

# 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
<b>GENERAL EDUCATION REQUIREMENTS - 34 Hours Required</b>		
Minimum of "C-" required		
<b>Fundamental Skills</b>		<b>15</b>
<b>Writing – 6 hrs.</b>		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
<b>Oral Communication – 3 hrs.</b>		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
<b>Quantitative Literacy – 3 hrs.</b>		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
<b>Data Literacy – 3 hrs.</b>		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
<b>Breadth of Knowledge</b>		<b>13</b>
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
<b>Individual and Social Responsibility</b>		<b>6</b>
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
<b>MAJOR REQUIREMENTS</b>		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
<b>Chemistry Major - 55 Hours Required</b>		
<b>Required Chemistry Coursework</b>		<b>23</b>
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 (^)	
CHEM 4900	SENIOR ASSESSMENT IN CHEMISTRY	
<b>Select two of the following:</b>		<b>8</b>
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 (^)	
<b>Additional credit hours of chemistry must come from the chemistry courses approved for the B.S. in Chemistry degree</b>		<b>5</b>
<b>Other Required Coursework*</b>		<b>9</b>
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.		
<b>Select one of the following sequences</b>		<b>10</b>
Sequence A		
PHYS 2110 & PHYS 1154	GENERAL PHYSICS I - CALCULUS LEVEL and GENERAL PHYSICS LABORATORY I (** ^)	
PHYS 2120 & PHYS 1164	GENERAL PHYSICS II-CALCULUS LEVEL and GENERAL PHYSICS LABORATORY II (^)	
Sequence B		
PHYS 1110 & PHYS 1154	PHYSICS FOR LIFE SCIENCE I and GENERAL PHYSICS LABORATORY I (** ^)	
PHYS 1120 & PHYS 1164	PHYSICS FOR LIFE SCIENCE II and GENERAL PHYSICS LABORATORY II (^)	
<b>College Breadth (choose one option)</b>		<b>15-30+</b>
Option 1: Complete any UNO minor or undergraduate certificate - 15+ hours		
Option 2: Additional General Education Requirements - 18+ hours		
Additional quantitative literacy - 3 hours		
Additional Social Science Gen. Ed. from another Discipline - 3 hours		
Additional Humanities Gen. Ed. from another Discipline - 3 hours		
HIST 1000 and HIST 1010 - 6 hours		
Additional Nat. and Physical Science w/ or without Lab - 3-5 hours		
Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)		
<b>BA Language Requirement</b>		<b>16</b>
FREN, GERM, Or SPAN, 1110**, 1120, 2110, 2120		
<b>ELECTIVES</b>		
Elective hours as required to reach a total of 120 hours		

# Chemistry, Bachelor of Arts Four-Year Plan

## Freshman

Fall		Credits
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
Attend Durango Days; other campus events.		
Set up a Handshake account and take the Pathway U career assessment.		
Attend the Student Involvement & Volunteer Fair to explore student organizations.		
Make advising appointment for spring: Sept-Oct.		
Work with your advisor to develop your Pathway in Stellic.		
<b>Credits</b>		<b>15</b>

## Spring

CHEM 1190 & CHEM 1194	GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY	4
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	3
MATH 1960	CALCULUS II	4
General Education Course or Elective		3
Attend campus events such as major exploration week to get an idea of interests and career paths.		
Schedule a resume review with UNO Career Services.		
Visit faculty office hours and ask about undergraduate research opportunities.		
Make advising appointment for summer and fall: February – March.		
<b>Credits</b>		<b>14</b>

## Summer

PHYS 2110 or PHYS 1110	GENERAL PHYSICS I - CALCULUS LEVEL (*) or PHYSICS FOR LIFE SCIENCE I	4
PHYS 1154	GENERAL PHYSICS LABORATORY I	1
<b>Credits</b>		<b>5</b>

