COMPUTER SCIENCE GAME PROGRAMMING

COLLEGE OF ARTS + SCIENCES

COURSES

In addition to completing an internship for practical experience, our program's curriculum includes core courses from computer science and related disciplines for a solid foundation in computer science. Here's a sample of what you can expect to learn and do:

Introduction to Programming

This course is an introduction to concepts and terminology in computer programming, including interface building and problem-solving techniques in various programming environments. Emphasis is placed on the basics of software design and on elementary applications to mathematics and other disciplines.

Computer Graphics

This course covers basic to advanced concepts of 2D and 3D graphics design and animation techniques. Topics include vector and matrix manipulations, 3D transformations, rendering, shading, and clipping.

Data Structures & Algorithms

This course covers the basics of data structures, such as abstract data types, linked lists, stacks, queues, trees, and graphs. Applications to a number of problems, both practical and theoretical, are studied, including sorting, searching, and changing from recursion to iteration.

Programming Languages

This course explores the design and implementation of procedural, object-oriented, and logic programing language paradigms in modern computer systems. Topics include parameters, data types, abstraction, storage issues, and static/dynamic attributes.

GAMING HAS BECOME more than a hobby. It's an art form, a storytelling medium, a vehicle for change—and a practical one. Gaming can be used to create entertainment, tell deeply personal stories, and build experiences that are emotional and immersive in a way that no other medium has ever been. This power, this new medium, has been applied in revolutionary ways to fields as diverse as healthcare, business, and military—and the gaming industry itself is only growing. Loyola's Game Programming concentration offers an eclectic set of electives, including Game as Art, Media Play, Making Games, Doing Things with Videogames, Videogames and Literature, AI, and Physics; and students in this concentration will work with local, regional, and international game companies to refine talents and aptitudes.

Possible Careers:

- Software engineer
- Systems engineer
- Web designer
- Web developer

ATTENDING LOYOLA means being in the heart of New Orleans. Our campus is located in the city's historic Uptown neighborhood, just a short drive from the Central Business District, the city's hub of innovation and strategic thinking. You'll learn to hone your talents in the city named #1 new brainpower city in America and the #5 city in the U.S. for women in tech.