Students in Drexel University’s Department of Chemistry explore the traditional disciplines of chemistry and the intricacies of chemistry in the natural and technological worlds. Many of our students take advantage of Drexel’s cooperative education program (co-op), gaining up to 18 months of hands-on work experience at a range of companies, including local industry leaders GlaxoSmithKline, Crayola and Johnson & Johnson — prior to graduation. Through hands-on research beginning as early as freshman year, Drexel chemistry majors gain the skills and experience needed to excel as leaders in research, teaching and innovation. Our graduates have been recognized for their contributions to academic, industrial and governmental research organizations around the world.
**UNDERGRADUATE STUDIES**

Chemistry majors at Drexel use state-of-the-art instrumentation to explore atomic- and molecular-scale structure, macroscopic properties and reactivity. Students develop close mentorships with their professors; conduct advanced research in areas including analytical, inorganic, organic, physical, computational and polymer chemistry; and learn to become resourceful chemists, adept at computations and well versed in the language of the field.

The first two years of the program are taught by chemistry faculty (not graduate students) in classes that consist exclusively of chemistry majors, allowing for small class sizes and close peer interaction. Students develop the technical skills, ethical practices, professional behavior, and critical and analytical thinking to empower them for lifelong achievement and leadership positions in energy, health and the environment.

**Bachelor of Science in Chemistry**

The Bachelor of Science in Chemistry provides a complete introduction to the many subfields of chemistry, complemented by significant hands-on laboratory and research experience and culminating in a yearlong research project with a faculty member. The degree is certified by the American Chemical Society, assuring potential employers that students are properly trained and prepared for careers in a range of industries including pharmaceutical, biotech, environmental, manufacturing and other allied fields. The BS degree is also well suited for students wishing to pursue graduate degrees in chemistry or related disciplines. Students who have an interest in biology can choose the Biochemistry concentration within the BS degree.

**Bachelor of Arts in Chemistry**

The Bachelor of Arts in Chemistry is designed for students who want a foundational education in chemistry and the flexibility to select courses in other fields of science. The BA degree is less demanding mathematically than the BS degree, and is well suited for those interested in professional schools (e.g., medical, dental) and other chemistry-related fields, such as biotechnology and forensic chemistry. Students interested in medical school will have enough free electives to pursue coursework required for medical school and the MCAT. While research is not a requirement for this degree, there are many opportunities to conduct research in the department.

**DREXEL CO-OP**

Through Drexel’s cooperative education program, students embark on up to three, six-month periods of employment, exploring their career options, strengthening their résumés and building a professional network in the process. The high concentration of pharmaceutical and chemical firms in the Philadelphia area provides a wide range of co-op and professional opportunities, in addition to co-ops across the country and abroad. Past chemistry co-ops have included positions at GlaxoSmithKline, Johnson & Johnson, NASA, Merck, Ethicon and Arkema.

**RESEARCH OPPORTUNITIES**

Faculty in the department work side-by-side with students, providing a level of mentorship not found at many other research universities. Beginning as early as freshman year, students gain critical laboratory experience using Drexel’s state-of-the-art instrumentation and technology. Senior Bachelor of Science (and some Bachelor of Arts) students complete a yearlong research project under the supervision of a faculty adviser. Areas for more intense study within the major include atmospheric, biological, environmental, mechanistic, theoretical and synthetic chemistry. The wide diversity of research conducted by Drexel faculty affords numerous choices for advanced practical study to help define students’ specific interests and career direction. These research experiences often result in co-authorship of one or more scholarly papers, and provide a distinct advantage upon graduation.

**CAREERS**

The technical and creative-thinking skills acquired in Drexel’s Chemistry program prepare students for careers in a wide range of specialties. Our graduates often work in development, testing or manufacturing within the chemical and pharmaceutical industries. Others have gone on to graduate school to prepare for chemical research positions or for faculty positions in academia. Students who opt for the BA degree typically enroll in professional schools to prepare for careers in medicine, dentistry or law.