



Department of Chemistry and Forensic Science
College of Science, Technology, Engineering, and

Math (2025-26)

Suggested Curriculum Guide for BS Chemistry, Chemistry Concentration

Freshman (1st Semester) 17 hrs

GSD 101- Foundations in
Learning CHE 111- General
Chemistry I CHE 111- General
Chemistry I Lab MAT 234-
Calculus I
Gen. Ed. 1A (*ENG 101*)
Gen. Ed. 3A (*Arts*)

Sophomore (1st Semester) 16 hrs

CHE 250 (*fall only*)- Descriptive Inorganic Chemistry
CHE 250L (*fall only*)- Descriptive Inorganic Chemistry Lab
CHE 361- Organic Chemistry I
CHE 361L- Organic Chemistry I Lab
CHE 385 (*fall only*)- Chemical Literature
^g PHY 131 *or* PHY 201 (*fulfills Gen. Ed. 4*)- College Physics I *or*
University Physics I

Junior (1st Semester) 13 (14) hrs

Gen. Ed. 4 (*Natural Sciences*)
CHE 425 (*fall only*)- Instrument Analysis
CHE 425L (*fall only*)- Instrument Analysis Lab
Gen. Ed. 2 (*STA 215 recommended*)- Applied Statistics
CHE/FOR (400 level) or FMT (300 level)
Lab course (CHE 402) (*take either 402 here or 450L in future
spring*)- Polymers and Particles

Senior (1st Semester) 16 hrs

‡ CHE/FOR (400 level) or FMT (300 level)
CHE 471- Principles of Physical Chemistry I
CHE 471L- Principles of Physical Chemistry I
Lab Gen. Ed. 3B Course 1
Free Elective
Free Elective

Freshman (2nd Semester) 16 hrs

3	CHE 112- General Chemistry II	3
3	CHE 112L- General Chemistry II Lab	1
1	Gen. Ed. 1B (<i>ENG 102</i>)	3
4	Gen. Ed. 1C (<i>Oral Comm.</i>)	3
3	Gen. Ed. 5B (<i>Soc. & Behav. Sci.</i>) Course 1	3
3	Free Elective	3

Sophomore (2nd Semester) 14 hrs

3	CHE 325- Analytical Chemistry CHE	3
1	325L- Analytical Chemistry Lab CHE	2
3	362- Organic Chemistry II	3
1	CHE 362L- Organic Chemistry II Lab	1
3	PHY 132 <i>or</i> PHY 202- College Physics II <i>or</i> University Physics II	5

Junior (2nd Semester) 14 hrs

3	CHE 430- Biochemistry of Macromolecules	3
3	CHE 432- Biochemistry Lab	1
1	Gen. Ed. 5A (<i>History</i>)	3
3	Gen. Ed. 5B Course 2	3
3	Free Elective	3
(1)	CHE 485- Chemistry Seminar	1

Senior (2nd Semester) 15 (16) hrs

3	‡ CHE/FOR (400 level) or FMT (300 level)	3
3	Gen. Ed. 3B Course 2	3
1	CHE 450 (<i>spring only</i>)- Inorganic Chemistry	3
3	Lab course (CHE 450L) (<i>if CHE 402 not already taken</i>)-	(1)
3	Inorganic Chemistry Lab	
3	Free Elective	3
	Free Elective	3

^g Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

UNIVERSITY GRADUATION REQUIREMENTS

39 hours

General Education

36 hours

Foundations in Learning (GSD 101; waived for transfers with 30+ hrs)

3 hours

MAJOR REQUIREMENTS

Core Courses

41 hours

CHE 111, CHE 111L, CHE 112, CHE 112L, CHE 250, CHE 250L, CHE 325, CHE 325L, CHE 361, CHE 361L, CHE 362, CHE 362L, CHE 385, CHE 430, CHE 432, CHE 471, CHE 471L, CHE 485, MAT 234

Concentration Requirements

17 hours

CHE 425, CHE 425L, CHE 450

† PLUS ONE (1) HOUR selected from the following lab courses:
CHE 402, CHE 450L

‡ PLUS NINE (9) HOURS from 400 level CHE or FOR electives or 300-level FMT electives. (*If CHE 495 is taken, only 3 hours can be applied to the major*).

Supporting Course Requirements

7 hours

^g PHY 131 or * ^g PHY 201, PHY 132 or *PHY 202

Free Electives

16 hours

Total Curriculum Requirements

120 hours

