

CURRICULUM STANDARD

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

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**

- 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 in Program	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

- 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																																																									
<p>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></p> <p>Required Courses:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>CIS 115</td><td>Intro to Prog & Logic</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>CTS 120</td><td>Hardware/Software Support</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>DBA 110</td><td>Database Concepts</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NET 125</td><td>Networking Basics</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NET 126</td><td>Routing Basics</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NET 225</td><td>Routing & Switching I</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NET 226</td><td>Routing & Switching II</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NOS 110</td><td>Operating Systems Concepts</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NOS 120</td><td>Linux/UNIX Single User</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NOS 130</td><td>Windows Single User</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>SEC 110</td><td>Security Concepts</td><td style="text-align: right;">3 SHC</td></tr> </table> <p>Required Subject Areas:</p> <p>Basic Computer Skills. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>CIS 110</td><td>Introduction to Computers</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>CIS 111</td><td>Basic PC Literacy</td><td style="text-align: right;">2 SHC</td></tr> </table> <p>Business. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>BUS 110</td><td>Introduction to Business</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>CTS 115</td><td>Info Sys Business Concepts</td><td style="text-align: right;">3 SHC</td></tr> </table> <p>Design. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>NET 240</td><td>Network Design</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NET 289</td><td>Networking Project</td><td style="text-align: right;">3 SHC</td></tr> </table> <p>Operating System Administration. Select one:</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>NOS 220</td><td>Linux/UNIX Admin I</td><td style="text-align: right;">3 SHC</td></tr> <tr><td>NOS 230</td><td>Windows Admin I</td><td style="text-align: right;">3 SHC</td></tr> </table>	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	CIS 110	Introduction to Computers	3 SHC	CIS 111	Basic PC Literacy	2 SHC	BUS 110	Introduction to Business	3 SHC	CTS 115	Info Sys Business Concepts	3 SHC	NET 240	Network Design	3 SHC	NET 289	Networking Project	3 SHC	NOS 220	Linux/UNIX Admin I	3 SHC	NOS 230	Windows Admin I	3 SHC	44-45 SHC	12 SHC	
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B. CONCENTRATION (<i>Not applicable</i>)																																																												

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<p>C. OTHER MAJOR HOURS <i>To be selected from the following prefixes:</i> BUS, 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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