## Sophomore

Fall		Credits
CHEM 2250	ORGANIC CHEMISTRY I	3
CHEM 2400 & CHEM 2404	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB	4
General Education Course or Elective		3
General Education Course or Elective		3
Attend the Career & Internship Fair to start networking with employers.		
Look for volunteer, research, or part-time work to gain experience.		
Join a student organization or club related to your field or interests.		
Make advising appointment for spring: Sept. - Oct.		
<b>Credits</b>		<b>13</b>

## Spring

CHEM 2260 & CHEM 2274	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY	5
CHEM 2500	INTRODUCTION TO INORGANIC CHEMISTRY	3
General Education Course or Elective		3
General Education Course or Elective		3
Attend a career fair for informational and networking purposes.		
Update your resume and LinkedIn profile with new experiences.		
Investigate and apply for summer internships, research, or study abroad programs.		
Make advising appointment for summer and fall: February – March.		
<b>Credits</b>		<b>14</b>

## Summer

PHYS 2120 or PHYS 1120	GENERAL PHYSICS II-CALCULUS LEVEL (*) or PHYSICS FOR LIFE SCIENCE II	4
PHYS 1164	GENERAL PHYSICS LABORATORY II	1
<b>Credits</b>		<b>5</b>

## Junior

Fall		Credits
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
General Education Course or Elective		3
World Language 1110		5
Apply for a paid internship or research assistantship.		
Attend a mock interview workshop or use online interview tools with Career Services.		
Start researching and visiting graduate programs or professional schools.		
Visit Career Center, continue updating resume.		
Make advising appointment for spring: Sept-Oct.		
<b>Credits</b>		<b>13-15</b>

## Spring

CHEM 3360 & CHEM 3364	PHYSICAL CHEMISTRY II and PHYSICAL CHEMISTRY II LABORATORY	4
OR Advanced Chemistry Course		
World Language 1120		5
General Education Course or Elective		3
General Education Course or Elective		3
Request letters of recommendation from faculty for jobs or grad school.		
Attend the All-Majors Career Fair with a plan to network.		
Meet with your advisor or submit for a graduation check-in to review remaining degree requirements.		
Make advising appointment for summer and fall: February – March.		
<b>Credits</b>		<b>15</b>

**Senior****Fall**

CHEM 3350 & CHEM 3354	PHYSICAL CHEMISTRY I and PHYSICAL CHEMISTRY I LABORATORY	4
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OR

CHEM 4650 & CHEM 4654	BIOCHEMISTRY I and BIOCHEMISTRY I LABORATORY	
OR Advanced Chemistry Course (3-4 cr)		

World Language 2110	3
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General Education Course or Elective	3
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General Education Course or Elective	3
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Check in with Career Center for networking tips.

Finalize graduate school applications or job search strategy.

Attend a career fair and start applying for full-time jobs.

Prepare for interviews and salary negotiations with Career Services.

Make advising appointment for spring: Sept. - Oct.

**Credits 13****Spring**

CHEM 4900	SENIOR ASSESSMENT IN CHEMISTRY	0
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Advanced Chemistry Course or Elective to reach 120 hours	3
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World Language 2120	3
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General Education Course or Elective	3
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General Education Course or Elective	3
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Complete your final advising check before graduation.

Polish your resume, cover letters, and LinkedIn profile.

Stay connected by joining alumni networks and professional organizations.

Apply for graduation via MavLink.

**Credits 12****Total Credits 119-121**

**College Breadth:** Students should plan on using at least 15 hours of "Electives" to fulfill Option 1, 2, or 3, of the College of Arts and Sciences' breadth requirement.

**Upper Level Credits:** Students need 27 upper level credits throughout the degree with at least 18 upper level credits within the major. Electives may need to be selected at the 3000-4000 level to reach these minimums.

**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, World 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>  
Transfer credit or placement exam scores may change suggested plan of study.

**GPA Requirements: 2.0**

**Note:** This plan provides a general guide, but your specific courses, experiences, and career goals may differ. Work with your academic advisor to ensure you're meeting degree requirements and consult with career advisors to explore internships, research opportunities, and post-graduation

plans. Regular check-ins will help you stay on track and make the most of your time at UNO!