

# Computer Information Technology (CIT) - Networking Degree Map



● CAREER DEGREE    **M** MIDDLETOWN CAMPUS

## A Day in the Life ...

Network engineers play a critical role in maintaining a company's vital information network. It is well understood that any company's productivity and success is directly contingent on the availability and integrity of its IT infrastructure. Three major facets of the job include installing and configuring network hardware and software, testing new or upgraded services, and troubleshooting problems at levels ranging from datacenter issues to individual user issues.

## Three Reasons to Consider CIT-Networking

1. Networking is integral to every company's IT operations. Skilled technicians are needed to maintain and support this vital component of the industry.
2. Entry-level technicians often progress rapidly in the business to become network engineers, analysts and designers.
3. Our Networking program of study was recently updated to offer a unique combination of programming, hardware, design and system administration courses.

## Keep This in Mind

Because of the criticality of networks to any business, coverage must be provided 24x7, often requiring evening and weekend shifts. Network technicians should expect to work various shifts.

All of our networking teachers are Cisco Academy certified instructors.

Our Networking degree program includes a required one-semester internship. Students are placed by the College with area businesses in order to gain experience and learn in the workplace. Students must provide their own transportation.

It is important that students stay in close touch with their advisors and remain in sequence with the course of study because some of the classes are only offered once per academic year.

While the intent is to prepare the graduate for entry-level employment, some students do transfer to a four-year college or university to earn a higher degree in Networking or Data Center Operations.

## Computer Information Technology - Networking Gateway Courses:

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

*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

# SUNY Orange

---

## 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.