

Chemistry A.S. (CHMS)

The Chemistry program is intended for students who plan to transfer in the following areas of study: Biochemistry, Chemistry, Chemical Engineering, Environmental Science, Geology, Medicine, Veterinary Medicine, or related areas.

Upon successful completion of this program, graduates will be able to:

- understand concepts, laws, and principles of natural science and apply them to the solution of problems.
- demonstrate critical thinking/problem-solving abilities.
- demonstrate good experimental techniques, including making observations and measurements, constructing a hypothesis and designing an experiment to test it, and analyzing and interpreting experimental results.
- demonstrate effective communication skills, including the writing of laboratory reports based on experiments.
- demonstrate effective teamwork and work ethics through group laboratory projects.
- demonstrate the ability to apply mathematical skills to the level of at least college Algebra.
- demonstrate an ability to work with computers, including word processing and spreadsheet applications.
- demonstrate competency in use of the international system of units.
- demonstrate effective library research skills.

Students should consult the catalog of the four-year college or university to which he or she plans to transfer to ensure that degree requirements are being properly met. Transfer information for this program is on file in the Transfer and University Center. For more information, contact an academic advisor or counselor.

First Semester		Credits
CHE 111	General Chemistry I	4
ENG 105	Research and Composition	3
MAT 191	Calculus and Analytic Geometry I	4
Elective	Humanities	3
Elective	Social Science	3
		17
Second Semester		
CHE 112	General Chemistry II	4
ENG 106	Introduction to Literature	3
MAT 196	Calculus and Analytic Geometry II	4
PHY 210	General Physics I	4
		15
Third Semester		
BIO 110	General Biology I	4
CHE 205	Organic Chemistry I	4
PHY 215	General Physics II	4
MAT 201	Calculus and Analytic Geometry III	4
		16
Fourth Semester		
BIO 111	General Biology II	4
CHE 206	Organic Chemistry II	4
CIS 155	Introduction to Computer Science - Structured Programming - C++	3.5
Elective	Humanities	3
		14.5
Credit Total		62.5

Prior Learning Assessment: Previous job training, certificates and work experience that may qualify for college credit (*see academic advisor*).

Gateway Courses: Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently.

RSS 099	Basic Skills Reading	3
RSS 100	Critical Reading	3
ENG 099	Basic Skills Writing	3
ENG 100	Fundamentals of Writing	3
MAT 090	Mathematical Literacy	6
ESL 251	English for Academic Purpose	6

(Required for ESL students only.)

Please note, taking gateway courses will increase your time for completion.