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Computer Science Program
Department of Electrical Engineering and Computer Science
South Dakota State University*



game programming emphasis

The Computer Science Program offers an emphasis in game programming.[†] This emphasis deals with a wide range of both hardware and software related topics relating to game development.

The Game Programming course will provide the students with an understanding of some of the tools used in game development such as C/C++, DirectX and OpenGL. The Artificial Intelligence course will provide a foundation that will allow students to understand how games can make effective decisions based upon the current game state. The Computer Networks course will provide a foundation that will allow students to understand how to deal with multiplayer LAN and WAN based games. The Microcontroller Systems Design course will provide a foundation that will allow students to understand how to communicate with the microcontrollers found inside of console and handheld gaming systems. The Embedded Systems Programming course will provide a foundation that will allow students to understand how to develop games for console and handheld gaming systems. Students interested in the Game Programming Emphasis are encouraged to take courses from the list of electives below.

Courses

- CSc 450 – Game Programming* (3 credits)
 - *currently taught as CS 492
 - Prerequisite: CSc 346 (Object Oriented Programming)
- CSc 447 – Artificial Intelligence (3 credits)
 - Prerequisite: CSc 250 (Computer Science II)
- CSc 474 – Computer Networks (3 credits)
 - Prerequisite: CSc 300 (Data Structures)
- EE 347/347L – Microcontroller Systems Design (3/1 credits)
 - Prerequisite: EE 245 (Digital Systems)
 - Prerequisite: CSc 250 (Computer Science II)
- SE 440 – Embedded Systems Programming (3 credits)
 - Prerequisite: EE 347 (Microcontroller Systems Design)
 - Prerequisite: SE 340 Software Test and Quality Assurance

[†] Effective Fall 2008