

East Central University

CHS

2024-2025 Chemistry Biochemistry Degree Plan

FIRST YEAR

Fall Semester

MATH 1513 College Algebra
 CHEM 1114 General Chemistry I
 ENG 1113 Freshman Composition I
 General Education Exploration and Personal Enrichment
 UNIV 1001 Tiger Connect
 BIOL 1114 General Biology
17 or 18 TOTAL HOURS

Spring Semester

MATH 1713 Trigonometry
 CHEM 1214 General Chemistry II
 ENG 1213 Freshman Composition II
 PS 1113 United States Government
 BIOL 1314 General Zoology
 OR BIOL 2344 General Microbiology

17 TOTAL HOURS

SECOND YEAR

Fall Semester

CHEM 3114 Organic Chemistry I
 MATH 2825 Calculus and Analytic Geometry I
 PHYS 1114 General Physics I
 OR PHYS 2115 Engineering Physics I
 BIOL 2184 Human Anatomy

17 or 18 TOTAL HOURS

Spring Semester

CHEM 4114 Organic Chemistry II
 PHYS 1214 General Physics II
 OR PHYS 2225 Engineering Physics II
 General Education Cultural and Aesthetic Awareness
 (Intercultural Knowledge and Competence)
 HIST 24-3 United States History Survey

Computer Proficiency requirement

17 or 18 TOTAL HOURS

THIRD YEAR – JUNIOR (Beginning Fall of Even Year) OR FOURTH YEAR – SENIOR (Beginning Fall of Even Year)

Fall Semester

PHYS 4514 Physical Chemistry I[^]
 CHEM 4213 Biochemistry [offered every fall]
 CHEM 4221 Biochemistry Laboratory [offered every fall]
 BIOL 4313 Cell and Molecular Biology [offered every fall]
 General Education Elective (Global Citizenship)

14 TOTAL HOURS

Spring Semester

CHEM 4413 Advanced Inorganic Chemistry^{^^}
 BIOL 3634 Human Physiology
 General Education Cultural and Aesthetic Awareness
 (3 hours)
 General Education or Electives (4 hours)

14 TOTAL HOURS

THIRD YEAR – JUNIOR (Beginning Fall of Odd Year) OR FOURTH YEAR – SENIOR (Beginning Fall of Odd Year)

Fall Semester

CHEM 3214 Quantitative Analysis I [offered every fall]
 General Education or Electives (11 hours)

15 TOTAL HOURS

Spring Semester

CHEM 4523 Advanced Biochemistry^{^^^}
 CHEM 3484 Instrumental Analysis^{^^}
 General Education or Electives (7 hours)

14 TOTAL HOURS

[^]Offered Fall Semester Even Years ^{^^} Offered Spring Semester Even Years

^{^^^} Offered Spring Semester Odd Years ^{^^^} Offered TBA (To Be Arranged)