CYBERSECURITY, ASSOCIATE IN SCIENCE

The Cybersecurity program prepares students for careers as security analysts. Students who complete the program will be able to secure networks by performing penetration testing, security audits, digital forensics and investigations, develop security policies, and provide overall security guidance to organizations. Topics include network security, Windows and Linux security, intruder detection systems and firewalls, web security and protocols, virtualization and cloud security, and security policies and procedures.

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Course ID	Title	Units/Hours
REQUIRED CORE: Completer the following (17 units)		
CNSE M01	Network+ Fundamentals	4
CNSE M13	Internetworking and TCP/IP ( )	4
CNSE M30	MS Windows Administration	3
CNSE M55	Linux Networking & System Administration	3
CNSE M82	Introduction to Network Security	3
Restrictive Electives: Select and complete 5 courses (13-16 units)		
CNSE M18	Cisco System Computer Networking A	4
CNSE M31	MS Windows Network Server	3
CNSE M56	CompTIA Advanced Security Practitioner Preparation	3
CNSE M57	Scripting for Security Management	2
CNSE M67	VMware vSphere Fundamentals	3
CNSE M83	Intro Computer Forensics	3
CNSE M84	Certified Ethical Hacker	2
CNSE M86	Firewall Administration	3
CNSE M100	Cybersecurity Analysis	3
CNSE M170	Cloud Security	3
Total Required Major Units: 30 - 33		
MC General Education Pattern: 28		
Double-Counted Units: 0		
Electives to meet 60 associate degree units: 0 -2		
Total units required for the AS Degree: 60 - 61		

Year 1

Fall Semester		Units/Hours
CNSE M01	Network+ Fundamentals	4
CNSE M30	MS Windows Administration	3
CNSE M55	Linux Networking & System Administration	3
	Units/Hours	**10**
Spring Semester		
CNSE M82	Introduction to Network Security	3
CNSE M13	Internetworking and TCP/IP	4

Restrictive Electives: Select and complete 5 courses

		Units/Hours	7
Year 2			
Fall Semester			
CNSE M18	Cisco System Computer Networking A		4
CNSE M100	Cybersecurity Analysis		3
CNSE M170	Cloud Security		3
CNSE M67	VMware vSphere Fundamentals		3
CNSE M83	Intro Computer Forensics		3
	Units/Hours		**16**
Spring Semester			
CNSE M84	Certified Ethical Hacker		2
CNSE M56	CompTIA Advanced Security Practitioner Preparation		3
CNSE M57	Scripting for Security Management		2
CNSE M86	Firewall Administration		3
CNSE M31	MS Windows Network Server		3
	Units/Hours		**13**
	Total Units/Hours		**46**

Upon successful completion of this program, students will be able to:

- •Build and maintain secure networks that includes varied systems such as a virtual system, windows system, Linux system, firewall, wireless devices, and a website on the cloud.
- •Demonstrate proficiency to solve common networking security problems using products or strategies learned in the classroom to design and implement a workable solution.
- •Demonstrate the ability to use technical resources to solve security related threats.