

Cyber Security Degree Map

● CAREER DEGREE  MIDDLETOWN CAMPUS

A Day in the Life ...

Entry level Cyber Security professionals will often begin their careers understanding and then supporting their company's networks before moving on to playing a vital role in protecting their company's IT infrastructure and data. In this dynamic, constantly evolving field, employees must be committed to staying abreast of new developments and threats in order to defend their environments. The work also includes the responsibility of tracking perpetrators after an attack has occurred. This is a career that will constantly evolve.

Three Reasons to Consider Cyber Security

1. Cyber Security is a fast growing profession as more companies realize the need to protect their operations and data in order to avoid negative business, social and legal repercussions.
2. Attacks and theft of data can be devastating to any company's ability to do business. A rewarding career in Cyber Security is one where professionals anticipate these threats and react accordingly.
3. Our program combines a substantial amount of network training in addition to the main cyber security related topics.

Keep This in Mind

Because IT operations can dramatically vary in hardware, software and network configurations, many large companies will provide their own Cyber Security training to those that have already obtained the basic foundation.

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.

All of our networking teachers are Cisco Academy certified instructors.

The industry respected EnCase software is used to teach the Computer and Network Forensic courses.

While the intent is to prepare the graduate for entry level employment, some students do transfer to a 4-year school to earn a higher degree in Cyber Security.

Cyber Security 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 (G10A [w] & G11A)	P	3
MAT 121	College Algebra (G1A)	P	3
	Category E Social Science (G6A)		3
CIT 100	Computer Literacy	P	3
CIT 105	Data Communications and Introduction to Networking	P	3
COM 100*	Oral Communication (G10A [o])*	P	1
	Total Semester Credits		16

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 (G7A & G12A)	P	3
CIT 116	Networking 1	P	4
CIT 112	Computer Hardware and Software	P	4
CIT 118	Operating Systems	P	3
CSC 138	Introduction to Applied Logic Through Scripting (G11A)	P	3
	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
CIT 203	Networking 2	P	4
CIT 117	Introduction to Unix/Linux	P	3
CFR 221	Computer Forensics	P	3
CSS 223	Information Security	P	3
PSY 111	Introduction to Psychology (G3A)		3
	Total Semester Credits		16

Milestones

During this semester, students should:

- Prepare resume for job search
- 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
CFR 222	Network Forensics	P	3
CSS 224	Network Perimeter Security	P	3
CSS 226	Cyber Crime Investigations		3
CRJ 111	Criminology		3
_____	SUNY Natural Sciences (G2A)**		4
	Total Semester Credits		15

Milestones

During this semester, students should:

- Apply for graduation
- Schedule mock interviews through the Career Services Office or the Computer Science department

TOTAL DEGREE CREDITS: 65

Notes:

*COM 101 satisfies the requirement of COM 100

**Must be 4 credits