



ACADEMIC MAP - CHEMISTRY

2025-2026



NORTHWESTERN STATE
UNIVERSITY OF LOUISIANA

Department of Physical Science
nsula.edu/physical-science



START HERE

YEAR 1	SEMESTER 1	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
	MATH 1100 – Precalculus Mathematics			6	C	Concentration	
	BIOL 1010 – Biological Principles I			3	C	Science	
	BIOL 1011 – Biological Principles I Lab			1	C	Academic	
	CHEM 1030 – General Chemistry I			3	C		
	CHEM 1031 – General Chemistry I Lab			1	C		
	UNIV 1000 – The University Experience			1			

Semester Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
ENGL 1010 – Composition & Rhetoric I			3	C	Concentration	
MATH 2100 – Analytical Geometry and Calculus I			5	D	Science	
CHEM 1040 – General Chemistry II			3	C	Academic	
CHEM 1041 – General Chemistry II Lab			1	C		
BIOL 1020 – Biological Principles II			3	C		
BIOL 1021 – Biological Principles II Lab			1	C		

Semester Credits _____

Total Credits _____

YEAR 2	SEMESTER 1	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
	PHYS 2510 – General Analytical Physics I			3	C	Concentration	
	PHYS 2511 – General Analytical Physics I Lab			1	C	Science	
	MATH 2110 – Analytical Geometry and Calculus II			5	D	Academic	
	ENGL 1020 – Composition & Rhetoric II			3	C		
	#Chem 3010 – Organic Chemistry I			3	C		
	#Chem 3011 – Organic Chemistry I Lab			1	C		

ACS required courses

Semester Credits _____

Total Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
PHYS 2520 – General Analytical Physics II			3	C	Concentration	
PHYS 2521 – General Analytical Physics II Lab			1	C	Science	
*CHEM 3020 – Organic Chemistry II			3	C	Academic	
*Chem 3021 – Organic Chemistry II Lab			1	C		
ENGL 2110 – Introduction to Literature			3			
#CHEM 2140 – Inorganic Chemistry			3	C		

ACS required courses

* This course may be exchanged for another chemistry elective.

Semester Credits _____

Total Credits _____

YEAR 3	SEMESTER 1	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
	COMM 1010 or 2500 – Oral Communication or Interpersonal Communication			3		Concentration	
	#CHEM 2110 – Quantitative Analysis			3	C	Science	
	#CHEM 2111 – Quantitative Analysis Lab			1	C	Academic	
	FA 1040 – Exploring the Arts			3			
	#CHEM 3210 – Chemical Thermodynamics			3	C		
	Academic Elective			2			

ACS required courses

Semester Credits _____

Total Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
#CHEM 4040 – General Biochemistry I			3	C	Concentration	
*CHEM 3220 – Chemical Kinetics & Quantum Mechanics			3	C	Science	
HIST 1010 or 1020 or 2010 or 2020			3		Academic	
Academic Elective			3			
*CHEM 2120 – Introduction to Instrumental Analysis			3	C		
*CHEM 2121 – Introduction to Instrumental Analysis Lab				C		

ACS required courses

* This course may be exchanged for another chemistry elective.

- Apply to graduate school(s).

- Verify requirements for schools of your choice.

Semester Credits _____

Total Credits _____

YEAR 4	SEMESTER 1	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
	CHEM 4910 – Capstone Course for Chemistry			3	C	Concentration	
	GEOG 1010 or ANTH 1510 or ECON 2000 or PSYC 2010 or PHIL 1010			3		Science	
	Chemistry elective			2	C	Academic	
	Science Elective			7	C		

Semester Credits _____

Total Credits _____

SEMESTER 2	Milestones	Grade	Credits	Minimum Grade	Electives	Credits
CHEM 4920 – Scientific Communication			3	C	Concentration	35
PSYC 1010 or PSYC 2050 or SOC 1010 or EPSY 2020			3		Science	9
Science Elective			7	C	Academic	11

Semester Credits _____

Total Credits 120

YOU'VE FINISHED!



Milestone

Should be taken in order to stay on track for graduation and professional school readiness.



Chemistry elective



Science elective



Academic elective

This is for chemistry concentration, for other concentration or majors, consult with your advisor for any suggested changes.



GRADUATION REQUIREMENTS

Semester = 120, Science Electives = 14, Chemistry Concentration Electives = 30, Academic Electives = 11

Courses taken outside of a student's degree program are not eligible for Title IV federal financial aid (grants and loans). However, elective courses are eligible for Title IV aid if they are required and included in the student's program of study. Once a student has completed all required elective credits, any additional elective courses taken beyond the program's requirements will not be eligible for Title IV funding.



List of Science Electives	Number of credits
MATH 3130 – Analytical Geometry and Calculus III	3
CHEM 2110 – Quantitative Analysis	3
CHEM 2111 – Quantitative Analysis Laboratory	1
CHEM 2120 – Introduction to Instrumental Analysis	3
CHEM 2121 – Introduction to Instrumental Analysis Laboratory	1
CHEM 2140 – Inorganic Chemistry	3
CHEM 2141 – Inorganic Chemistry Laboratory	1
CHEM 2160 – Environmental Chemistry	3
CHEM 2200 – Practicum for Chemistry Teaching	1
CHEM 3010 – Organic Chemistry I	3
CHEM 3011 – Organic Chemistry I Lab	1
CHEM 3020 – Organic Chemistry II	3
CHEM 3021 – Organic Chemistry II Lab	1
CHEM 3100 – Medicinal Chemistry	3
CHEM 3210 – Chemical Thermodynamics	3
CHEM 3220 – Chemical Kinetics and Quantum Mechanics	3
CHEM 3221 – Physical Chemistry Laboratory	2
CHEM 3900 – Special Topics in Chemistry	1-3
CHEM 4040 – General Biochemistry I	3
CHEM 4041 – General Biochemistry I Lab	1
CHEM 4050 – General Biochemistry II	3
CHEM 4140 – Advanced Inorganic Chemistry	3
CHEM 4160 – Forensic Chemistry	3
CHEM 4161 – Forensic Chemistry Lab	2
CHEM 4950 – Research Problems in Chemistry	1-4

- **Science electives:** Students may select any course from Physics, Chemistry, Mathematics, or Biology.
- **Academic Electives:** Students are limited to a maximum of 6 hours of 1000-level courses.