

## **What is Chemistry?**

Chemistry considers the nature of matter, its transformations, and its interaction with energy. The discipline provides the foundation for modern biology, and serves as a cornerstone to emerging fields such as materials science and nanotechnology. Students who obtain a chemistry degree at Brooklyn College are prepared to work at the forefront of scientific and medical research, and are strong applicants to graduate and professional programs nationwide. A minor in biochemistry is available and provides strong preparation for students interested in specializing in biochemistry at the Masters or Doctoral level.

The Department of Chemistry provides three degrees: A Bachelor of Science (B.S.) degree, a Bachelor of Arts (B.A.) degree, and a Bachelor of Arts Chemistry Teacher (BAct) degree. The B.S. degree is a rigorous program designed to prepare students to work as professional chemists, either immediately after graduation or after graduate school. The program provides excellent preparation for a career in industry, government, or academia. This program is recommended to students interested in pursuing scientific research.

The B.A. degree is a less rigorous program intended for students pursuing careers in areas related to chemistry, but who do not intend to pursue advanced study. This option is recommended for students interested in the medical professions, as the more flexible course schedule makes it easier for students to schedule the additional coursework and extracurricular activities necessary for admission to professional schools. While the B.A. is a less rigorous degree than the B.S., the skills of B.A. students are in high demand and graduates find employment as chemists in many different roles.

The BAct degree is intended for students interested in teaching chemistry at the middle and high school level (grades 7-12). Its requirements are equivalent to those of the B.A. degree, with supplementary courses in education.

Chemists work in an enormous range of fields, from government laboratories testing food, air and water quality to commercial analytical and manufacturing facilities. A background in science can lead to managerial positions, particularly in industries that rely on science and technology. A bachelor's degree in science is a pre-requisite for a career in patent law, and can facilitate careers in other areas such as environmental law. The department maintains an office library of materials on careers in chemistry, and interested students should inquire at the office.

Department faculty members maintain active research programs, and students are encouraged to inquire about the possibility of mentorship in research projects. Internship opportunities in local commercial concerns are also available, and interested students should contact the departmental counselor. Students seeking honors in chemistry should consult the department.