

CHEMISTRY, BACHELOR OF ARTS

To obtain a B.A. with a major in Chemistry, a student must fulfill university, college, and departmental requirements.

Chemistry, Bachelor of Arts Requirements

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS - 46 Hours Required		
Minimum of "C-" required		
Fundamental Academic Skills		15
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	ENGLISH COMPOSITION II	
Writing in the Discipline Course		
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS ARGUMENTATION AND DEBATE	
MATH 1120 or MATH 1100 or MATH 1130 or MATH 1140 or MATH 1300 or STAT 1100 or STAT 1530	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING DATA LITERACY AND VISUALIZATION QUANTITATIVE LITERACY QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS COLLEGE ALGEBRA WITH SUPPORT DATA LITERACY AND VISUALIZATION ELEMENTARY STATISTICS	
Distribution Requirements		31
Natural Science - From two disciplines and at least one lab - 7 hrs		
Social Science - From two disciplines - 9 hrs		
Humanities and Fine Arts - From two disciplines - 9 hrs		
Global Diversity - 3 hrs		
US Diversity - 3 hrs		
MAJOR REQUIREMENTS		
** Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
Chemistry Major - 55 Hours Required		
Required Chemistry Coursework		23
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY (**^)	
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY (^)	
CHEM 2250	ORGANIC CHEMISTRY I (^)	
CHEM 2260 & CHEM 2274	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY (^)	
CHEM 2400 & CHEM 2404	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB (^)	
CHEM 2500	INTRODUCTION TO INORGANIC CHEMISTRY (^)	
Select two of the following:		8
CHEM 3350 & CHEM 3354	PHYSICAL CHEMISTRY I and PHYSICAL CHEMISTRY I LABORATORY (^)	

CHEM 3360 & CHEM 3364	PHYSICAL CHEMISTRY II and PHYSICAL CHEMISTRY II LABORATORY (^)	
CHEM 4650 & CHEM 4654	BIOCHEMISTRY I and BIOCHEMISTRY I LABORATORY (^)	
Additional credit hours of chemistry must come from the chemistry courses approved for the B.S. in Chemistry degree		5
Other Required Coursework*		9
MATH 1950	CALCULUS I (^)	
MATH 1960	CALCULUS II (^)	
*MATH 1970, Calculus III, is recommended but not required		
To graduate with an ACS certified degree, see your chemistry advisor for proper course selection.		
Select one of the following sequences		10
Sequence A		
PHYS 2110 & PHYS 1154	GENERAL PHYSICS I - CALCULUS LEVEL and GENERAL PHYSICS LABORATORY I (** ^)	
PHYS 2120 & PHYS 1164	GENERAL PHYSICS-CALCULUS LEVEL and GENERAL PHYSICS LABORATORY II (^)	
Sequence B		
PHYS 1110 & PHYS 1154	GENERAL PHYSICS I and GENERAL PHYSICS LABORATORY I (** ^)	
PHYS 1120 & PHYS 1164	GENERAL PHYSICS II and GENERAL PHYSICS LABORATORY II (^)	
College Breadth (choose one option)		15-30+
Option 1: Complete any UNO minor or undergraduate certificate - 15+ hours		
Option 2: Additional General Education Requirements - 19+ hours		
Additional quantitative literacy - 3 hours		
Additional Social Science Gen. Ed. from 3rd Discipline - 3 hours		
Additional Humanities Gen. Ed. from 3rd Discipline - 3 hours		
HIST 1000 and HIST 1010 - 6 hours		
Additional Nat. and Physical Science w/ Lab - 4-5 hours		
Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)		
BA Language Requirement		16
FREN, GERM, Or SPAN, 1110**, 1120, 2110, 2120		
ELECTIVES		
Elective hours as required to reach a total of 120 hours		

Chemistry, Bachelor of Arts Four-Year Plan

Freshman		Credits
Fall		
CHEM 1180 & CHEM 1184	GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY (*)	4
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
ENGL 1150	ENGLISH COMPOSITION I (**)	3
MATH 1950	CALCULUS I (**)	5

*CHEM 1180: Requires appropriate Math placement. Must take 1184 concurrently.

