CHEMISTRY

College of Natural Science and Mathematics
Department of Chemistry and Biochemistry
907-474-5510
http://www.uaf.edu/chem/

B.A., B.S. Degrees

Minimum Requirements for Degrees: 120 credits

Our programs prepare students for employment as research chemists in federal, state, municipal, academic or industrial laboratories, and in premedicine as laboratory technicians, industry supervisors and technical sales personnel. Our programs also provide a technical base for chemistry teachers. Graduates also find positions in the environmental sciences, oceanography and related interdisciplinary fields. Many chemistry graduates elect to pursue advanced M.S., Ph.D., pharmacology or MD degrees.

The chemistry curriculum meets the American Chemical Society standards covering the basics of general, organic, inorganic, physical and analytical chemistry, and biochemistry. Undergraduate research leading to publications is strongly encouraged, and many of the laboratory-based courses have a research component built into them. The B.S. and B.A. programs may be completed without an optional concentration, or students can opt for an additional focus in biochemistry, environmental chemistry or forensic chemistry. The B.S. programs generally prepare students for a career in chemistry or biochemistry, or for professional school. The B.S. in chemistry is an ACS-approved degree program. The environmental chemistry concentration provides courses that help students study the chemistry of the natural environment by adding geology, biology or atmospheric courses, and it prepares students for graduate studies and/or careers in the environmental industry. The biochemistry concentration provides an enhanced curriculum in biological chemistry for students seeking advanced careers in biochemistry, medicine or health sciences. The B.A. degree provides breadth in the curriculum for study of a minor subject and requires more humanities courses. The B.A. best prepares students for careers in chemistry-related fields like environmental law, forensic science, science education, anthropology, etc. Limited teaching assistantships are often available for upper-division students, which strengthen leadership and communication skills.

The bachelor’s degrees in chemistry and concentrations in biochemistry and environmental chemistry provide excellent research opportunities and background for undergraduate students through connection to corresponding graduate programs. See graduate programs in chemistry (http://catalog.uaf.edu/graduate/graduate-degree-programs/chemistry), biochemistry and molecular biology (http://catalog.uaf.edu/graduate/graduate-degree-programs/biochemistry-neuroscience), and environmental chemistry (http://catalog.uaf.edu/graduate/graduate-degree-programs/environmental-chemistry).

The Chemistry and Biochemistry Department is housed in the Reichardt Building, where laboratories are equipped with research-grade instrumentation, providing hands-on experience to students for entry into graduate school or industry. See the departmental website for more information, http://www.uaf.edu/chem/.

Degrees

- B.A., Chemistry (http://catalog.uaf.edu/bachelors/bachelors-degree-programs/chemistry/ba) — Admission to this program is currently suspended.
- B.S., Chemistry (http://catalog.uaf.edu/bachelors/bachelors-degree-programs/chemistry/bs)

Minor

- Minor, Chemistry (http://catalog.uaf.edu/bachelors/bachelors-degree-programs/chemistry/minor)
- Minor, Biochemistry (http://catalog.uaf.edu/bachelors/bachelors-degree-programs/chemistry/minor-biochemistry)