The Chemistry Department trains its B.S. graduates to attain a high level of familiarity with:

- basic chemical concepts and fundamental chemical processes;
- organic synthesis and characterization;
- analytical and environmental approaches and problem solving;
- inorganic, material, and nuclear chemical concepts and applications;
- physical chemical aspects of natural systems and theoretical modeling thereof.

In the course of their studies, students will acquire:

- strong lab techniques and synthetic skills;
- familiarity with the chemical literature and relevant search techniques;
- an awareness of safety issues;
- communication skills;
- problem solving skills;
- basic research skills;
- a sense of professionalism and competence.

M.S. and Ph.D. degrees are offered in chemistry with concentrations in analytical, inorganic, organic, and physical chemistry.

Entering graduate students (master’s and doctoral candidates) are expected to demonstrate proficiency in chemistry by taking a series of four examinations in the areas of analytical (qualitative, quantitative, and instrumental), inorganic, organic (including qualitative organic analysis), and physical chemistry. These must be taken at the first offering after the student’s arrival. These examinations are offered immediately before registration week of the fall and spring semesters. Questions are at an advanced undergraduate level.

Students who score at greater than the 50th percentile (established nationally) on a qualifying examination may begin with a 500-level course in that area in their first semester and are given credit for the relevant 400-level course (CHEM 455, CHEM 466, CHEM 476, and/or CHEM 496). Students who score at less than the 50th percentile on an examination will begin course work in the respective area: analytical, CHEM 454 (the lab in this course may be bypassed by petition if the student can present evidence of adequate exposure; previous course at B level); CHEM 495; CHEM 463, CHEM 473.

All candidates for the M.S. or Ph.D. degree in chemistry are required to have teaching experience, here or elsewhere, as part of their training and will complete CHEM 506 (Introduction to Teaching and Research Skills) at their first opportunity on entering the program.

Chemistry graduate students will acquire advanced perspectives in analytical, inorganic, organic, and physical chemistry. They will gain a detailed understanding of the problems, challenges, and opportunities in their chosen subdiscipline, and an in-depth familiarity with the theoretical underpinnings and methodologies in their specific research area. Graduate students will also acquire skills in teaching, directing, and mentoring others.

Majors

- Chemistry (B.S.) (https://catalog.uidaho.edu/colleges-related-units/science/chemistry/chemistry-bs/)

Minors

- Chemistry Minor (https://catalog.uidaho.edu/colleges-related-units/science/chemistry/chemistry-minor/)

Graduate Programs

Candidates must fulfill the requirements of the College of Graduate Studies and of the Department of Chemistry. See the College of Graduate Studies (https://catalog.uidaho.edu/colleges-related-units/graduate-studies/) section for the general requirements applicable to each degree.
Department of Chemistry

- Chemistry (M.S.) (https://catalog.uidaho.edu/colleges-related-units/science/chemistry/chemistry-ms/)
- Chemistry (Ph.D.) (https://catalog.uidaho.edu/colleges-related-units/science/chemistry/chemistry-phd/)