Chemistry B.S.

Major
Bachelor of Science
Chemistry & Biochemistry
Swenson College of Science and Engineering

The Department of Chemistry and Biochemistry provides classroom and laboratory learning experiences with dedicated and caring instructors. Undergraduate majors are able to participate in research experiences in faculty research groups, addressing cutting edge questions in basic science as well as applied science on locally relevant topics.

Why UMD

What makes this program at UMD stand out? Why study this particular subject at UMD, rather than other schools? What kind of practical learning opportunities are available? Are students required to complete a certain number of hours in the lab? Do students participate in research?

- Active learning environment
- Access to state-of-the-art instrumentation
- Focus on undergraduate teaching and research
- ACS approved major

Acquired Skills

- Apply critical thinking and quantitative skills to solve chemistry-related problems.
- Effectively communicate (orally and in written form).
- Apply experience with lab techniques and data analysis to responsibly design, safely perform and critically analyze the results of experiments which involve: the measurement of chemical quantities; the synthesis and purification of chemical reaction products; and the simulation or modeling of chemical systems.

Career Possibilities

Graduating chemists have multiple career options in industry, government, and academia ranging from research and development, quality control and manufacturing support, environmental and health law, policy and enforcement, education, activism and management. Our graduates are employed in small to large regional and national industries encompassing drug development and manufacturing, biotechnology, environmental and medical testing, and food processing.

Scholarships

In addition to SCSE scholarships, our department has several that are focused upon upper-level chemistry majors including the UMD Peterson Memorial Scholarship, the Ballou Scholarship Honoring Dr. John C. Cothran, the Robert Bayer Memorial Scholarship, the Catherine E. Cox Scholarship for Chemistry and Biochemistry, the James H. Maguire Award, and the F.B. Moore Academic and Leadership Scholarship. Further details on application criteria can be found on the departmental website.

Student Clubs

We have 2 chemistry and biochemistry clubs. The Chemistry and Biochemistry Club serves students in the department by fostering community outreach and by helping to strengthen chemistry education among
undergraduate and local high-school students. The club also provides social activities, networking opportunities, and a platform for members to enhance their leadership and communications skills.

The Society of Chemists and Biochemists is focused on broadening scientific interests, engaging with the researchers and students behind the science and promoting personal and professional improvement. We accomplish this by fostering conversation and a sense of community among the chemists and biochemists on our campus.

In addition to these clubs, some of our chemistry majors are involved in pre-professional clubs such as the following: Pre-Dentistry Club, Pre-Medicine Club (Pre-Med Club), Pre Optometry Club, Pre-OT Club, Pre-Pharmacy Club, Pre-Physical Therapy (Pre PT), Pre-Physician Assistant Club (Pre-PA Club), Pre-Veterinary Medicine Club.

**Graduate Report**

Recent UMD Graduates Job Placement Data & Employers

Here's a sampling of positions Chemistry B.S. grads have attained six months to one year after graduation.

- Quality & Process Improvements Leader - Chemstar, Carlton, MN
- Emergency Medical Scribe - Emergency Physicians Professional Association, Robbinsdale, MN
- Laboratory Chemist 1 - Pace Analytical, Duluth, MN
- Quality Control Analyst - Upsher-Smith, Maple Grove, MN

- Graduate School, Biophysics, University of Notre Dame, South Bend, IN
- Graduate School, Chemistry, University of Minnesota Twin Cities
- Optometry School, University of Missouri-St. Louis, College of Optometry

For more data see the Chemistry B.S. Graduate Follow-Up Report.

For ideas about Chemistry B.S. and other majors visit Career & Internship Services.