INFORMATION SECURITY AND ASSURANCE CERTIFICATE (CAREER)

Program website (https://www.frederick.edu/programs/information-technology/cybersecurity.aspx)

Program Description

Designed for students seeking to build skills in specialty areas (e.g., information security), upgrade current skills, or broaden their general knowledge base in information technology. All CMIS courses completed in these certificates apply directly to an A.A.S. degree in information technology. The Information Security and Assurance Certificate is specifically designed to meet the need for workers in this rapidly growing area of information technology.

Program Learning Outcomes

- Apply a structured model in the Security Systems Development Life Cycle (SDLC).
- Detect and mitigate attack methodology, intrusion, and suspicious attempts to gain unauthorized access to systems and/or resources.
- Design and implement risk analyses, security policies, and damage assessments.
- Evaluate and develop plans to implement operating system security-hardening procedures across multiple environments.
- Explain the policies and procedures needed to identify, protect, detect, respond, and recover from a given information security incident.

Please note: the Information Security and Assurance Certificate requirements include substantial modifications that are pending MHEC approval.

Program Requirements

Code	Title	Credits
Departmental Requirements		
CMIS 101	Information Systems and Technology	3
CMIS 111V	Virtualization and Cloud Essentials	3
CMIS 120	PC Operating Systems	3
CMIS 121	PC Repair & Diagnostics	3
CMIS 218	Information Security	3
CMIS 266	Cloud System Administration	3
CMIS 295	Cloud Security	3
Total Credits		21

Transfer Note

For more information on careers and transfer, contact the Career and Academic Planning Services office at 301.846.2471 or visit Transfer Services (https://www.frederick.edu/student-resources/counseling-advising/transfer-services.aspx).

Guided Pathway to Success (GPS)

Suggested schedules map your path to degree completion.

Students should meet with an advisor each semester to carefully select and sequence courses based on their specific academic goals and interests. Visit Jefferson Hall or call 301.846.2471 for advising.

Recommended First Semester		Credits
CMIS 101	Information Systems and Technology	3
CMIS 120	PC Operating Systems	3
CMIS 121	PC Repair & Diagnostics	3
CMIS 111V	Virtualization and Cloud Essentials	3
	Credits	12
Recommended Second Semester		
Select one of the following:		3
CMIS 218	Information Security	
CMIS 266	Cloud System Administration	3
CMIS 295	Cloud Security	3
	Credits	9
	Total Credits	21

Part-time Students

Part-time students should complete courses in the order listed on the pathway. Please contact program manager for questions about part-time status.

Students who take fewer than 15 credits each semester or who require developmental English or Math coursework will need additional semesters to complete their degrees. Summer term and January session classes may help students to make faster progress.

Pathway Legend

Milestone - courses with the Milestone notation should be taken within the recommend credit range to stay on track for program completion.

Fall, Spring, Summer - courses with a Fall, Spring, or Summer notation indicate the course is offered in the specified semester only.