

**East Central University**  
**CHS**  
**2023-2024 Chemistry B.S. Degree Plan**

**FIRST YEAR**

**Fall Semester**

MATH 1513 College Algebra  
 CHEM 1114 General Chemistry I  
 ENG 1113 Freshman Composition I  
 HIST 24-3 United States History Survey  
 UNIV 1001 Tiger Connect

**14 TOTAL HOURS**

**Spring Semester**

MATH 1713 Trigonometry  
 CHEM 1214 General Chemistry II  
 ENG 1213 Freshman Composition II  
 PS 1113 United States Government  
 General Education Exploration and Personal  
 Enrichment

**16 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  
 Computer Proficiency requirement

**16 or 17 TOTAL HOURS**

**Spring Semester**

CHEM 4114 Organic Chemistry II  
 MATH 3025 Calculus and Analytic Geometry II  
 PHYS 1214 General Physics II  
 OR PHYS 2225 Engineering Physics II  
 General Education Cultural and Aesthetic Awareness  
 (Intercultural Knowledge and Competence)

**16 or 17 TOTAL HOURS**

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

**Fall Semester Even Year**

CHEM 4514 Physical Chemistry I<sup>^</sup>  
 CHEM 3214 Quantitative Analysis I  
 BIOL 1114 General Biology  
 General Education Elective (Global Citizenship)

**15 TOTAL HOURS**

**Spring Semester Odd Year**

CHEM 4413 Advanced Inorganic Chemistry<sup>^^</sup>  
 CHEM ---1 Required Chemistry Elective  
 (CHEM 4421 recommended)  
 General Education Elective or Minor (10 hours)

**14 TOTAL HOURS**

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

**Fall Semester Odd Year**

CHEM 4213 Biochemistry [offered every fall]  
 CHEM ---1 Required Chemistry Elective  
 (recommend CHEM 4421 – offered every fall)  
 ---8 Minor or Electives (8 hours)  
 --- 3 Minor or Electives (3 hours)

**15 TOTAL HOURS**

**Spring Semester Even Year**

CHEM ---1 Required Chemistry Elective  
 (CHEM 4614, 4981-4, or 4991-4)<sup>^^^</sup>  
 CHEM 3484 Instrumental Analysis<sup>^^</sup>  
 General Education Cultural and Aesthetic Awareness  
 ---7 Minor or Electives (7 hours)

**15 TOTAL HOURS**

<sup>^</sup> Offered Fall Semester of Even Years

<sup>^^</sup> Offered Spring Semester of Odd Years

<sup>^^</sup> Offered Spring Semester of Even Years

<sup>^^^</sup> Offered TBA (To Be Arranged)