CYBERSECURITY OPERATIONS

Course Code:
6304/6306

Course Description: This one year program is designed to teach computer and network administration and security. Students learn cyber security concepts, including the practice of protecting systems, networks, and programs from digital attacks. Cyber security is defined as the steps and processes taken to protect networks, devices, programs, and data from unauthorized access that can result in theft or damage. Students learn to establish, implement, and maintain security networks.

Topics of Study:
Introduction to Cybersecurity
Threats, Attacks, & Vulnerabilities
Physical Security
Networks & Host Design & Diagnosis
Devices & Infrastructure
Identity, Access, and Account Management
Cryptography & PKI
Wireless Threats
Virtualization, Cloud Security, and Securing Mobile Devices
Securing Data and Applications
Security Assessments
Incident Response, Forensics, & Recovery
Risk Management
Governance & Compliance

Campus Location:
Butler Farm, Hampton

Sessions:
AM and PM

Class Size:
20 students

Credentials:
CompTIA Security + Examination
Cybersecurity NOCTI
TestOut Security Pro

Career & Technical Student Organization:
SkillsUSA

Work-Based Learning Opportunities:

Course Prerequisites:
Completed 10th grade English with a grade of "C" or better
Completed a computer applications course
Completed Algebra I with a grade of "C" or better

Instructor Bio:
Quintasia Hurt
quintasia.hurt@nhrec.org
Bachelor of Science Degree from Norfolk State University
6 Years of Educational Experience
Virginia CyberRange K-12 Advisory Board Member
Virginia CyberAlliance Project Participant

Projected Employment:
Employment of information security analysts is projected to grow 32 percent from 2022 to 2032, much faster than the average for all occupations.
"Information Security Analyst" Occupational Outlook Handbook, US Bureau of Labor Statistics,

11 October, 2023.

https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm#tab-6

Career Pathways:
Cybersecurity Analyst
Computer & Information Systems Manager
Computer Support Specialist
Network & Computer Systems Administrator

Program Flyer: (linked)