

# East Central University

CHS

## 2024-2025 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 Even Years

<sup>^^^</sup> Offered Spring Semester of Odd Year    <sup>^^^^</sup> Offered TBA (To Be Arranged)