

# Game Programming Certificate

The Game Programming Certificate provides students with an opportunity to learn how to create interactive computer games, including web-based games. The program is ideal for students who want to acquire skills needed for game design and programming.

## Game Programming Curriculum

### Curriculum

Program Courses				
Course Code	Title	Course Outlines	Goal Areas	
<a href="#">CSCI 1030</a>	Programming for Internet	<a href="#">View-CSCI 1030</a>	n/a	3
<a href="#">CSCI 1035</a>	Introduction to Computer Programming with Games	<a href="#">View-CSCI 1035</a>	n/a	4

## Program Electives

Course Code	Title	Course Outlines	Goal Areas
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### Program Electives - 4 credits

<a href="#">CSCI 1120</a>	Programming in C/C++ <b>or</b>	<a href="#">View-CSCI 1120</a>	n/a
<a href="#">CSCI 1130</a>	Introduction to Programming in Java (CS0) <b>or</b>	<a href="#">View-CSCI 1130</a>	n/a
<a href="#">CSCI 1150</a>	Programming in C# for .NET	<a href="#">View-CSCI 1150</a>	n/a

### Program Electives - 5 credits

<a href="#">CSCI 1020</a>	Beginning Web Page Programming <b>or</b>	<a href="#">View-CSCI 1020</a>	n/a
<a href="#">CSCI 1025</a>	Responsive Web Design <b>or</b>	<a href="#">View-CSCI 1025</a>	n/a
<a href="#">CSCI 1040</a>	Fundamentals of Structured Query Language (SQL) <b>or</b>	<a href="#">View-CSCI 1040</a>	n/a
<a href="#">CSCI 1990</a>	Computer Science Special Topics <b>or</b>	<a href="#">View-CSCI 1990</a>	n/a
<a href="#">CSCI 2011</a>	Programming in Python <b>or</b>	<a href="#">View-CSCI 2011</a>	n/a
<a href="#">CSCI 2060</a>	Web Programming in ASP.NET	<a href="#">View-CSCI 2060</a>	n/a

## NHCC Residency and GPA

5 Credits must be earned at NHCC

## Program Overview

2022-2023

The Game Programming Certificate provides students with an opportunity to learn how to create interactive computer games, including web-based ones. It targets students who want to acquire skills needed for game design and programming. The required Game Programming course utilizes the programming language chosen by the instructor. The Certificate offers a choice between the three most popular programming languages: Java, C++ and C#.

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## Program Outcomes

Knowledge of Human Cultures and the Physical and Natural World, including:

- Designing appealing and functional user interfaces.

Intellectual and Practical Skills, including:

- How to plan an interactive game
  - Specifics of game design for Internet delivery
  - How to design and deploy a website
  - How to program in one of the major general computer languages
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## Career Opportunities

Information on careers, including salary and employment outlook data, is available at Minnesota State and the Bureau of Labor Statistics websites:

[careerwise.minnstate.edu](http://careerwise.minnstate.edu) and [www.bls.gov](http://www.bls.gov).

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## Transfer Information

If you are planning on transferring to another institution, follow the guidelines available on our transfer resources web page to help you plan the process: [Transfer Information](#)

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## Degree Information

Certificates may be earned for successful completion of courses in a specialized program of study with a minimum grade point average of 2.00 (C). A certificate shall include 9 to 30 semester credits. At least one third of the total credits required for each certificate must be completed at North Hennepin Community College.

**Developmental Courses** Some students may need preparatory course(s) in Math and/or English. Courses numbered below 1000 will not apply toward a degree.

**Equal Opportunity Employer and Disability Access Information** North Hennepin Community College is a member of Minnesota State Colleges and Universities system and an equal opportunity employer and educator. This document is available in alternative formats to individuals with disabilities by calling 7634930555 or through the Minnesota Relay Service at 18006273529.

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## Accreditation

North Hennepin Community College is accredited by the:  
Higher Learning Commission of the North Central Association of Colleges and  
Schools

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