

CURRICULUM STANDARD

<i>Effective Term</i> Summer 2006 [2006*02]

Curriculum Program Title

Networking Technology

Code

A25340

Concentration

(not applicable)

Curriculum Description

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.

*Curriculum Requirements**

[for associate degree, diploma, and certificate programs in accordance with 23 NCAC 02E.0204 (3)]

- I. General Education.** Degree programs must contain a minimum of 15 semester hours including at least one course from each of the following areas: humanities/fine arts, social/behavioral sciences, and natural sciences/mathematics. Degree programs must contain a minimum of 6 semester hours of communications. Diploma programs must contain a minimum of 6 semester hours of general education; 3 semester hours must be in communications. General education is optional in certificate programs.
- II. Major Hours.** AAS, diploma, and certificate programs must include courses which offer specific job knowledge and skills. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit. *(See second page for additional information.)*
- III. Other Required Hours.** A college may include courses to meet graduation or local employer requirements in a certificate, diploma, or associate in applied science program. These curriculum courses shall be selected from the Combined Course Library and must be approved by the System Office prior to implementation. Restricted, unique, or free elective courses may not be included as other required hours.

	AAS	Diploma	Certificate
Minimum General Education Hours	15	6	0
Minimum Major Hours	49	30	12
Other Required Hours	0-7	0-4	0-1
Total Semester Hours Credit (SHC)	64-76	36-48	12-18

*Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic use of computers.

Major Hours

[ref. 23 NCAC 02E.0204 (3)]

- A. Core.** The subject/course core is comprised of subject areas and/or specific courses which are required for each curriculum program. A diploma program offered under an approved AAS program standard or a certificate which is the highest credential level awarded under an approved AAS program standard must include a minimum of 12 semester hours credit derived from the subject/course core of the AAS program.
- B. Concentration (if applicable).** A concentration of study must include a minimum of 12 semester hours credit from required subjects and/or courses. The majority of the course credit hours are unique to the concentration. The required subjects and/or courses that make up the concentration of study are in addition to the required subject/course core.
- C. Other Major Hours.** Other major hours must be selected from prefixes listed on the curriculum standard. A maximum of 9 semester hours of credit may be selected from any prefix listed, with the exception of prefixes listed in the core or concentration. Work experience, including cooperative education, practicums, and internships, may be included in associate in applied science degrees up to a maximum of 8 semester hours of credit; in diploma programs up to a maximum of 4 semester hours of credit; and in certificate programs up to a maximum of 2 semester hours of credit.

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	AAS	Diploma	Certificate
Minimum Major Hours Required	49 SHC	30 SHC	12 SHC
A. CORE <i>A diploma offered under this AAS degree requires a minimum of 12 SHC extracted from the required subject/course core of the AAS degree</i> Required Courses: CIS 115 Intro to Prog & Logic 3 SHC CTS 120 Hardware/Software Support 3 SHC DBA 110 Database Concepts 3 SHC NET 125 Networking Basics 3 SHC NET 126 Routing Basics 3 SHC NET 225 Routing & Switching I 3 SHC NET 226 Routing & Switching II 3 SHC NOS 110 Operating Systems Concepts 3 SHC NOS 120 Linux/UNIX Single User 3 SHC NOS 130 Windows Single User 3 SHC SEC 110 Security Concepts 3 SHC Required Subject Areas: Basic Computer Skills. Select one: CIS 110 Introduction to Computers 3 SHC CIS 111 Basic PC Literacy 2 SHC Business. Select one: BUS 110 Introduction to Business 3 SHC CTS 115 Info Sys Business Concepts 3 SHC Design. Select one: NET 240 Network Design 3 SHC NET 289 Networking Project 3 SHC Operating System Administration. Select one: NOS 220 Linux/UNIX Admin I 3 SHC NOS 230 Windows Admin I 3 SHC	44-45 SHC	12 SHC	
B. CONCENTRATION (Not applicable)			

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<p>C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> BUS, CCT, CET, CIS, COE, CSC, CTS, DBA, ELC, NET, NOS, SEC, TNE, and WEB</p> <p><i>Foreign language courses (including ASL) that are not designated as approved other major hours may be included in all programs up to a maximum of 3 semester hours of credit.</i></p>			
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