

CHEMISTRY - BACHELOR OF SCIENCE

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1511G Calculus and Analytic Geometry I and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year

Semester 1		Credits
ENGL 1110G or ENGL 1110H	Composition I ¹ or Composition I Honors	4
MATH 1511G or MATH 1511H	Calculus and Analytic Geometry I ¹ or Calculus and Analytic Geometry I Honors	4
CHEM 1215G or CHEM 1216	General Chemistry I Lecture and Laboratory for STEM Majors or General Chemistry I Lecture and Laboratory for CHEM Majors	4
CHEM 2111	Explorations in Chemistry and Biochemistry	1
Area IV: Social and Behavioral Science Course ²		3
Credits		16

Semester 2

ENGL 2210G or ENGL 2210H	Professional and Technical Communication or Professional and Technical Communication	3
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II or Calculus and Analytic Geometry II Honors	4
CHEM 1225G or CHEM 1226	General Chemistry II Lecture and Laboratory for STEM Majors or General Chemistry II Lecture and Laboratory for CHEM Majors	4
Area V: Humanities Course ²		3
Elective Course		3
Credits		17

Second Year

Semester 1

CHEM 313	Organic Chemistry I	3
CHEM 371	Analytical Chemistry	4
PHYS 2110 & 2110L	Mechanics and Experimental Mechanics	4
Elective Course		3
Elective Course		3
Credits		17

Semester 2

COMM 1115G or HNRS 2175G	Introduction to Communication or Introduction to Communication Honors	3
CHEM 314 & CHEM 315	Organic Chemistry II and Organic Chemistry Laboratory ¹	5
PHYS 2140 & 2140L	Electricity and Magnetism and Electricity & Magnetism Laboratory ¹	4
Choose from one of the following:		3
MATH 2530G	Calculus III	

MATH 3160	Introduction to Ordinary Differential Equations ¹	
Credits		15

Third Year

Semester 1

CHEM 430	Physical Chemistry: Thermodynamics, Kinetics, Quantum Chemistry, and Spectroscopy	3
Area VI: Creative and Fine Arts Course ²		3
VWW: Viewing a Wider World Course ³		3
Choose one of the following:		3
PHYS 315	Modern Physics	
MATH 2415	Introduction to Linear Algebra	
Credits		12

Semester 2

CHEM 456	Inorganic Structure and Bonding	3
Upper Division Chemistry Elective Course		3
Elective Course		3
Elective Course		3
Credits		12

Fourth Year

Semester 1

CHEM 471	Advanced Integrated Inorganic and Physical Chemistry Laboratory ¹	3
VWW: Viewing a Wider World Course ³		3
Elective Course ⁴		3
Elective Course ⁴		3
Elective Course ⁴		3

Credits **15**

Semester 2

CHEM 443	Senior Seminar ¹	1
CHEM 472	Advanced Integrated Instrumental Analysis and Protein Biochemistry Laboratory	3
BCHE 395	Biochemistry I	3
Elective Course ⁴		3
Elective Course ⁴		3
Elective Course ⁴		3

Credits **16**

Total Credits **120**

¹ These courses may have prerequisites and/or co-requisites, and it is the students responsibility for checking and fulfilling all those requirements.

² See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses.

³ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog for a full list of courses.

⁴ Students who need to enroll in 15 credits a semester for Financial Aid purposes will need to enroll in additional elective credits to meet that requirement.