

## **Cybersecurity Certificate**

General Program Information: 410-287-1000 or [information@cecil.edu](mailto:information@cecil.edu)

The Cybersecurity Certificate provides students with the skills, knowledge and credentials to successfully begin a career in the field of Cybersecurity. Cybersecurity specialists apply computer security techniques to work with industry, government, and academia to solve computer networking and security related challenges.

	<i><b>Certificate Requirements</b></i>	<i><b>Credits</b></i>
CSC 104	Computer Science Fundamentals	3
CSC 109	Introduction to Programming	3
CSC 140	Introduction to Networking	3
CSC 141	Computer Network Security Fundamentals	3
CSC 156	Windows Server	3
CSC 151	Introduction to Computer Forensics and Investigations	3
CSC 225	Tactical Perimeter Defense	3
CSC 235	Strategic Infrastructure Security	3
CSC 266	Cisco Certified Network Associate I	4

***Total Credits Required in Program: 28***

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

- Demonstrate proficiency in a programming language
- Configure and secure Windows and Unix/Linux server and clients, routers, firewalls, email, networks, and other network security appliances and software
- Recognize networking standards, protocols, and the OSI model
- Identify and describe security measures for different types of network attacks, operating systems, software, databases, websites, social engineering and physical security
- Apply computer forensics, data acquisition, analysis, tools, and crime scene investigation and documentation requirements for corporate or legal testimony
- Explain the function of cryptography and encryption to secure data, public key infrastructure, hashing, and digital signatures along with other data protection techniques
- Create an effective security policy and disaster recovery plan, addressing business requirements related to confidentiality, integrity and availability