

## Cert: Game Programming 2021-2022

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 programming language chosen by instructor. The Certificate offers a choice between the three most popular programming languages: Java, C++ and C#.

### Program Courses

Course No.	Course Title	Credits
CSCI1030	Programming for Internet	3
CSCI1035	Introduction to Computer Programming with Games	4

### Program Electives

Course No.	Course Title	Credits
<b>Program Electives - 4 credits:</b>		
CSCI1120	Programming in C/C++ <i>or</i>	4
CSCI1130	Introduction to Programming in Java (CS0) <i>or</i>	4
CSCI1150	Programming in C# for .NET	4
<b>Program Electives - 5 credits:</b>		
CSCI1020	Beginning Web Page Programming <i>or</i>	1
CSCI1025	Responsive Web Design <i>or</i>	1
CSCI1040	Fundamentals of Structured Query Language (SQL) <i>or</i>	3
CSCI1990	Topics: <i>or</i>	1
CSCI2011	Programming in Python <i>or</i>	1
CSCI2060	Web Programming in ASP.NET	4

### NHCC Residency and GPA

Course No.	Course Title	Credits
<b>5 Credits must be earned at NHCC:</b>		
<b>2.00 overall GPA for NHCC courses</b>		

**Total Credit Required 16**

### Degree Requirements

2.00 overall GPA for NHCC courses

#### 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 themajor general computer languages

#### 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 763-493-0555 or through the Minnesota Relay Service at 1-800-627-3529.

**Career Opportunities**

Information on careers, including salary and employment outlook data, is available on the iSeek and Bureau of Labor Statistics websites: <https://careerwise.minnstate.edu/careers/> and [www.bls.gov](http://www.bls.gov).

**Accreditation**

North Hennepin Community College is accredited by the: Higher Learning Commission 30 N. LaSalle Street, Suite 2400 Chicago, IL 60602-2504 1-800-621-7440

**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](#)