EAST CENTRAL UNIVERSITY
CHEMISTRY—BIOCHEMISTRY CONCENTRATION 0103
2026-27 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- Biochemistry Concentration 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 Biochemistry Concentration 7 hours
- CHEM 4213 Biochemistry
- CHEM 4221 Biochemistry Laboratory
- CHEM 4523 Advanced Biochemistry

C. Biochemistry Electives (Choose at least 11 hours from the following) 11 hours
- BIOL 3634 Human Physiology
- BIOL 4314 Cell and Molecular Biology
- CHEM 3484 Instrumental Analysis
- CHEM 4413 Advanced Inorganic Chemistry
- CHEM 4421 Advanced Inorganic Chemistry Laboratory
- CHEM 4514 Physical Chemistry I
- CHEM 4531 Advanced Biochemistry 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)
- PHYS 3222 Medical Physics

III. Related Work 25-33 hours
- BIOL 1114 General Biology
- BIOL 1134 General Biology II OR BIOL 2344 General Microbiology
- BIOL 2184 Human Anatomy
- MATH 1513 College Algebra †
- MATH 1713 Trigonometry †
- MATH 2825 Calculus and Analytical Geometry I
- PHYS 1114 General Physics I OR PHYS 2115 Engineering Physics I
- PHYS 1214 General Physics II OR PHYS 2225 Engineering Physics II

IV. Minor (Required)

No minor is required for the Biochemistry Concentration.

V. Electives 9-17 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.