



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 Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption).
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HUMANITIES (3.00 credits)

ARH 1000	Art Appreciation	(3 credits)	Prerequisite: ENC 1101
HUM 1020	Introduction to Humanities	(3 credits)	
LIT 2000	Introduction to Literature	(3 credits)	
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♦
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♦Note: Students must seek advisement for proper mathematics course from discipline chairperson.

NATURAL SCIENCE (3.00 credits)

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)

COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

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CGS 1060C Introduction to Computer Technology & Application

MAJOR COURSE REQUIREMENTS (16.00 Credits)

CGS 1060C Intro to Computer Technology and Applications (4 credits)

CTS 1120 Cybersecurity Fundamentals (4 credits)

CTS 1134 Networking Technologies (4 credits)

CTS 2303 Windows Server Administration (4 credits)

Recommended preparation: prior knowledge of
Networking Technologies

Recommended preparation: CGS 1060C and CTS 1134

PROGRAM CONCENTRATION CORE (24 Credits)

CTS 1111 Linux + (4 credits)

CTS 1650 CCNA 1: Cisco Fundamentals (4 credits)

CTS 1651 CCNA 2: Routing and Switching (4 credits)

CTS 2143C Windows Server Administration (4 credits)

Corequisite: CTS 1650

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 ELECTIVES (5 Credits)

CGS*; CIS*; COP*; CTS*

CGS 1560 A+ Computer Operating Systems (4 credits)

CIS 1949 Co-op Work Experience 1: CIS (1-4 credits)

CIS 2900 Directed Information Technology Study (1-4 credits)

CTS 1145 Cloud Essentials (4 credits)

CTS 1328 Supporting Microsoft Clients (4 credits)

CTS 2153 Supporting Windows Users & Applications (4 credits)

Recommended preparation: CGS 1060C

Prerequisite: CTS 1328

*Any course with the listed prefixes satisfies this requirement.