**ENGL 1150: Requires appropriate English Placement.

***MATH 1950: Requires appropriate Math placement. MATH 1950 is part of other required courses for the major.

	Credits	15
Spring		
CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY (*)	4
ENGL 1160	ENGLISH COMPOSITION II	3
MATH 1960	CALCULUS II (**)	4
Social Science/US Diversity		3
*CHEM 1190: See the catalog for most up-to-date prerequisites. Requires 1194 be taken concurrently.		
**MATH 1960 prereq is MATH 1950. MATH 1960 is part of the other required courses for the major.		

	Credits	14
Summer		
PHYS 2110 or PHYS 1110	GENERAL PHYSICS I - CALCULUS LEVEL (*) or GENERAL PHYSICS I	4
PHYS 1154	GENERAL PHYSICS LABORATORY I	1
		5

	Credits	5
Sophomore		
Fall		
CHEM 2250	ORGANIC CHEMISTRY I (*)	3
CHEM 2400 & CHEM 2404	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB (**)	4
Humanities and Fine Arts		3
Social Science		3

	Credits	13
Spring		
CHEM 2260 & CHEM 2274	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY (*)	5
CHEM 2500	INTRODUCTION TO INORGANIC CHEMISTRY (**)	3
CAS Requirement (HIST 1000 or Minor/2nd Major Course)***		3
Humanities and Fine Arts		3
***CAS College Requirement		

	Credits	14
Summer		
PHYS 2120 or PHYS 1120	GENERAL PHYSICS-CALCULUS LEVEL (*) or GENERAL PHYSICS II	4
PHYS 1164	GENERAL PHYSICS LABORATORY II	1

	Credits	5
Junior		
Fall		
CHEM 3350 & CHEM 3354	PHYSICAL CHEMISTRY I and PHYSICAL CHEMISTRY I LABORATORY (*)	4
OR		
CHEM 4650 & CHEM 4654	BIOCHEMISTRY I and BIOCHEMISTRY I LABORATORY (**)	
Advanced Chemistry Course*		1-3
Social Science**		3
Foreign Language 1110^		5

*Must take 5 credit hours of Advanced Chemistry courses from the approved list of courses for the BS Chemistry.

**Social Science must come from a 2nd discipline

^Level 1110 foreign language courses count as a Humanity/ Fine Arts course, Global Diversity, and toward the student's BA requirement. If student is fulfilling the BA requirement via alternative methods, then 16 additional credits including a HFA and Global Diversity will need to be factored in to this degree plan.

	Credits	13-15
Spring		
CHEM 3360 & CHEM 3364	PHYSICAL CHEMISTRY II and PHYSICAL CHEMISTRY II LABORATORY (*)	4
OR Advanced Chemistry Course**		
NSCI 3940	WRITING IN CHEMISTRY (***)	2
Foreign Language 1120		5
Minor/2nd Major or Elective Course^		3
**Must take 5 credit hours of Advanced Chemistry courses from the approved list of courses for the BS Chemistry.		
***NSCI 3940: Requires ENGL 1160, and CHEM 2400 or 2500.		
^CAS College Requirement		

	Credits	14
Senior		
Fall		
CHEM 3350 & CHEM 3354	PHYSICAL CHEMISTRY I and PHYSICAL CHEMISTRY I LABORATORY (*)	4
OR		
CHEM 4650 & CHEM 4654	BIOCHEMISTRY I and BIOCHEMISTRY I LABORATORY (**)	
OR Advanced Chemistry Course (3-4 cr)***		
Foreign Language 2110		3
Minor/2nd Major or Elective Course		3
CAS Requirement: Additional Humanities/Fine Arts course or Minor/2nd Major course^		3
***Must take 5 credit hours of Advanced Chemistry courses from the approved list of courses for the BS Chemistry.		
^CAS College Requirement: Add'l Humanities must be from 3rd discipline.		

	Credits	13
Spring		
Advanced Chemistry Course or Elective to reach 120 hours		3
Foreign Language 2120		3
CAS Requirement: Additional Social Science or Minor/2nd Major course*		3
CAS Requirement: HIST 1010 or Minor/2nd Major course**		3
*CAS College Requirement: Add'l Social Science must be from 3rd discipline.		
**Students need a minimum of 120 total credit hours. May need to select electives to reach this minimum.		

	Credits	12
Total Credits		118-120

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual

sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change. Transfer credit or placement exam scores may change suggested plan of study.

Additional Information About this Plan:

University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

Placement Exams: For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at <https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php>

GPA Requirements: 2.0