

# CHEMISTRY, BA

## ADVISING AND CAREERS

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#### ADVISING

The chemistry advisor provides advising for chemistry majors and prospective chemistry majors. Both appointments and drop-in hours are available. See Undergraduate Advising (<https://www.chem.wisc.edu/undergraduate-advising/>) on the Department of Chemistry website for more details.

The chemistry website also provides information about introductory chemistry courses (<https://chem.wisc.edu/introductory-chemistry-courses-and-placement/>) and placement for continuing and new undergraduate students (<https://chem.wisc.edu/new-undergraduate-students/>) interested in taking a chemistry course. Students with enrollment and course access questions should visit the enrollment inquiries (<https://chem.wisc.edu/enrollment-inquiries/>) page. If further assistance is needed, students may visit the Undergraduate Chemistry Office (room 1351 Chemistry) during normal business hours, email ([undergrad@chem.wisc.edu](mailto:undergrad@chem.wisc.edu)), or call 608-263-2424.

Chemistry majors interested in getting involved in research should explore the undergraduate research (<https://undergradresearch.chem.wisc.edu/>) pages on the chemistry website. Students needing additional information may contact the undergraduate research director by email ([chem\\_ugr\\_research@chem.wisc.edu](mailto:chem_ugr_research@chem.wisc.edu)).

#### COURSE SELECTION AND SEQUENCING

The Requirements (<https://guide.wisc.edu/undergraduate/letters-science/chemistry/chemistry-bs/#requirementstext>) page provides the minimum requirements necessary for completing the chemistry major. This section provides additional advisory information about course selection and sequencing.

- In addition to MATH 222 Calculus and Analytic Geometry 2, it is highly recommended that students also take MATH 234 Calculus--Functions of Several Variables and MATH 320 Linear Algebra and Differential Equations. The extra math is especially helpful to students when they take the required physical chemistry courses.
- PHYSICS 207 General Physics + PHYSICS 208 General Physics is the preferred physics sequence for most students in the chemistry major; PHYSICS 201 General Physics / PHYSICS 202 General Physics is recommended for engineering students. PHYSICS 247 A Modern Introduction to Physics + PHYSICS 248 A Modern Introduction to Physics is intended for students considering a major in Physics (<https://guide.wisc.edu/undergraduate/letters-science/physics/physics-ba/>), Astronomy-Physics (<https://guide.wisc.edu/undergraduate/letters-science/astronomy/astronomy-physics-ba/>), or a Bachelor of Science, Applied Mathematics, Engineering, and Physics (<https://guide.wisc.edu/undergraduate/letters-science/mathematics/applied-mathematics-engineering-physics-bs-amep/>).
- Students in the chemistry major are strongly encouraged to take either CHEM 329 Fundamentals of Analytical Science or CHEM 116 Chemical Principles II (as opposed to CHEM 327 Fundamentals of Analytical

Science) to satisfy their analytical chemistry requirement, because research is an integral part of these two courses. Both CHEM 329 and CHEM 116 come with honors credit, but students do not need to be part of an honors program to enroll.

- Most students take CHEM 561 Physical Chemistry I or CHEM 665 Biophysical Chemistry for Physical Chemistry Part I. Students also majoring in Chemical Engineering (<https://guide.wisc.edu/undergraduate/engineering/chemical-biological-engineering/chemical-engineering-bs/>) take CBE 310 Chemical Process Thermodynamics instead. M S & E 330 Thermodynamics of Materials is recommended only for students also majoring in Materials Science and Engineering (<https://guide.wisc.edu/undergraduate/engineering/materials-science-engineering/materials-science-engineering-bs/>).
- It is recommended that CHEM 563 Physical Chemistry Laboratory I be taken after Physical Chemistry Part I and that CHEM 564 Physical Chemistry Laboratory II be taken after CHEM 562 Physical Chemistry II. Especially strong students needing to complete physical chemistry in two semesters may take CHEM 563 concurrently with CHEM 561 Physical Chemistry I (or CHEM 665 Biophysical Chemistry) and CHEM 564 concurrently with CHEM 562.

#### CAREER SERVICES

The chemistry major prepares graduates for a wide variety of careers in the chemical and related industries (e.g., consumer and agricultural products, materials, energy, petroleum, paper, and food), as well as environmental, pharmaceutical, and other health-related sciences. Combined with a master's program in secondary education, the major qualifies the student to teach chemistry in secondary schools. The major prepares students for graduate-level work in chemistry, chemical physics, biochemistry, biophysics, materials chemistry, and other related fields. Students who excel in undergraduate chemistry coursework are able to obtain funding for graduate studies in chemistry and related sciences through teaching or research assistantships and fellowships. Some chemistry graduates go on to professional schools to study medicine, pharmacy, dentistry, veterinary medicine, business, or law.

Current career, research, and internship opportunities of specific interest to chemistry students can be found on the Career Services (<https://chem.wisc.edu/career-services/>) pages of the chemistry website.

#### SUCCESSWORKS

SuccessWorks (<https://successworks.wisc.edu/>) at the College of Letters & Science helps you turn the academic skills learned in your classes into a fulfilling life, guiding you every step of the way to securing jobs, internships, or admission to graduate school.

Through one-on-one career advising, events, and resources, you can explore career options, build valuable internship and research experience, and connect with supportive alumni and employers who open doors of opportunity.

- What you can do with your major (<https://successworks.wisc.edu/what-you-can-do-with-your-major/>) (Major Skills & Outcomes Sheets)
- Make a career advising appointment (<https://successworks.wisc.edu/make-an-appointment/>)
- Learn about internships and internship funding (<https://successworks.wisc.edu/finding-a-job-or-internship/>)

- Try “Jobs, Internships, & How to Get Them,” (<https://successworks.wisc.edu/canvas/>) an interactive guide in Canvas for enrolled UW–Madison students