

# Cert: Object-Oriented Programming

## 2014 - 2015

The Object-Oriented Programming Certificate provides students with the opportunity to learn the fundamentals and more advanced topics of object-oriented design and programming. The certificate is designed in the way allowing the students to select one or two programming languages, among the most popular ones. The major language elements are introduced in connection with the related algorithms. The students will also learn about the major abstract data types and the efficient ways to manipulate data.

### Program Courses

Course No.	Course Title	Credits	Goal Area	Comments/Substitution
CSCI2001	Structure of Computer Programming I	4		
CSCI2002	Structure of Computer Programming II	4		

### Program Electives

Course No.	Course Title	Credits	Goal Area	Comments/Substitution
<b>Program Electives - 1 course:</b>				
CSCI1130	Introduction to Programming in Java <i>or</i>	4		
CSCI1150	Programming in C# for .NET	4		

### NHCC Residency and GPA

Course No.	Course Title	Credits	Goal Area	Comments/Substitution
<b>4 Credits must be earned at NHCC:</b>				
<b>2.00 overall GPA for NHCC courses</b>				

**Total Credit Required 12**

### Degree Requirements

2.00 overall GPA for NHCC courses

#### 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.

#### Program Outcomes

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

- Designing appealing and functional user interfaces.

Intellectual and Practical Skills, including:

- Debugging and testing computer programs.
- Designing professional-grade object-oriented applications in Java.
- Programming in another major computer language (optional).
- Utilizing the standard data structures to handle and store the data associated with the applications.

#### Career Opportunities

Information on careers, including salary and employment outlook data, is available on the [iseek](http://www.iseek.org) and Bureau of Labor Statistics websites: [www.iseek.org](http://www.iseek.org) and [www.bls.gov](http://www.bls.gov).

#### Accreditation

North Hennepin Community College is an Equal Opportunity Institution.

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