GAME PROGRAMMING - MINOR

College of Arts and Sciences
Department of Computer Science
www.kent.edu/cs

About This Program

Level up your skills with the Game Programming minor. Gain expertise in game design, development and programming while learning from experienced faculty and using industry-standard tools. This minor is a perfect complement to a major in computer science, digital media production and many more. Read more...

Contact Information

- **Feodor F. Dragan** and **Augustine Samba** | ugradinfo@cs.kent.edu | 330-672-9120
- Speak with an Advisor

Program Delivery

- **Delivery:**
  - In person
- **Location:**
  - Kent Campus

Admission Requirements

Admission to a minor is open to students declared in a bachelor's degree, the A.A.B. or A.A.S. degree or the A.T.S. degree (not Individualized Program major). Students declared only in the A.A. or A.S. degree or the A.T.S. degree in Individualized Program may not declare a minor. Students may not pursue a minor and a major in the same discipline.

Program Requirements

Minor Requirements

Code	Title	Credit Hours
Minor Prerequisite		
MATH 11010	ALGEBRA FOR CALCULUS (KMCR)	
Minor Requirements		
CS 13001	COMPUTER SCIENCE I: PROGRAMMING AND PROBLEM SOLVING	4
or CS 13011 & CS 13012	COMPUTER SCIENCE IA: PROCEDURAL PROGRAMMING and COMPUTER SCIENCE IB: OBJECT ORIENTED PROGRAMMING	
CS 23001	COMPUTER SCIENCE II: DATA STRUCTURES AND ABSTRACTION	4
CS 23022	DISCRETE STRUCTURES FOR COMPUTER SCIENCE	3
CS 38101	INTRODUCTION TO GAME PROGRAMMING	3
Minor Upper-Division Electives (30000 or 40000 level), choose from the following:		6
AGD 33010	COMPETITIVE GAMING	
AGD 33030	GAMES FOR IMPACT	
CS 47101	COMPUTER GRAPHICS	
CS 48101	GAME ENGINE CONCEPTS	
CS 48102	GAME DEVELOPMENT PRACTICUM (ELR) (WIC)	
SPAD 45022	EVENT PLANNING AND PRODUCTION	
SPAD 45034	ESPORT MANAGEMENT	
Minimum Total Credit Hours:		**20**

Graduation Requirements

Minimum Minor GPA	Minimum Overall GPA
2.000	2.000

- Minimum 6 credit hours in the minor must be upper-division coursework (30000 and 40000 level).
- Minimum 6 credit hours in the minor must be outside of the course requirements for any major or other minor the student is pursuing.
- Minimum 50 percent of the total credit hours for the minor must be taken at Kent State (in residence).

Program Learning Outcomes

Graduates of this program will be able to:

1. Understand the essential concepts, principles and theories related to computer science and game programming.
2. Understand game programming basics and data structures in C# and C++.
3. Understand game design and development using game engines.
4. Obtain industry-ready game programming skills though hands-on projects.
5. Collaborate with other team members in groups to complete game development projects.

Full Description

The Game Programming minor prepares students for a career in interactive game entertainment. Students explore a variety of game programming components, including the theoretical concepts (2D/3D graphics, game engines, artificial intelligence, physics and user interface) and practical programming skills using computer programming languages (C, C++ and C#).

The Game Programming minor features elective courses across disciplines and an interdisciplinary capstone that is a team-based game development project to procure knowledge and acquire practical skills pertaining to game development after having completed all the core courses.

Students in the Game Programming minor write and debug code to develop games. Students interested more in applying design concepts and using design tools should view the Game Design minor.