

ACADEMIC ROADMAP

BS Degree in Chemistry (Chemistry Concentration)

Fall 2022

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** |
| Intellectual Foundations (IF) Course (3) | | |

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) |
| Intellectual Foundations (IF) 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 |
| Intellectual Foundations (IF) 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) |
| Intellectual Foundations (IF) Course (3) (not NS or MQ) | | |

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 201 (or concurrent registration) |
| Intro to Inorganic Chem (3) ¹ | CHE 360 | CHE 202 |
| Intellectual Foundations (IF) Course (3) | | |
| Intellectual Foundations (IF) 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 |
| Instrumental Analysis (3) ¹ | CHE 403 | CHE 301, CHE 306 (concurrent registration recommended) |
| Intellectual Foundations (IF) Course (3) ² | | |
| Intellectual Foundations (IF) Course (3) ² | | |
| All College Elective ² | | |

Notes and recommendations:

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

²At least **two** all college electives must be upper division to satisfy college graduation requirements.

Visit the Career Development Center; talk to your faculty advisor about graduate 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, CHE 301, and CHE 470 (or concurrent registration) |
| Instrumental Analysis Lab (2) ¹ | CHE 404 | CHE 403 |
| All College Elective ² | | |
| All College Elective ² | | |

EIGHTH SEMESTER

| Course Title | Catalog Number | Prerequisite(s) |
|--|----------------|---|
| Adv Inorganic Chemistry (3) ¹ | CHE 462 | CHE 202, CHE 204, CHE 305, CHE 360 and CHE 306 (or concurrent registration) |
| All College Elective ² | | |
| All College Elective ² | | |
| All College Elective ² | | |

Notes and recommendations:

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

²At least **two** all college electives must be upper division to satisfy college graduation requirements.

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