

# COMPUTER STUDIES CERTIFICATE (CAREER)

Program website (<https://www.frederick.edu/programs/information-technology/computer-studies.aspx>)

**Program Manager:** James Hatch  
**Email:** [jhatch@frederick.edu](mailto:jhatch@frederick.edu)  
**Phone:** 301.624.2769

## Program Description

Designed for students seeking to build skills in the field of computer studies. Involves defining and analyzing problems and developing, testing, and maintaining programs by incorporating a broad range of transferable problem-solving skills and techniques including logical thinking, creative design, synthesis, and evaluation.

## Program Learning Outcomes

- Prepare a plan that addresses organizational needs.
- Identify problem requirements that demonstrate understanding of user and technical needs.
- Design problem solutions that solve the requirements.
- Integrate hardware, software, and security models that facilitate project outcomes.

## Program Requirements

Code	Title	Credits
<b>Departmental Requirements</b>		
CMIS 106	Object Design and Programming	3
CMIS 120	PC Operating Systems	3
CMIS 203	Systems Analysis & Design	3
CMIS 121	PC Repair & Diagnostics	3
CMIS 218 or CMIS 179	Information Security Cybersecurity Fundamentals	3
<b>Electives</b>		
Select 6 credits of the following:		6
Any BMGT course		
Any CMIS course		
Any INTR course		
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 106	Object Design and Programming	3
CMIS 120	PC Operating Systems	3

CMIS 121	PC Repair & Diagnostics	3
Credits		9
<b>Recommended Second Semester</b>		
CMIS 203	Systems Analysis & Design	3
Select one of the following:		3
CMIS 179	Cybersecurity Fundamentals	
CMIS 218	Information Security	
Any BGMT, CMIS, or INTR course		3
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Credits		12
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.