

### ***Networking Technology (A25340)***

The Networking Technology curriculum prepares individuals for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education.

Course work includes design, installation, configuration, and management of network infrastructure technologies and network operating systems. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers.

Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

Networking Technology is designed to prepare students for a variety of roles within the Network Infrastructure and broader IT fields. The US Department of Labor projects the Networking field will be the second fastest growing career area nationally between 2002 and 2012 and that over 100,000 jobs will be added in this field by 2012.

Students receive significant hands on experience in the study of Network Infrastructure and System Administration. The primary emphasis will be the implementation of a secure, reliable and robust network infrastructure and directory service environment. The program leads to an AAS degree. The program centers on the following industry certifications: Microsoft MCSA, Cisco CCNA, Network+, Security+, A+, Linux+.

#### **Degree Awarded**

The Associate in Applied Science Degree in Networking Technology is awarded by the College upon completion of this program.

#### **Admissions**

- A high school diploma or equivalent is required.
- Placement tests determine placement in English (ENG) and mathematics (MAT), and CIS 115.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.
- Students may see Program Chair to obtain a plan for completing the program in five (5) terms while enrolled full-time.

**Contact Information**

The Networking Technology program is in the Information Technology Division. For more information, call 704.330.6203 or 704.330.6549.

**Major and Related Course Requirements**

	Class	Lab	Hours Clinical	Work Exper.	Credits
CIS 115 Introduction to Programming & Logic	2	2	0	0	3
CTS 120 Hardware/Software Support	2	3	0	0	2
DBA 110 Database Concepts	2	3	0	0	3
NET 125 Networking Basics	1	4	0	0	3
NET 126 Routing Basics	1	4	0	0	3
NET 225 Routing & Switching I	1	4	0	0	3
NET 226 Routing & Switching II	1	4	0	0	3
NOS 110 Operating System Concepts	2	3	0	0	3
NOS 120 Linux/UNIX Single User	2	2	0	0	3
NOS 130 Windows Single User	2	2	0	0	3
SEC 110 Security Concepts	3	0	0	0	3
CIS 110 Introduction to Computers	2	2	0	0	3
NOS 230 Windows Administration I	2	2	0	0	3
NET 289 Networking Project	1	4	0	0	3
BUS 110 Introduction to Business	3	0	0	0	3

OR

CTS 115 Information Systems Business Concepts	3	0	0	0	3
NOS 231 Windows Administration II	2	2	0	0	3

**Technical Electives**

Students must select a minimum of three (3) credits from the courses below:

COE 111 Co-op Work Experience I	0	0	0	10	1
COE 112 Co-op Work Experience I	0	0	0	20	2
NET 113 Home Automation Systems	2	2	0	0	3
NET 116 Fundamentals of Voice/Data Cable	2	2	0	0	3
NOS 220 Linux/UNIX Admin I	2	2	0	0	3
NET 193 Seminar/Selected Topics in Networking	3	0	0	0	3
COE 121 Co-op Work Experience II	0	0	0	20	2
COE 122 Co-op Work Experience II	0	0	0	30	3
CSC 139 Visual Basic Programming	2	2	0	0	3
SEC 220 Defense-In-Depth	2	3	0	0	3
DBA 112 Database Utilization	2	2	0	0	3
DBA 115 Database Applications	2	2	0	0	3
WEB 110 Internet/Web Fund.	2	2	0	0	3
WEB 230 Implementing Web Servers	2	2	0	0	3

**General Education Requirements**

ENG 111 Expository Writing	3	0	0	0	3
ENG 112 Argument-Based Research	3	0	0	0	3
OR					
ENG 113 Literature-Based Research	3	0	0	0	3
OR					
ENG 114 Professional Research and Reporting	3	0	0	0	3
COM 110 Introduction to Communication	3	0	0	0	3
OR					
COM 120 Interpersonal Communication	3	0	0	0	3
OR					
COM 231 Public Speaking	3	0	0	0	3

**Mathematics**

Students must select a minimum of three (3) courses from the list of approved mathematics courses at the end of this section of the catalog.

**Humanities/Fine Arts**

Students must select a minimum of three (3) credit hours of approved humanities/fine arts courses from the list at the end of this section of the catalog.

**Social/Behavioral Sciences**

3

Students must select a minimum of three (3) credit hours of approved social/behavioral science courses from the list at the end of this section of the catalog.

**Total Credit Hours**

69

**Networking Technology Certificates (C25340)**

The certificates listed below can be earned in the Networking Technology (A25340) program.

**Admissions**

- A high school diploma or equivalent is encouraged as the foundation of a career in this area.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.

**Contact Information**

For more information, call 704.330.6203 or 704.330.6549.

**Networking Technology Certificate with a Specialization in Cisco Network Administrator (C25340-C1)**

**Major and Related Course Requirements**

	Class	Lab	Hours Clinical	Work Exper.	Credits
NET 125 Networking Basics	1	4	0	0	3
NET 126 Routing Basics	1	4	0	0	3
NET 225 Routing and Switching I	1	4	0	0	3
NET 226 Routing and Switching II	1	4	0	0	3
<b>Total Credit Hours</b>					<b>12</b>

**Networking Technology Certificate with a Specialization in Microsoft Systems Administrator (C25340-C2)**

**Major and Related Course Requirements**

	Class	Lab	Hours Clinical	Work Exper.	Credits
NOS 110 Operating Systems Concepts	2	3	0	0	3
NOS 130 Windows Single User	2	2	0	0	3
NOS 230 Windows Admin I	2	2	0	0	3
NOS 231 Windows Admin II	2	2	0	0	3
<b>Total Credit Hours</b>					<b>12</b>