

Web Based 2D Game Development CERTIFICATE

Program Overview

This is a 24 credit certificate program exploring video game creation. The certificate is ideal for students who want to acquire skills needed for game design and programming. The certificate will utilize HTML5, Javascript, Tumult Hype and Phonegap to recreate classic video games for both the Desktop and mobile platforms. The capstone class will introduce students to some of the concepts of mobile app development for both the iPhone and Android platforms. This certificate may be completed apart from a degree program or may be selected as an emphasis in the Computer Programming AAS degree.

The student should have above average communications and math skills. He/she should exhibit qualities of patience, perseverance, and preciseness, and should enjoy working in a team environment and also be able to work independently. All programs emphasize training for industry certification.

Career Opportunities

Graduates find excellent opportunities as computer programmers in business, manufacturing, government and education. Jobs for computer programmers for all types of computer systems are found throughout the country with opportunities for good earning and rapid advancement.

Program Outcomes

1. Graduates will be able to design and code gaming software applications.
2. Graduates will be able to use industry standard design skills to support their applications

Program Faculty

Darren Pearson darren.pearson@saintpaul.edu

Part-Time/Full-time Options

Some day and evening class availability. Students may attend full time or part time.

Program Requirements

Check off when completed

This program is designed for individuals who have computer programming knowledge or are currently employed in the computer programming field.

Course	Cr
<input type="checkbox"/> CSCI 1450 Web Fundamentals/HTML	4
<input type="checkbox"/> CSCI 2440 Client Side Programming 1	4
<input type="checkbox"/> CSCI 2587 Web Based Game Dev. 1	4
<input type="checkbox"/> CSCI 2588 Web Based Game Dev. 2	4
<input type="checkbox"/> DGIM 2521 2D Web Animation	2
<input type="checkbox"/> DGIM 2586 Digital Sound	2
<input type="checkbox"/> DGIM Technical Elective	4

Any 4 credits of DGIM classes will be allowed, although the following classes are strongly recommended.

DGIM 1490 3D Animation Fundamentals - 4cr
 DGIM 2560 Illustrator - 4cr
 DGIM 1483 Photoshop 1 - 2cr
 DGIM 1484 Photoshop 2 - 2cr

Total Program Credits24

Program Start Dates

Fall, Spring, Summer

Course Sequence

The following sequence is recommended for a part-time student. Not all courses are offered every semester. Please contact the program advisor for course sequence.

First Semester

CSCI 1450 Web Fundamentals/HTML	4
CSCI 2440 Client Side Programming 1	4
CSCI 2587 Web Based Game Dev. 1	4
Total Semester Credits.	12

Second Semester

CSCI 2588 Web Based Game Dev. 2	4
DGIM 2521 2D Web Animation	2
DGIM 2586 Digital Sound	2
DGIM Technical Elective	4
Total Semester Credits.	12

Total Program Credits24

Continued on back

Information is subject to change.
 This Program Requirements Guide is not a contract.

Minimum Program Entry Requirements
 Students entering this program must meet the following minimum program entry requirements:

Reading: Score of 38+

Elementary Algebra: Score of 76+ or grade of "C" or better in MATH 0910

Assessment Results and Prerequisites:
 Students admitted into Saint Paul College programs may need to complete additional courses based on assessment results and course prerequisite requirements. Certain MATH, READ, and ENGL courses have additional prerequisites.

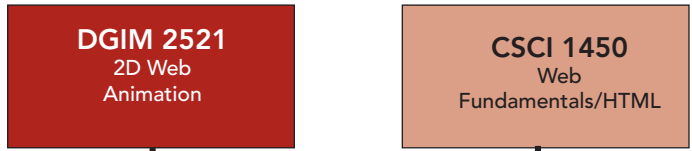
Degree option may have a greater requirement than this certificate.

299C (7177)

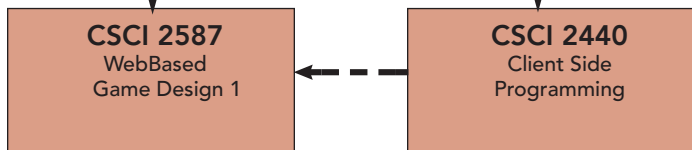
Web Based 2D Game Development CERTIFICATE *(continued)*
(24 credits)

The below chart illustrates the courses required for completion of this certificate.

Introductory



Intermediate



Advanced
 (offered once per year)

