

Bachelor of Science in Chemistry

Suggested Course Sequence

The sequence below is the recommended sequence for a chemistry major enter Fall 2015 and later.
Make changes to the sequence only in consultation with an advisor.

| | Fall | Spring |
|------------------|--|---|
| Freshman | CHEM 121 General Chem I MATH 131 Calculus I ENGLWRIT 112 College Writing BIOL 151 Intro Biol I + CHEM 196 Independent Research (optional) | CHEM 122 General Chem II MATH 132 Calculus II PHYS 151 General Physics I and Lab GEN ED Diversity (DU/DG) ++ CHEM 196 Independent Research (optional) |
| Sophomore | CHEM 265 Organic Chem I CHEM 267 Organic Chem I Lab CHEM 291A Sophomore Seminar MATH 233 Multivariate Calculus PHYS 152 General Physics II and Lab CHEM 296 Independent Research (optional) | CHEM 266 Organic Chem II CHEM 268 Organic Chem II Lab CHEM 315 Quantitative Analysis CHEM 296 Independent Research (optional) |
| Junior | CHEM 330 Writing in Chemistry CHEM 341 Inorganic Chem CHEM 475 Physical Chem I CHEM 477 Physical Chem Lab CHEM 396 Independent Research (optional) | Upper-level Courses* CHEM 342 Inorganic Chem Lab CHEM 476 Physical Chem II CHEM 396 Independent Research (optional) or CHEM 388 Independent Research ** |
| Senior | Upper-level Courses* CHEM 388 Independent Research ** or CHEM 499Y Honors Research/Thesis** & or CHEM 496 Independent Research (optional) | Upper-level Courses* CHEM 499T Honors Research/Thesis** CHEM 496 Independent Research (optional) |

| Upper-level courses | | | | | |
|--|---------------------------------------|--------------|---------------|--|--------------|
| Fall | | Group A/B | Spring | | Group A/B |
| CHEM 396/496 | Independent Research | B | CHEM 396/496 | Independent Research | B |
| CHEM 513 | Instrumental Analysis | A/B | CHEM 423 | Biochemistry for Chemists | A |
| CHEM 515 | Thry Analytical Processes | A | CHEM 585 | Advanced Physical II | A |
| CHEM 546 | Advanced Inorganic | A | CHEM 581 | Chemical Biology | A |
| CHEM 551 | Advanced Organic | A | CHEM 560 | Materials Chemistry | A |
| CHEM 552 | Organic Spectroscopy | A | CHEM 595 | Computational & Mathematical Methods in Chemistry | A |
| CHEM 584 | Advanced Physical I | A | | | |
| PHYS 531 | Electronics for Scientists I w/Lab | B | PHYS 553 | Optics with Lab | B |
| | | | PSE 501 | Intro to Polymer Science | A |
| 600 and 700 level | Chem courses also accepted | A | 600/700 level | Chem courses also accepted | A |
| BIOCHEM 423 | General Biochemistry I* | A | BIOCHEM 424 | General Biochemistry II* | A |
| If double majoring in Biochemistry and Molecular Biology | | | | | |
| | | | BIOCHEM 426 | General Biochemistry Lab* | B |

+ Required for students entering Fall 2015

++ Required for students entering Fall 2018

* Minimum of 12 credits of upper-level courses required to graduate. At least 2 credits must be taken from both groups A and B.

** CHEM 388 and 499Y/T are not intended to be a student's first lab experience.

NOTES:

To satisfy the American Chemical Society certification take CHEM 423 (or BIOCHM 423), plus two additional Group A upper level CHEM electives.

Students interested in chemical physics are encouraged to take Physics 181, 182 and 287 instead of Physics 151 and 152.