

# Chemistry Transfer Pathway AS

The Chemistry Transfer Pathway Associate of Science degree is designed for students to work as a chemical lab assistant or who are interested in transferring after graduation to pursue a bachelor's degree in chemistry.

## Chemistry Transfer Pathway Curriculum

### Curriculum

#### Chemistry Specific Content Area

Course Code	Title	Course Outlines	Goal Areas	Credits
<a href="#">CHEM 1061</a>	Principles of Chemistry I	<a href="#">View-CHEM 1061</a>	n/a	4
<a href="#">CHEM 1062</a>	Principles of Chemistry II	<a href="#">View-CHEM 1062</a>	n/a	4
<a href="#">CHEM 2061</a>	Organic Chemistry I	<a href="#">View-CHEM 2061</a>	n/a	5
<a href="#">CHEM 2062</a>	Organic Chemistry II	<a href="#">View-CHEM 2062</a>	n/a	5

#### Science and Math Specific Content Area

Course Code	Title	Course Outlines	Goal Areas	Credits
<a href="#">MATH 1221</a>	Calculus I	<a href="#">View-MATH 1221</a>	n/a	5
<a href="#">MATH 1222</a>	Calculus II	<a href="#">View-MATH 1222</a>	n/a	5
<a href="#">PHYS 1601</a>	General Physics I	<a href="#">View-PHYS 1601</a>	n/a	5
<a href="#">PHYS 1602</a>	General Physics II	<a href="#">View-PHYS 1602</a>	n/a	5

## General Education Courses

Course Code	Title	Course Outlines	Goal Areas	Credits
College Writing I				
<a href="#">ENGL 1200</a>	Gateway College Writing <b>or</b>	<a href="#">View-ENGL 1200</a>	n/a	4
<a href="#">ENGL 1201</a>	College Writing I	<a href="#">View-ENGL 1201</a>	n/a	4
<a href="#">COMM 1010</a>	Fundamentals of Public Speaking	<a href="#">View-COMM 1010</a>	n/a	3
<a href="#">ENGL 1202</a>	College Writing II	<a href="#">View-ENGL 1202</a>	n/a	2
<a href="#">PSYC 1150</a>	General Psychology	<a href="#">View-PSYC 1150</a>	n/a	3
<a href="#">SOC 1110</a>	Introduction to Sociology	<a href="#">View-SOC 1110</a>	n/a	3

## Humanities and Fine Arts Requirement

[Goal Area 6 - Must complete 3 credit](#)

## MnTC Electives

[Must Complete 3 credits from Goals 7, 8, 9, 10](#)

1 elective credit

## NHCC Residency and GPA

15 Credits must be earned at NHCC

**Total Credits Required**

**60**

## Program Overview

### 2023-2024

The Associate in Science degree in Chemistry is designed for students to work as a chemical lab assistant or who are interested in transferring after graduation to pursue a 4-year baccalaureate in chemistry. The pathway to a baccalaureate degree was created to ensure minimum competency requirements are met at the associate degree level and that students are academically prepared to transfer into the parallel bachelor degree program as juniors in chemistry at all of the following Minnesota State Institutions:

Minnesota State Universities: Bemidji State University, Metropolitan State University, Minnesota State University Mankato, Minnesota State University Moorhead, Southwest Minnesota State University, St. Cloud State University, Winona State University.

# Program Outcomes

Knowledge of human cultures and the physical and natural world, including:

- Demonstrate basic knowledge and understanding of the fundamentals of experimental and theoretical chemistry.
- Explain and apply skills in analytical thinking and problem solving, and apply scientific methods to experimental data.

Intellectual and practical skills including:

- Demonstrate skills in laboratory operations including making accurate and precise measurements, preparing solutions, operating instrumentation, experimental design, and the interpretation and reporting of quantitative and qualitative data and results.

Personal and social responsibility and engagement, including:

- Work both independently and collaboratively in the classroom and in the laboratory.
- Apply learned concepts to everyday situations and experiences and critically evaluate contributions to science reported in the media; identify valid approaches to scientific problem solving and reporting.

Integrative and applied learning, including:

- Communicate their own data and analysis in oral and written communications that uses tables and graphs, describes detailed experimental procedures, and clearly explains conclusions, in order to create clear and compelling papers, posters, or presentations.

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## Program Maps

Program roadmaps provide students with a guide to understand the recommended course sequence to complete their degree.

- [Chemistry Transfer Pathway AS Program Roadmap Full Time](#)
- [Chemistry Transfer Pathway AS Program Roadmap Part Time](#)

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## Career Opportunities

## 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

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 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 ([hlcommission.org](http://hlcommission.org)), an institutional accreditation agency recognized by the U.S. Department of Education.

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