

CYBER DEFENSE - CERTIFICATE



CYBC

The Cyber Defense program is part of the Cybersecurity degree designed to provide students with a strong foundation in the principles and methods of cybersecurity, as well as the fundamental knowledge and tools for applying security measures across a variety of network architectures and settings. This certificate program will provide the educational background and hands-on training necessary to prepare students in the cybersecurity defense sector. The curriculum meets the National Security Agency (NSA) and Centers of Academic Excellence (CAE) core foundational content and standards.

Note: Students must earn a grade of at least C in all computer course requirements and must maintain a 2.0 GPA. Credits earned in this certificate program can be applied toward the Cybersecurity associate degree program. Many courses require prerequisites, corequisites and/or testing.

Program Learning Outcomes

Upon completion of this program, a student will be able to:

1. Demonstrate critical thinking and problem-solving skills.
2. Present conclusions orally and in writing.
3. Develop solution algorithms.
4. Install and securely configure, operate, and maintain computer network(s).
5. Implement secure network management including intrusion prevention.
6. Explain the basic objectives of cybersecurity and the importance of information security as well as the current threats to networks.
7. Assess cybersecurity risk management policies to adequately protect an organization's critical information and assets.
8. Develop appropriate workplace attitudes and identify, understand, and work within professional standards.

Certificate Requirements

Code	Title	Hours
CNVT 1810	Networking 1	3
CNVT 1820	Networking 2	3
CNVT 2200	Network Security Hardware	4
COMI 1170	Scripting for System Administration	3
COMI 1800	Computer Networking Software Linux	3
COMI 2036	Introduction to Computer Ethics	3
COMI 2037	Foundations of Cybersecurity	3
Total Hours		22

Recommended Course Sequence

Course	Title	Hours
Summer Session		
CNVT 1810	Networking 1	3
	Hours	3
Year 1		
Semester 1		
CNVT 1820	Networking 2	3
COMI 1800	Computer Networking Software Linux	3
COMI 2036	Introduction to Computer Ethics	3
	Hours	9
Semester 2		
CNVT 2200	Network Security Hardware	4
COMI 1170	Scripting for System Administration	3
COMI 2037	Foundations of Cybersecurity	3
	Hours	10
	Total Hours	22