

Contact

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Admission Requirements

(In years as established by the college)

A high school diploma with the following specific courses:

- 4 English
 - 2 Algebra I & II
 - 1 Geometry
 - 1/2 Trigonometry
 - 2 Lab Science (*chemistry preferred*)
 - 2 History/Social Studies
 - 2 Foreign Language (*same language or two years of American Sign Language-ASL*)
- Academic electives (*to equal at least 17 total credits*)

To ensure current mathematical skills, students should take a mathematics course during their senior year of high school.

Major Requirements

- 41 credits Chemistry
- 6 credits Communications (*English, speech*)
- 18 credits Humanities & Social Sciences
- 25 credits Sciences & Mathematics Electives

120 Minimum total credit hours required for graduation

College of Liberal Arts & Sciences

Program Description

The Department of Chemistry offers programs in analytical, inorganic, organic, materials and surface chemistry, wood/paper and physical chemistry. Understanding and using a variety of modern instruments and computers play an integral part in these programs. The Chemistry curriculum affords an unusual opportunity for a wide choice of electives so Chemistry majors can adapt the program to individual interests and goals. Scholarships are available in the Chemistry Department for chemistry majors who plan a career in teaching chemistry. The department is large enough to provide excellent facilities and small enough for each Chemistry major to receive personal attention. The B.S. degree in Chemistry meets all the requirements for pre-medical, pre-dental, and pre-veterinary programs.

Students fulfill the capstone General Education requirements by participating in undergraduate research and writing a senior thesis. Internships are available to broaden students' experiences. Past internships have included: Environmental Intern, The CEIP Fund; Lab Assistant, State of Maine Public Health Lab; Lab Field Assistant, Acheron Engineering; PIRG Intern, Peoples Interest Research Groups; Intern, National Starch and Chemical Corporation; Intern, Argonne National Laboratory; Intern, The Jackson Laboratory.

Career Opportunities

Employment opportunities for graduates with a Chemistry degree are available at research institutions, government agencies and in private enterprise and education. A degree in Chemistry is also excellent preparation for entrance into the medical professions which provide additional opportunities for career diversification. Also, a Chemistry degree provides a technical background for professional studies in law or business.

General Education Requirements*

- ENG 101 College Composition
- 18 credits Human Values & Social Context area (*a single course may satisfy more than 1 sub-category, but a total of 18 credits must be completed*)
 - Western Cultural Tradition
 - Social Context & Institutions
 - Cultural Diversity & International Perspectives
 - Population & the Environment
 - Artistic & Creative Expression
- 2 courses Designated Writing Intensive (*1 must be within the major*)
- 2 courses Biological or Physical Sciences (*must include at least 1 laboratory course*)
- 1 course Ethics (*emphasis on discussion of ethical issues in 1 course or series of courses*)
- 6 credits Mathematics (*including statistics & some computer science, only 3 credits in computer science can count toward this requirement*)
- 1 capstone An approved experience in which the student integrates the components of his or her undergraduate training to perform at a professional level. The capstone experience is usually completed during the senior year in consultation with the student's academic advisor.

**All UMaine students must complete these general education requirements, which are counted in the total credit hours required for graduation and may be contained in the Major Requirements previously listed.*

Specialized Information

The Department of Chemistry offers a minor which is open to all undergraduate, degree-seeking University of Maine students. A minor in Chemistry is intended to broaden the academic base of students who already have a solid scientific background in areas such as biology, microbiology, biochemistry, and engineering. This curriculum exposes students to the first two years of introductory chemistry and provides additional knowledge at a more advanced level in an area of the student's choice.

Requirements for the minor include 23 credits taken from the following list: CHY 121/123, 122/124, 242, 251/252, 253/254, 431, 443, 453, 461, 462, 471, 472, 475, 483, and either (but not both) BMB 322/322L or BMB 450. A 500-level chemistry course can be used to fulfill the minor requirement by obtaining permission from the course instructor and academic advisor.

No grade below a C- will be accepted toward these requirements.

Graduate Study

Graduates of the Chemistry undergraduate program in recent years have been admitted to advanced study at MIT, Cornell, the University of Illinois, Cal Tech, the University of Texas, Florida State University, Wesleyan University, the University of California at Santa Barbara and many other fine schools.

Through the Department of Chemistry and the Graduate School, the University of Maine offers a Master of Science degree and a Doctor of Philosophy degree in Chemistry. Both are research intensive degrees and a wide variety of chemistry and related interdisciplinary science research projects are available.

Academic Programs 2008-2009

Please refer to the web site (<http://factsheets.umaine.edu/>) for the most updated version of the fact sheets.

This fact sheet is intended for informational purposes only and is subject to change.