

# CHEMISTRY, B.S. (SCIENCE)

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**Begin Campus:** Any Penn State Campus

**End Campus:** University Park

## Program Description

This major provides a strong foundation in the theory and practice of chemistry. Mathematics and physics are emphasized, since these subjects are essential to the understanding of chemistry. Courses in English and electives ensure study in non-technical subjects which broaden the student's general education and enables students to relate the major to other fields of knowledge.

## What is Chemistry?

Chemistry is the study of matter and its transformations. Chemists seek a molecular-level understanding of the ways in which atoms combine to form molecules and bulk materials, how molecular structure and interactions lead to macroscopic material properties, and how chemical transformations can be used to create useful materials and store energy. Research in chemistry intersects a variety of other fields including biology, physics, environmental science, geology, material science, medicine, and more. Faculty in the Department of Chemistry at Penn State are engaged in cutting-edge projects aimed at probing outstanding questions in biology, creating new materials for medicine or energy storage, using computational methods model and simulate a variety of processes, and more.

MORE INFORMATION ABOUT FACULTY RESEARCH PROJECTS (<https://science.psu.edu/chem/research/>)

## You Might Like This Program If...

- You are curious about why the materials you encounter in daily life have certain properties and interact in myriad ways.
- You want to use advanced instrumentation to measure the composition, behaviors, and properties of molecules, atoms, and materials.
- You want to help create new and better chemicals for personal care, medicine, construction, agriculture, or energy storage.
- You plan to pursue a career in chemistry research, education or outreach, or attend professional school in areas including medicine and dentistry.