

GAME PROGRAMMING CONCENTRATION

The game programming concentration provides students with the basic concepts involved in the video game development process. The required courses give the student an introductory knowledge of both 2D and 3D game programming, as well as resource management, concepts of designing games, and general graphics theory. The elective courses allow the student to focus on a particular aspect of game development: game design, game/player interaction, game programming, or graphics. This concentration is only open to undergraduate Computer Science majors in the College of IS&T.

Requirements

Code	Title	Credits
Required Courses		
CSCI 2510	INTRODUCTION TO GAME PROGRAMMING	3
CSCI 3510	ADVANCED GAME PROGRAMMING	3
CSCI 4620	COMPUTER GRAPHICS	3
Elective Courses ¹		
Select 9 hours from the following (limit of 1 non-CSCI course):		9
CSCI 1280	INTRODUCTION TO COMPUTATIONAL SCIENCE	
CSCI 2620	2D GRAPHICS: IMAGE PROCESSING	
CSCI 4250	HUMAN COMPUTER INTERACTION	
CSCI 4260	USER EXPERIENCE DESIGN	
CSCI 4450	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	
CSCI 4480	ALGORITHMS FOR ROBOTICS	
CSCI/MATH 4660	AUTOMATA, COMPUTABILITY, AND FORMAL LANGUAGES	
CSCI 4850	DATABASE MANAGEMENT SYSTEMS	
ART 3140	COMPUTER GENERATED IMAGERY	
ART 3160	GAME DESIGN AS ART	
Total Credits		18

¹ NOTE: This list of electives is not exhaustive. Students can take other courses as electives under approval of the UPC.