

CHEMISTRY (AS)

Associate of Science

Transfer Program












Interest Areas:

Science, Tech., Engr. and Math

Chemistry is a science that deals with the composition, structure, and properties of substances and their transformations. A solid math and science background is important preparation for a college chemistry program. Completion of the following courses results in an associate of science degree with an area of emphasis in Chemistry. The required coursework normally fulfills the first half of baccalaureate degree requirements in Chemistry. Course selection should be tailored to match requirements defined by intended transfer institutions.

Program Website (https://www.nic.edu/programs/viewprogram.aspx?program_id=14)

Program Requirements

Code	Title	Credits
General Education Requirements		
GEM 1	Written Communication	6
GEM 2	Oral Communication	3
GEM 3	Mathematical Ways of Knowing ¹	0
GEM 4	Scientific Ways of Knowing ¹	0
GEM 5	Humanistic and Artistic Ways of Knowing	6
GEM 6	Social and Behavioral Ways of Knowing	6
GEM 7	Institutionally Designated	4-6
Program Requirements		
CHEM-111	Principles of General College Chemistry I   	5
CHEM-112	Principles of General College Chemistry II   	5
CHEM-253	Quantitative Analysis	5
CHEM-277	Organic Chemistry I	3
CHEM-278	Organic Chemistry I Lab	1
CHEM-287	Organic Chemistry II	3
CHEM-288	Organic Chemistry II Lab	1
MATH-170	Analytic Geometry and Calculus I   	4
MATH-175	Analytic Geometry and Calculus II	4
MATH-275	Analytic Geometry and Calculus III	4
PHYS-211	Engineering Physics I  	5
PHYS-212	Engineering Physics II	5
Total Credits		70-72

¹ This General Education Requirement is met by the Program Requirements.

Course Key



GEM



WCHE



AAS
Institutionally
Designated



Gateway



Milestone

Program Outcomes

Upon completion of the program, students will be able to:

- Describe basic chemical concepts.
- Demonstrate the ability to solve qualitative and quantitative problems in chemistry.
- Apply the fundamental principles of chemistry to explain the physical and chemical properties of matter.
- Demonstrate competence in laboratory skills, including:
 - lab safety,
 - recording and evaluating data, and
 - the use of balances, glassware, and instrumentation in analyzing chemical samples
- Compose a written or oral report to communicate the results of laboratory experiments.

In addition to the program outcomes, students will meet the North Idaho College General Education (GEM) Requirements.