

# Computer Information Technology (CIT) - Networking



● CAREER DEGREE    MIDDLETOWN CAMPUS

## Program Description

The Associate in Applied Science degree program in CIT–Networking prepares students for employment in a variety of entry-level careers in computer networking and information technology occupations. The theory and practical experience students gain allow them to enter jobs with highly competitive salaries.

This degree program offers the coursework that provides background information for students to take the CompTIA’s A+, Security+, Networking+, Linux+ and CISCO’s CNA certification exams. The primary focus of this degree program is networking computer systems including implementation, configuration, maintenance and administration of networking equipment, which includes creation of networking servers. The degree course work introduces students to basic computer systems and builds on theoretical and technical knowledge and skills to develop a strong understanding of networking topologies, mediums and medium access techniques in both local area and wide area networks (LANs and WANs). Classes are designed to provide students with hands-on training utilizing state-of-the-art computer facilities. Students are also placed in a work environment in order to provide actual service to a business through the CIT–Networking internship.

*Students are encouraged to discuss their future career and/or transfer goals with a CIT–Networking advisor.*

## Program Outcomes

Students will:

- install and configure networking equipment and configure network protocols
- assemble a PC and troubleshoot PC hardware and software
- identify and summarize security threats and appropriate actions to minimize those threats
- install, configure and manage a Network Operating System
- analyze an existing system and determine appropriate systems design and implementation strategies

## Admission Criteria

Admission to this program requires that students be high school graduates or have high school equivalency diplomas (HSEs). If students are not high school graduates, they may be eligible for admission to the College’s 24 Credit Hour Program. If students are home schooled, they may be eligible for admission.

## Transfer Options

While the A.A.S. degree leads to immediate employment, SUNY Orange CIT-Networking students and graduates have successfully transferred to:

- Marist College
- Mount St. Mary College
- St. John’s University
- SUNY Institute of Technology

## Your Career Coach

Career opportunities:

- banks
- law firms
- medical offices
- hospitals
- small businesses
- government agencies
- corporations
- schools
- colleges
- consulting firms

[Browse careers at Career Coach](#)

## Computer Information Technology - Networking Gateway Courses:

- Gateway courses: CIT 100, CIT 105
- Key courses: CIT 105, CIT 116, CFR 221, CIT 203

# SUNY Orange 22-23

Courses above have been recommended by the department to help introduce you to the program (Gateway courses) and guide you in selecting courses that will provide you with the best academic experience (Key courses and suggested Electives).

## First Semester

Course #	Course Name	P, C, P/C	Cr
ENG 101	Freshman English 1	P	3
MAT ____	College Algebra or higher		3
CIT 105	Data Communication and Networking	P	3
CIT 117	Unix/Linux	P	3
CSC 138	Scripting		3
	Total Semester Credits		15

## Milestones

During this semester, students should:

- Meet with your newly assigned “department” advisor to plan your second semester
- Consider joining the student-led Computer Club

## Second Semester

Course #	Course Name	P, C, P/C	Cr
ENG 102	Freshman English 2	P	3
MAT ____	College Trigonometry or higher		3
CIT 112	Computer Hardware and Software	P	4
CIT 116	Networking 1	P	4
CSC 101	Computer Science 1	P	4
	Total Semester Credits		18

## Milestones

During this semester, students should:

- Meet with department advisor to plan third semester

## Third Semester

Course #	Course Name	P, C, P/C	Cr
_____	Social Science Elective		3
CIT 103	Management Information Systems		3
CIT 203	Networking 2	P	4
CIT 218	Systems Analysis and Design	P, P/C	3
CIT 225	Database Fundamentals	P	3
	Total Semester Credits		16

## Milestones

During this semester, students should:

- Prepare resume for next semester’s internship
- Schedule time with Career Services Office to identify internship opportunities
- Meet with Department Chair to get approval for upcoming internship
- Narrow focus for post-graduate job search or, if continuing studies, research and apply to transfer schools

## Fourth Semester

Course #	Course Name	P, C, P/C	Cr
_____	Social Science Elective		3
CIT 206	Network Security	P	3
CIT 228	System Administration	P	3
CIT 230	Internship		3
_____	Restricted Elective*		3
	Total Semester Credits		15

## Milestones

During this semester, students should:

- Apply for graduation

- Schedule mock interviews through the Career Services Office or the Department

**TOTAL DEGREE CREDITS: 64**

**Notes**

\*Restricted Electives: CSC 102, CIT 111, Any course approved by the department.

\*\*Students unprepared for technical coursework are strongly urged to take CIT 100 in addition to the standard curriculum.