



Networking Technology
Credential: Network Operating System
Certificate
C25340N0

The Networking Operating System is a certificate under the curriculum title of Networking Technology. This curriculum Prepares students to understand various network operating systems and models. This curriculum also develops operating skills needed to successfully manage and support these devices.

Course work includes extensive hands-on experience with different network operating systems and tools. Classes cover installation and support of various network operating systems, security electronics, security and intrusion detection software, troubleshooting, administrative responsibilities, and other tools. Graduates should qualify for position such as: LAN/PC network operating systems administrator, technician, and personal computer technician.

Graduates are also prepared to sit for certification exams that can result in industry-recognized credentials. Credits earned in this certificate program will transfer into the Associate in Applied Science Degree in Networking Technology. Students must meet the higher entrance requirements.

Program Length: 2 semesters
 Career Pathway Options: Associate in Applied Science Degree in Network Technology
 Program Site: North Carolina School of Telecommunications – Day Program, Evening “Career Centered” Flexible Program

Course Requirements for Networking Security Certificate

| Required Major Core Courses (12 SHC) | C-L-SHC |
|--------------------------------------|---------|
| NOS 110 Operating Systems Concepts | 2-2-3 |
| NOS 120 Linux/UNIX Single User | 2-2-3 |
| NOS 130 Windows Single User | 2-2-3 |
| NOS 220 Linux/UNIX Administration I | 2-2-3 |

Total Semester Hours Credit Needed for Graduation: 12

NOS 110 Operating System Concepts 2-3-3
 This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is place on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

NOS 120 Linux/UNIX Single User 2-2-3
Prerequisites: NOS 110
 This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

NOS 130 Windows Single User 2-2-3
Prerequisites: NOS 110
 This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

NOS 220 Linux/UNIX Admin I 2-2-3
Prerequisites: NOS 120
 This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks including installation, configuring and attaching a new Linux workstation to an existing network.