

# Networking

## Degree Type

Associate of Science

The Networking career path within the Computer Technology program is both comprehensive and flexible, providing students with several career options and paths in the computer science field. The curriculum introduces students to networking systems while integrating these courses with a relevant core of general education electives.

Graduates who successfully complete the program will be awarded an Associate Degree in Networking and can enter the workforce prepared for such jobs as PC support specialist, help desk technician, network and server administrators, or they can choose to further their education by transferring credits to baccalaureate programs in Applied Computer Science or Computer Science. Students who choose to continue on to four-year institutions are encouraged to select the higher-level mathematics (math at the level of Precalculus is preferred). All applicants to this networking program must satisfy the general requirements for admission to the College, possess high school or college credits in English, mathematics, two lab sciences and interview with Program Director. Attending college part-time will take more than two years to complete

Students must earn a grade of "C" or higher in all required CSCI courses to progress within this program to graduate.

Students who are unable to pass a criminal background check may find it difficult to obtain or stay employed in the Computer Technology industry. These students are advised to seek an alternate education program. Students will be required to sign a program code of conduct that has a zero tolerance policy. Violation of the code of conduct will be grounds for removal from the program.

## Program Mission

To develop and train networking technology professionals who can help companies manage and protect their systems.

## Program / Student Outcomes

The proposed program will provide students with a strong foundation of understanding in networking. Students will learn:

- the focused discipline of networking in technology and develop a foundation of knowledge of the field
- to write clearly and effectively for defined audiences through a variety of strategies
- the purpose behind their field of study, how to best interact with the people in their work environment and the career path that is best aligned with their personal goals
- how to use multiple operating systems commonly found in the technology field today
- basic security principles for information assurance
- the basics of descriptive and inferential statistics
- computer networking through the introduction of the Open Systems Interconnection (OSI) model, the TCP/IP protocol suite, routing and switching protocols, Wide Area Network services, and network design & implementation
- a programming language and be able to design and implement simple programs dealing with numerical and string processing
- to implement, maintain and protect a Microsoft Windows Server Domain
- graphical and command line SQL methods of creating relational databases
- to perform ordinary tasks in the Linux operating systems
- the methods in which emerging technologies can be deployed on current and future platforms
- how to succeed in an networking technology position through an Internship or Capstone course

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**Total Credits**

**62-66**

**Course Sequencing**

## First Year: Fall Semester

Item #	Title	Credits
CSCI101R	Computer Architecture and Operating Systems	3
CSCI110R	Introduction to Networks	3
CSCI186R	Introduction to Operating Systems	3
MATH110R	Functions & Modeling I	4
ENGL102R	College Composition	3-4

## First Year: Spring Semester

Item #	Title	Credits
CSCI106R	Communication Infrastructure	3
CSCI121R	Switching & Routing and Wireless Essentials	3
CSCI175R	Introduction to C++	4
MATH120R	Functions & Modeling II	4
	Humanities/Fine Arts/World Language Elective	3

## Second Year: Fall Semester

Item #	Title	Credits
CSCI203R	Introduction to Linux	3
CSCI204R	Administering Windows Servers	3
CSCI236R	Enterprise Networking and Security and Automation	3
MATH106R	Statistics I	4
	Science Elective	3-4

## Second Year: Spring Semester

Item #	Title	Credits
CYBS120R	Network Security	3
CSCI220R	Storage and Virtualization	3
CSCI296R	Technology Capstone	3
	Computer Technology Elective	3
	Social Science Elective	3