Cyber Security

Degree Awarded: Associate in Applied Science

Recommended Course Sequence

First Semester		Credits
ENG 101	Freshman English 1	3
MAT 121	College Algebra	3
CRJ 101	Intro to Criminal Justice	3
CIT 100	Computer Literacy	3
CIT 105	Data Communications and Introduction to Networking	3
Second Semester		
ENG 102	Freshman English 2	3
CIT 116	Networking 1	4
CIT 112	Computer Hardware and Software	4
CIT 118	Operating Systems	4
MAT 122	College Trigonometry	3
Third Semester		
CIT 203	Networking 2	4
CIT 217	Introduction to Unix/Linux	3
CFR 221	Computer Forensics	3
CSS 223	Information Security	3
PSY ___	Psychology	3
Fourth Semester		
CFR 222	Network Forensics	3
CSS 224	Network Perimeter Security	3
CSS 226	Cyber Crime Investigations	3
CRJ 111	Criminology	3
_____	Restricted Elective *	3

Total Credits: 63

* *Restricted Electives:*
CIT 111 - Internet & HTML Programming
CIT 115 - Visual Basic
Any course approved by the Department Chair

Program Description

The Associate in Applied Science degree program in Cyber Security prepares students for employment in a variety of entry level careers in Cyber Security. Today, everyone is concerned with security, and people with knowledge in this area are in high demand. Positions can include such titles as Network Administrator, network security specialist, information security technician, just to name a few. The main thrust is protection of information and limiting access to network resources. In addition to security, students will also be instructed in techniques used to track perpetrators once an attack has occurred.

In addition to basic computer and networking skills, the student will be instructed in Operating Systems, Computer Forensics, Network Forensics, Information Security, Network Perimeter Security, and Cyber Crime Investigation.

Classes are designed to provide students with hands-on training utilizing state-of-the-art computer facilities. Lab work and assignments will present real world cyber security scenarios encountered in the work place. For forensics studies, industry standard software will be used.

While A.A.S. graduates are prepared to enter the workforce immediately, many students choose to transfer to upper-level programs leading to a bachelor's degree in technology. If students are considering this, they should consult with the department chair and advisors for program planning. Special planning is available for students entering the program with previous college credit or equivalent training/work experience.

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.

Hudson Valley Educational Consortium students from Sullivan County Community College or Ulster Community College who plan to register for Cybersecurity courses must apply to and be accepted in the program by the following dates: August 15 for a Fall semester; December 15 for a Spring semester.

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Program Learning Outcomes

Students will:

- Develop basic networking skills
- Demonstrate knowledge of Operating systems fundamentals
- Demonstrate an understanding of network security and forensics and perform computer forensic analysis.
- Develop an understanding of the legal issues associated with cybersecurity and document appropriate procedures for handling case evidence.

Career Opportunities

Entry level

- Network Administrator
- Network Security Specialist
- Computer Crime Investigation

Transfer Opportunities

SUNY Orange has special relationships with upper-level colleges and universities for transfer.

These transfer institutions include:

- St. John's University

Contact Information

Applied Technology
Department Chair
341-4523

Admissions Office
(845) 341-4030