

## AS: Computer Science Transfer

### Pathway

2021-2022

The Computer Science Transfer Pathway (AS) is designed for students who are interested in transferring after graduation to pursue a four-year baccalaureate degree in Computer Science or related disciplines.

This transfer pathway specifically ensures that a student who successfully completes a Computer Science Transfer Pathway (AS) can transfer the entire completed degree into a designated parallel baccalaureate degree program in Computer Science at any of the following universities:

- Metropolitan State University (Options to continue at NHCC)
- Minnesota State University Moorhead
- Bemidji State University
- Minnesota State University Mankato
- Southwest State University
- St. Cloud State University
- Winona State University

A balanced set of required and elective courses makes this degree suitable for succeeding in the software development job market. Besides providing the students with necessary knowledge and skills, it equips them with tools and routines to keep them current with the industry progress.

### Program Courses

Course No.	Course Title	Credits
CSCI1040	Fundamentals of Structured Query Language (SQL)	3
CSCI1130	Introduction to Programming in Java (CS0)	4
CSCI2001	Object Oriented Programming (CS1)	4
CSCI2002	Data Structures and Algorithms (CS2)	4
CSCI2020	Computer Architecture	4
CSCI2030	Database Modeling and Design	4

### Program Electives

Course No.	Course Title	Credits
<b>Choose 7 credits from the following courses::</b>		
CSCI1020	Beginning Web Page Programming <i>or</i>	1
CSCI1025	Responsive Web Design <i>or</i>	1
CSCI1030	Programming for Internet <i>or</i>	3
CSCI1035	Introduction to Computer Programming with Games <i>or</i>	4
CSCI1050	Computer Security Basics <i>or</i>	3
CSCI1120	Programming in C/C++ <i>or</i>	4
CSCI1150	Programming in C# for .NET <i>or</i>	4
CSCI1180	Introduction to Linux Operating System <i>or</i>	4
CSCI1990	Topics: <i>or</i>	1
CSCI2011	Programming in Python <i>or</i>	1
CSCI2050	Internship Computer Science <i>or</i>	3
CSCI2060	Web Programming in ASP.NET <i>or</i>	4
CSCI2100	Introduction to Android Application Development <i>or</i>	4
CSCI2400	Objective-C for Mobile Programming <i>or</i>	4
CSCI2500	Introduction to Mobile Programming in iOS	4

### General Education Courses

Course No.	Course Title	Credits
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<b>College Writing I - 1 course:</b>		
ENGL1200	Gateway College Writing <i>or</i>	4
ENGL1201	College Writing I	4
<b>College Writing II:</b>		
ENGL1202	College Writing II	2
<b>COMM1010 or COMM1210 - 1 Course:</b>		
COMM1010	Fundamentals of Public Speaking <i>or</i>	3
COMM1210	Small Group Communication	3
<b>BIOL1120 or GEOG1010 - 1 course:</b>		
BIOL1120	Human Biology <i>or</i>	3
GEOG1010	Physical Geography	3
<b>ECON 1060, ECON 1070, PSYC 1150 - 1 course:</b>		
ECON1060	Principles of Macroeconomics <i>or</i>	3
ECON1070	Principles of Microeconomics <i>or</i>	3
PSYC1150	General Psychology	3
<b>Goal Area 6 Humanities and Fine Arts</b>		3
MATH1221	Calculus I	5
<b>CSCI 2010 or MATH2000 - 1 course:</b>		
CSCI2010	Discrete Mathematical Structures <i>or</i>	4
MATH2000	Discrete Mathematical Structures	4
<b>3 credits from Goal Areas 1-6</b>		

### Total Credit Required 60

#### Degree Information

The Associate of Science (A.S.) degree is intended for students whose primary goal is to complete the credentials for a specific career and/or prepare for transfer to complete a bachelor's degree at a college or university with whom North Hennepin Community College has an articulation agreement. The A.S. degree provides a balance of general education courses and the required scientific, professional or technical courses in the degree program.

A student shall:

Earn a minimum of 60 semester credits as required in the program, with a grade point average of 2.00 (C) or above in courses taken at North Hennepin Community College. Specific programs may have additional requirements or a higher minimum grade point average.

Earn a minimum of 15 semester credits at North Hennepin Community College. A student must complete at least 50% of career specific courses at North Hennepin Community College.

Earn 30 credits in at least 6 Minnesota Transfer Curriculum (MnTC) goal areas. Earn 30 professional/technical credits.

Have four years to complete the graduation requirements as published in the catalog in effect at the time of their initial enrollment. Students taking more than four years to complete their graduation requirements may follow any catalog published during the four-year period preceding their graduation.

Completion of an A.S. degree fulfills the Goal Area 2 requirement of the Minnesota Transfer Curriculum (MnTC).

#### 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.

#### 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](#)

#### 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