Chemistry

Chemistry is the study of the composition, properties, and transformations of matter at an atomic and molecular level. Chemistry has been called the central science, as it connects the more basic disciplines of biology, mathematics, and physics with more applied areas of science. A fundamental understanding of chemistry enables the development of viable and thoughtful solutions to critical global issues, ranging from climate change to public health.

Following a year of general chemistry with lab, students take a combination of lecture and laboratory courses in the subdisciplines of organic, inorganic, and physical chemistry, in addition to more advanced elective courses.

Visit our website:

Programs

- BA and BS in Chemistry
- Engineering Chemistry BS (ECM)- jointly sponsored by the College of Arts and Sciences and the College of Engineering and Applied Sciences
- Accelerated 5-year BS/MS program in Chemistry
- American Chemical Society Certification
- Minor in Chemistry

Choose one of five area options:

- Chemical Science
- Biological Chemistry
- Chemical Physics
- Environmental Chemistry
- Marine and Atmospheric Chemistry

Stony Brook University
College *of* Arts and Sciences

Salowa Siddique '24
BS Chemistry

"The promise of chemistry in drug discovery and development has always captivated me, which is why I decided to major in it. It greatly inspires me to think that I might be able to help develop medicines and therapies that could save lives for a variety of ailments."

Learn how scientific information is accumulated and how ideas are developed!

Career Pathways

- Education at all levels
- Medicine
- Healthcare
- Manufacturing
- Microelectronics
- Petrochemicals
- Sustainable energy (e.g., battery, fuel cell, and water purification) applications
- Government lab work and research
- Analytical testing and diagnostics
- Chemical industry
- Pharmaceutical and drug research and development

Research Opportunities

Many chemistry majors get involved in interesting and innovative research in faculty laboratories. Benefits of research include:

- experience that may be useful to you in future study or your career
- formation of professional relationships with your supervisor/mentor that can serve as the basis for a letter of recommendation
- receipt of course credit that can be applied to your degree, and you may even be paid for your work
- your participation may turn out to be the most important aspect of your college experience!

The Department is involved in many collaborative research projects with scientists at other area institutions including:

- Brookhaven National Lab
- Cold Spring Harbor Laboratory
- Rockefeller University
- Sloan-Kettering Cancer Center