

Student ID: _____
Student Name: _____
Adviser Name: _____

Catalog: 2015-2016 Catalog
Program: Computer Networking Technology, A.A.S.
Minimum Credits Required: _____

Computer Networking Technology, A.A.S.

Associate of Applied Science (A.A.S.)

Contact Information: Program Office 615-353-3475, E-mail: network.tech@nsc.edu, Program Site

Computer Networking Technology prepares students for employment in the Information Technology field in the area of network infrastructure. The program includes theoretical and practical components, preparing entry-level networking technicians to design, install, monitor, maintain, and enhance network infrastructure. Graduates of the program will be able to design and implement an infrastructure consisting of various networking devices and components such as clients, servers, routers, switches, hubs, and cabling systems.

Graduates of this program will be capable of working in entry-level positions of user support, server monitoring, directory services basic administration, network media installation and testing, basic router configuration, subnetting, and network communications protocols.

In addition to technical proficiency, graduates of this program will be knowledgeable in effective communications, both written and verbal. Graduates will be experienced in working in teams and being self-motivated in problem-solving scenarios.

Graduates of the program should be able to:

- Function competently in entry-level network technician positions;
- Proficiently use various operating system environments including Windows and UNIX/Linux;
- Perform initial installation and setup of various network servers, such as Linux and Windows;
- Perform initial configuration of microcomputers including the installations of workstation software necessary to communicate with network servers;
- Select, install, terminate, and test appropriate network media including unshielded twisted pair;
- Perform basic configuration on routers, switches, and wireless networking components;
- Troubleshoot and analyze network hardware, software, and communications problems;
- Install and implement network monitoring and management tools;
- Communicate successfully in a variety of situations using written and oral communication skills;
- Use concepts taught in the general education courses that are reinforced in the Computer Networking Technology curriculum;
- Apply critical thinking skills in providing solutions to network infrastructure problems; and
- Work effectively as individuals and in a team environment.

After completing the minimum course requirements, graduates have been exposed to concepts and materials used in the certification exams. These exams include A+, Security+, Microsoft OS, Server, and CCENT. In addition, a rich selection of electives allows students to increase the breadth and depth of their understanding and prepares them for advanced certifications such as Cisco CCNA as well as advanced Microsoft certifications.

Career Opportunities

Typical positions available to graduates of this program (based upon DOL classifications) are:

- LAN Administrator
- Network Administrator
- Microcomputer Support Specialist
- Network Technician
- Data Communications Technician

Course Requirements

English

Course Name	Credits	Term Taken	Grade	Gen Ed
ENGL 1010 - English Composition I*	3 Credits			

Speech (choose one)

Course Name	Credits	Term Taken	Grade	Gen Ed
SPCH 1010 - Fundamentals of Speech Comm*	3 Credits			
OR				
SPCH 1112 - Speech*	3 Credits			

Humanities

- Humanities Elective 3 Credits

Mathematics

Course Name	Credits	Term Taken	Grade	Gen Ed
MATH 1630 - Finite Mathematics*	3 Credits			

Social Sciences

- Social Sciences Elective 3 Credits

Computer Technology

Course Name	Credits	Term Taken	Grade	Gen Ed
CPT 1510 - A+ IT Essentials	3 Credits			
CPT 2425 - UNIX/Linux	4 Credits			

Computer Networking Technology

Course Name	Credits	Term Taken	Grade	Gen Ed
CNT 1060 - Cisco Routers I	4 Credits			
CNT 1160 - Cisco Routers II	4 Credits			
CNT 1170 - Microsoft Professional OS	3 Credits			
CNT 2110 - Applied Networking Fundamentals	4 Credits			
CNT 2130 - Advanced Applied Networking	4 Credits			
CNT 2350 - Install/Config Windows Server	4 Credits			
CNT 2370 - Administering Windows Server	4 Credits			
CNT 2450 - Network Security	4 Credits			
CNT 2470 - CNT Capstone	3 Credits			
Technical Elective 4 Credits				

Total Required – Associate’s Degree: 60 Credits

Approved Electives

Course Name	Credits	Term Taken	Grade	Gen Ed
CIS 1060 - Project Management	3 Credits			
CNT 2410 - Cisco Routers III	4 Credits			
CNT 2420 - Cisco Routers IV	4 Credits			
CNT 29XX - Cooperative Education				
CPT 2480 - Tactical Perimeter Defense	3 Credits			
CPT 2490 - Infrastructure Security	3 Credits			
CPT 2530 - Computer Forensics	3 Credits			
CPT 29XX - Cooperative Education				
EETH 2250 - Fiber Optics & Cabling	3 Credits			
EETH 2255 - Fiber Optics & Cabling Lab	1 Credit			
Other electives as approved by faculty				

Recommended Full-Time Day Schedule

First Year

Fall Semester

Course Name	Credits	Term Taken	Grade	Gen Ed
MATH 1630 - Finite Mathematics*	3 Credits			
CPT 1510 - A+ IT Essentials	3 Credits			
CNT 1060 - Cisco Routers I	4 Credits			
CNT 1170 - Microsoft Professional OS	3 Credits			

Spring Semester

Course Name	Credits	Term Taken	Grade	Gen Ed
CPT 2425 - UNIX/Linux	4 Credits			

ENGL 1010 - English Composition I*	3 Credits			
CNT 2350 - Install/Config Windows Server	4 Credits			
CNT 1160 - Cisco Routers II	4 Credits			

Second Year

Fall Semester

Course Name	Credits	Term Taken	Grade	Gen Ed
CNT 2110 - Applied Networking Fundamentals	4 Credits			
CNT 2370 - Administering Windows Server	4 Credits			
CNT 2450 - Network Security	4 Credits			

Speech (choose one)

Course Name	Credits	Term Taken	Grade	Gen Ed
SPCH 1010 - Fundamentals of Speech Comm*	3 Credits			
OR				
SPCH 1112 - Speech*	3 Credits			

Spring Semester

Course Name	Credits	Term Taken	Grade	Gen Ed
Humanities Elective 3 Credits				
Social Sciences Elective 3 Credits				
CNT 2130 - Advanced Applied Networking	4 Credits			
CNT 2470 - CNT Capstone	3 Credits			
Technical Elective 4 Credits				

Notes:

Additional course requirements: The Tennessee Board of Regents requires that students either demonstrate the appropriate skill levels in math, reading, and/or writing before enrolling in college-level courses or enroll in appropriate co-requisite experiences with college-level courses to develop competency in those skills while performing college-level work. ACT/SAT scores, COMPASS test scores, or other relevant information determine whether a student needs to enroll in co-requisite courses in math, reading, and/or writing (English).

Cooperative work experience can be an important addition to a student's formal classroom work. Co-op courses may substitute for technical courses with the prior approval of the instructor. The Career Services Office will provide the correct course numbers.

* This course is part of the general education core.

Notes: