

Networking Services Technology - Network Infrastructure

Associate in Science | Code: 25062 | 60 credits

CIP (1511100112)

Effective Term: Fall 2024 (2247)

The Networking Services Technology program provides an opportunity to establish a foundation in the field of network design and administration for employment in commercial, industrial and government institutions. The Network Infrastructure concentration offers the training needed to connect and secure multiple computing systems and software platforms. Students are additionally eligible to sit for the Cisco Certified Networking Associate (CCNA) certification exam. Graduates are prepared for positions as information technology specialists, help desk specialists, network specialists, entry level security specialists and network systems analysts.

Note: There is only one A.S. program in Networking Services Technology with three (3) track specializations—Network Infrastructure, Network Security, and Enterprise Cloud Computing. Students may select from one of the three options, but the A.S. in Networking Services Technology will be awarded to the student only once.

GENERAL EDUCATION REQUIREMENTS (15.00 Credits)

COMMUNICATIONS (3.00 credits)

ENC 1101 English Composition	(3 credits)	Prerequisite: Student must meet the
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Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course,

placement score, or eligible exemption).

HUMANITIES (3.00 credits)

ARH 1000	Art Appreciation	(3 credits)	
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	Prerequisite: ENC 1101
MUL 1010	Music Appreciation	(3 credits)	
PHI 2010	Introduction to Philosophy	(3 credits)	
THE 2000	Theatre Appreciation	(3 credits)	

MATHEMATICS (3.00 credits)

MAC 1105 College Algebra (3 credits) Prerequisite: MAT 1033+

NATURAL SCIENCE (3.00 credits)

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AST 1002	Descriptive Astronomy	(3 credits)
BSC 1005	General Education Biology	(3 credits)
CHM 1020	General Education Chemistry	(3 credits)
ESC 1000	General Education Earth Science	(3 credits)
EVR 1001	Introduction to Environmental Science	(3 credits)
GLY 1010	Physical Geology	(3 credits)
OCE 1001	Introduction to Oceanography	(3 credits)
PHY 1020	General Education Physics	(3 credits)

SOCIAL SCIENCE (3.00 credits)

AMH 2010	History of the US to 1877	(3 credits)
AMH 2020	History of the US since 1877	(3 credits)
POS 2041	American Federal Government	(3 credits)

[•]Note: Students must seek advisement for proper mathematics course from discipline chairperson.

COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

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CGS 1060C

CGS 1060C Introduction to Computer Technology & Application

Intro to Computer Technology and Applications (4 credits)

MAJOR COURSE REQUIREMENTS (16.00 Credits)

CTS 1120	Cybersecurity Fundamentals	(4 credits)	Recommended preparation: prior knowledge of
			Networking Technologies
CTS 1134	Networking Technologies	(4 credits)	
CTS 2303	Windows Server Administration	(4 credits)	Recommended preparation: CGS 1060C and CTS
			1134

PROGRAM CONCENTRATION CORE (24.00 Credits)

CTS 1111	Linux +	(4 credits)	
CTS 1650	CCNA 1: Cisco Fundamentals	(4 credits)	
CTS 1651	CCNA 2: Routing and Switching	(4 credits)	Corequisite: CTS 1650
CTS 2143C	Server Administration	(4 credits)	Recommended preparation: server operating systems experience
CTS 2192C	Microsoft Azure Administration	(4 credits)	Recommended preparation: CTS 1145 or equivalent knowledge in Microsoft Azure Fundamentals
CTS 2652	CCNA 3: Advanced Routing and Switching	(4 credits)	Prerequisite: CTS 1651

PROGRAM COURSE ELECTIVE (5.00 Credits)

CGS*; CIS*; COP*	; CTS*		
CGS 1560	A+ Computer Operating Systems	(4 credits)	
CIS 2900	Directed Information Technology Study	(1-4 credits)	
CTS 1145	Cloud Essentials	(4 credits)	
CTS 1328	Supporting Microsoft Clients	(4 credits)	Prerequisite: CGS 1060C
CTS 1437	Microsoft SQL Administration	(4 credits)	Recommended preparation:
			CGS 1540 or CGS 1541
CTS 2153	Supporting Windows Users & Applications	(4 credits)	Prerequisite: CTS 1328

^{*} Any course with the listed prefixes satisfies this requirement.