Certificate in Educational Computer Gaming

Department

Computer Science (https://www.stmarytx.edu/academics/department/computer-science/)

Program Specific Admission Requirements

In this graduate certificate program, students learn to evaluate, design and create educational computer games. These games can be developed to target any population, circumstance or situation to teach, train or practice any skill or topic. The student may be an educator who wants to make games for classes, or a parent who may make some for their children, or just interested in how games can help someone learn. Students will make at least two educational computer games and learn about the gamification of instruction during the courses in this certificate.

To participate in this graduate certificate, students must have an undergraduate degree in a technology-related field (or equivalent experience) and have completed at least two computer programming classes with a B- or better. Students need computer programming as a skill they already have.

Certificate Requirements

The certificate requires four classes (12 credit hours) that may also be used toward a Master's of Computer Science or Computer Information Systems.

Click on the course number to view course title and description.

Code	Title	Semester Hours
Required Classes		
CS 6335	Game Development	3
CS 6345	eLearning and Gamification	3
Elective Classes		
Select two of the following:		6
CS 6315	Artificial Intelligence & Machine Learning [1]	
CS 6320	Files and Database [1]	
CS 6325	Computer Graphics [1]	
CS 6330	Advanced Computer Networks [1]	
CS 6350	Hardware & Operating Systems [1]	
CS 6375	Special Topics [1]	
Total Semester Hours		**12**

[1]   Any research work in these classes must be in related to educational computer gaming.