

CYBERSECURITY CERTIFICATE

Program code: CYSC-CC-ESN

Location: Capital, Quinebaug Valley, Tunxis

Program Description

The Cybersecurity Certificate is designed to take a student with little or no information technology experience and prepare them for entry-level work in Cybersecurity. Curriculum in this program is based on topic areas, learning objectives, and goals for educating the workforce prescribed by the cybersecurity community, including the National Institute for Standards and Technology (NIST) and the National Initiative for Cybersecurity Education (NICE).

Learning Outcomes

Upon successful completion of all program requirements, graduates should be able to:

1. Design, build and test a Python program.
2. Identify the security controls required by organization to protect the Confidentiality, Integrity, and Availability (CIA) of data and systems.
3. Evaluate computer forensic methods.
4. Implement major network authentication schemes.
5. Use hacking software tools to identify known vulnerabilities associated with a computer system, and computer network.
6. Install network security appliances and software such as firewall and network intrusion systems.

This certificate will begin to prepare students for common security certification exams such as:

- CompTIA Network+
- CompTIA Linux+
- CompTIA Security+
- Computer Hacking Forensic Investigator (CHFI)
- Penetration Testing and Ethical Hacking (CEH)
- ISC2's Systems Security Certified Practitioner (SSCP)

Certificate Requirements

Code	Title	Credits
Required Courses		
CSC 1203	Python Fundamentals	3
CST 1221	Networking I	4
CST 2222	Networking II	4
CST 1141	Linux System Administration	4
CYS 2111	Network Security	3
CYS 2131	Computer Forensics and Network Intrusions	3
CYS 2151	Ethical Hacking and Pen Testing I	3
Total Credits		24

- Cyber and Homeland Security Certificate
- Cyber and Homeland Security, AS
- Cybersecurity: Computer Science, AS
- Cybersecurity: Networking, AS