GAME PROGRAMMING CERTIFICATE (CAREER)

Program website (https://www.frederick.edu/programs/information-technology/game-and-simulation-development.aspx)

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Program Description

Prepares students to develop interactive computer games on the Internet, mobile computers, and personal computers. This certificate targets students who wish to obtain the skills necessary to develop computer games using programming language, such as Java, C++, C#, and Python.

Program Learning Outcomes

- Plan programming components of a computer game.
- Create a game that implements defined game mechanics.
- Create a game that utilizes game resources.

Program Requirements

Code	Title	Credits
Departmental Requirements		
CMIS 106	Object Design and Programming	3
CMIS 226	Game Scripting	3
CMIS 227	Game Programming	4
CMIS 228	Simulation and Game Development	4
CMIS 208	C++ Programming	3
or CMIS 225C	Computer Programming Language: Mobile Applet Programming	
Total Credits		17

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 226	Game Scripting	3
	Credits	6
Recommended Second Semester		
CMIS 227	Game Programming	4
CMIS 228	Simulation and Game Development	4
Select one of the following:		3
CMIS 208	C++ Programming	

CMIS 225C	Computer Programming Language: Mobile Applet Programming	
	Credits	11
	Total Credits	17

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.