

EAST CENTRAL UNIVERSITY
CHEMISTRY—CHEMISTRY CONCENTRATION 0100
2025-26 Catalog Year

Requirements for Bachelor's Degrees

- 30 hours at ECU
- 60 hours at senior level college
- 40 hours upper level courses
- OSRHE computer proficiency requirement

I. General Education 40 hours

A maximum of 12 hours may be counted in both the major/related work and general education.

II. Major in Chemistry 37-38 hours

A. Required in Chemistry Core 20 hours

- CHEM 1114 General Chemistry I
- CHEM 1214 General Chemistry II
- CHEM 3114 Organic Chemistry I
- CHEM 3214 Quantitative Analysis I
- CHEM 4114 Organic Chemistry II

B. Required in Chemistry Concentration 14 hours

- CHEM 3484 Instrumental Analysis
- CHEM 4213 Biochemistry
- CHEM 4413 Advanced Inorganic Chemistry
- CHEM 4514 Physical Chemistry I

C. Required Electives 3-4 hours

At least 3 hours from the following:

- CHEM 4221 Biochemistry Laboratory
- CHEM 4421 Advanced Inorganic Chemistry Laboratory
- CHEM 4614 Physical Chemistry II
- CHEM 4981-4 Seminar in Chemistry (Subject named in title listing)
- CHEM 4991-4 Individual Studies in Chemistry (Subject named in title listing)

III. Related Work 22-30 hours

- BIOL 1114 General Biology
 - MATH 1513 College Algebra †
 - MATH 1713 Trigonometry †
 - MATH 2825 Calculus and Analytical Geometry I
 - MATH 3025 Calculus and Analytical Geometry II
 - PHYS 1114 General Physics I OR PHYS 2115 Engineering Physics I
 - PHYS 1214 General Physics II OR PHYS 2225 Engineering Physics II
- Recommended Related Work
Geology, additional physics, biology (not BIOL 1114), and computer science

IV. Minor (Required) 18-33 hours

The minor with the chemistry major must be biology, environmental science, mathematics, or physics.

V. Electives 0-15 hours

VI. Total Hours Required 120 hours

VII. Special Requirements

† With department approval, students may omit MATH 1513 and/or MATH 1713 and begin with MATH 2825

Teachers or methods courses do not count in the major.