

CLOUD COMPUTING CERTIFICATE (CAREER)

Program website ([https://www.frederick.edu/programs/information-technology/information-technology-\(2\).aspx](https://www.frederick.edu/programs/information-technology/information-technology-(2).aspx))

Program Description

Prepares students with the knowledge and skills required to implement, adopt, and govern cloud computing systems. This certificate covers the objectives of five (5) professional certification exams:

- Amazon Web Services (AWS) Certified Cloud Practitioner,
- AWS Certified SysOps Administrator Associate
- CompTIA Cloud Essentials
- CompTIA A+
- CompTIA Network+

Program Learning Outcomes

- Evaluate and select appropriate cloud computing solutions.
- Develop and deploy cloud application using popular cloud platforms.
- Design and develop scalable cloud-based applications.
- Compare, contrast, and evaluate the trade-offs between multiple approaches to cloud system design.
- Identify appropriate design choices when solving real-world cloud computing problems.

Program Requirements

Code	Title	Credits
Departmental Requirements		
CMIS 111V	Virtualization and Cloud Essentials	3
CMIS 120	PC Operating Systems	3
CMIS 121	PC Repair & Diagnostics	3
CMIS 266	Cloud System Administration	3
CMIS 280	Networking Fundamentals	3
or CMIS 290	Cisco 1 Introduction to Networks	
CMIS 295	Cloud Security	3
Total Credits		18

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 120	PC Operating Systems	3
CMIS 121	PC Repair & Diagnostics	3
CMIS 111V	Virtualization and Cloud Essentials	3
Credits		9

Recommended Second Semester

Select one of the following:		3
CMIS 280	Networking Fundamentals	
CMIS 290	Cisco 1 Introduction to Networks	
CMIS 295	Cloud Security	3
CMIS 266	Cloud System Administration	3
Credits		9
Total Credits		18

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.