

ACADEMIC ROADMAP

BS Degree in Chemistry (Biochemistry Concentration)

Fall 2023

Freshman Year (30 credits)

FIRST SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing I (3)	CWP 101	Successful completion of CWP 099 or SAT score over 400 or ACT composite score of 18 (or higher)
Fund of Chem I and Lab (4)*	CHE 111 and CHE 113	CHE 110 (C or better) or MAT 114 or a higher-level math (C or better) or SAT math of 480 (or better) or ACT composite score of 18 (or higher)
Calculus I and Lab (5)*	MAT 161 and MAT 163	MAT 124 with a minimum grade of C, or, equivalent**
General Education Course (GE23) (3) (not NS or MQ)		

SECOND SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing II (3)	CWP 102	CWP 101 or its equivalent
Fund of Chem II and Lab (4)*	CHE 112 and CHE 114	CHE 111, CHE 113
Calculus II and Lab (5)	MAT 162 and MAT 164	MAT 161/163 (C or better)
GE23 Course (3)		

Notes and recommendations:

*A grade of C or better is required.

**A high school pre-calculus course is considered equivalent

Attend at least one faculty office hour; visit Academic Commons (Math & Writing Centers, tutoring); view your degree audit sheet in Degree Works

Sophomore Year (60 credits)

THIRD SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Organic Chemistry I (3)	CHE 201	CHE 112
Organic Chemistry I Lab (1)	CHE 203	CHE 112, CHE 114, and CHE 201 (or concurrent registration)
University Physics I (5)	PHY 111	MAT 161 (or concurrent registration)
Analytical Chemistry (4) ¹	CHE 301	CHE 112, CHE 114
GE23 Course (3)		

FOURTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Organic Chemistry II (3)	CHE 202	CHE 201
Organic Chemistry II Lab (1)	CHE 204	CHE 203 and CHE 202 (or concurrent registration)
University Physics II (5)	PHY 112	PHY 111 or equivalent
Calculus III and Lab (4)	MAT 263 and MAT 264	MAT 162/164 (C or better)
GE23 Course (3)		

Notes and recommendations:

¹These courses are usually offered only in the semester indicated.

Form a study group; consider enrolling in a minor or certificate program

Junior Year (90 credits)

FIFTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Physical Chemistry I (3) ¹	CHE 305	CHE 202, CHE 301, PHY 112 and MAT 263 (or concurrently) or instructor's permission
Physical Chemistry I Lab (1) ¹	CHE 307	CWP 102, CHE 204, CHE 301 and CHE 305 (or concurrent registration)
Literature of Chemistry (1) ¹	CHE 310	CHE 202 (or concurrent registration)
Intro to Inorganic Chem (3) ¹	CHE 360	CHE 202
GE23 Course (3)		
GE23 Course (3)		

SIXTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Physical Chemistry II (3) ¹	CHE 306	CHE 305 and MAT 263
Physical Chemistry II Lab (1) ¹	CHE 308	CHE 305, CHE 307, MAT 263 and CWP/ENG 102
Intro to Cell Biology (4)	BIO 211	BIO 111 or CHE 112
GE23 Course (3) ²		

Notes and recommendations:

¹These courses are usually offered only in the semester indicated.

²If choosing CHE 403/404 as one of the required major electives, take CHE 403 here and delay one of the IF's

Visit the Career Development Center; talk to your faculty advisor about graduate school and/or professional school options.

Senior Year (120 credits)

SEVENTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Biochemistry I (3) ¹	CHE 470	CHE 202; BIO 211 recommended
Biochemical Techniques (2) ¹	CHE 471	CHE 204 and CHE 301
Major Elective(s) (3-7) ³		
All College Elective ²		

EIGHTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Biochemistry II (3) ¹	CHE 472	CHE 202, CHE 470, BIO 211 or BIO 214
Major Elective(s) (2-4)		
All College Elective ²		
All College Elective ²		

Notes and recommendations:

¹These courses are usually offered only in the semester indicated.

²At least **one** of these courses must be at the 300 or 400 level to satisfy the 45 credits of upper-level courses required for graduation.

³If choosing CHE 403/404 as one of the required major electives, take CHE 404 here.

Apply for graduation; apply to graduate school, if applicable; visit the Career Development Center to have your resume reviewed