Program: Chemistry  
Major: Chemistry  
Degree: Bachelor of Science (B.S.)

Minimum Required Hours

University Core (Total Listed 42-44)

Specific courses within the University Core are listed on pages 95-96.

• Courses from the major may apply to the areas marked in the University Core.

Written and Oral Communication .................................................... 9

Quantitative Reasoning/Scientific Method ...................................... 10-11

• Math............................................................... 3
• Life Science ................................................. 4
• Physical Science .......................................... 3-4

Critical Inquiry and Aesthetic Analysis ............................................ 6

Aesthetic Analysis ......................................................... 3

Critical Inquiry .......................................................... 3

American Historical and Political Analysis ................................. 6

American National Government ................................................. 3

American History .......................................................... 3

Cultural and Language Analysis ............................................... 3-4

Second Language .......................................................... 4

OR

Cultural Analysis .......................................................... 3

Social and Behavioral Analysis .................................................. 3

Life Skills ........................................................................ 5

Required Health Course ....................................................... 2

Elective Life Skills ................................................................ 3

Support Courses

Support Courses..............................................................0-6

Required Courses:

*MATH 1533 Precalculus-Algebra OR
MATH 1513 College Algebra OR Placement Score AND
*MATH 1593 Plane Trigonometry OR Placement Score

*A grade of ‘C’ or better is required for either MATH 1513 or MATH 1533 and MATH 1593 to take MATH 2313.

Major Requirements

Chemistry .............................................................................68

Common Core ......................................................................47

Required courses:

CHEM 1103 General Chemistry I
CHEM 1112 General Chemistry I - Recitation/Lab
CHEM 1223 General Chemistry II
CHEM 1232 General Chemistry II - Recitation/Lab
CHEM 2104 Quantitative Analysis and Lab
CHEM 2621 Professionalism in Chemistry I
CHEM 3303 Organic Chemistry I
CHEM 3312 Organic Chemistry I Lab
CHEM 3323 Organic Chemistry II
CHEM 3332 Organic Chemistry II Lab
CHEM 3454 Fundamentals of Instrumental Analysis and Lab
CHEM 3621 Professionalism in Chemistry II
MATH 2313 Calculus I
MATH 2323 Calculus 2
MATH 2333 Calculus 3
PHY 2014 Physics for Science and Engineering I and Lab
PHY 2114 Physics for Science and Engineering II and Lab

Advanced Chemistry ............................................................ 21

Required courses:................................................................. 12

CHEM 3503 Physical Chemistry I
CHEM 3513 Physical Chemistry II
CHEM 3602 Experimental Physical Chemistry
CHEM 4502 Directed Research and Lab (taken twice)

Electives to bring total to .............................................. 124

The following are highly recommended:

CHEM 3403 Biochemistry I
CHEM 4454 Advanced Instrumental Analysis and Lab
ENG 4023 Technical Writing
MATH 2343 Calculus 4
PHY 3103 Modern Physics

Minimum Grade Requirements

1. Average in (a) all college course work, and (b) course work at UCO ........................................... 2.25

2. A minimum grade of “C” must be earned in all courses in the major to count toward meeting degree requirements.

For other regulations pertaining to graduation, see pages 66-67 of the 2019-2020 catalog.