Credits
 Prepares students for the CompTIA A+ certification examination. Hardware and software concepts are reviewed using A+ techniques.

CNG121 Computer Technician I: A+ 4 Credits
 Introduces personal computer hardware to gain the skills and knowledge for a successful entry-level computer service technician. Provides extensive hands-on work with computer systems. Includes PC setup and configuration, floppy and hard drive installation, basic maintenance and troubleshooting. Successful completion prepares the student for the core hardware service technician portion of the CompTIA A+ Certification Exam.

CNG122 Computer Technician II: A+ 3 Credits
 Focuses on operating systems as well as installation of modems, tape backups, CD-ROM drives, and SCSI subsystems. Covers operating systems, Windows 9x, Windows NT and Windows 2000 installation, configuration, and upgrading. Includes laser printers and backup power systems. This course prepares the student for the CompTIA A+ OS Technologies Exam.

CNG124 Networking I: Network+ 3 Credits
 Provides students with the knowledge necessary to understand, identify, and perform necessary tasks involved in supporting a network. Covers the vendor-independent networking skills and concepts that affect all aspects of networking, such as installing and configuring the TCP/IP. This course also prepares students for the Networking II: Network + course.

CNG125 Networking II: Network+ 3 Credits
 Continues to provide students with the knowledge necessary to implement and support a network. Focuses on the vendor-independent networking skills and concepts that affect all aspects of networking. The Networking I and II: Network + courses prepare students for the Network + certification.

CNG255 Industry Certification 3 Credits
 Provides the student with a comprehensive preparation for recognized industry certification exams in personal computer and network technology. Features alternative methods for delivery of instruction, including self-paced instruction assisted by technology.

CNG260 CISCO Network Associate I 5 Credits
 Introduces network fundamentals, the OSI model and industry standards, IP addressing (subnet masks), and basic network design.

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CNG261 CISCO Network Associate II

5 Credits

Focuses on router theory and technologies, including router configurations, protocols, network management, and introductory LAN switching.

CNG262 CISCO Network Associate III

5 Credits

Focuses on advanced routing and switching configurations, LAN switching, network management, and advanced network design.

CNG263 CISCO Network Associate IV

5 Credits

Focuses on project-based learning, including advanced network design projects and advanced management projects. This course and CNG 260, 261 and 262 prepare students for the CISCO Certified Network Associate (CCNA) certification exam.