

Chemistry

at Coastal Carolina University

What does a chemistry major study?

Chemistry is the science of all matter and its changes and is, therefore, intimately linked to all the natural and applied sciences. The curriculum of the Bachelor of Science degree in Chemistry will involve the study of numerous fields of chemistry including analytical, biological, inorganic, organic, and physical chemistry.

Why study chemistry at Coastal Carolina University?

- A chemistry degree will prepare you for a wide variety of post-graduate (M.S. or Ph.D.) opportunities such as graduate programs in chemistry and biochemistry; pharmacy, medical, or dental school; and various teaching degrees.
- Students with a bachelor's degree in chemistry find work opportunities in the chemical, biochemical, environmental, medical, and pharmaceutical industries as well as forensic and government laboratories.
- State-of-the-art instrumentation includes High Field Fourier Transform Nuclear Magnetic Resonance (FT-NMR), FTIR, Raman, and Ultraviolet/Visible (UV/VIS) Spectrophotometers; a Gas Chromatograph with Flame Ionization Detection (GC/FID); a High Performance Liquid Chromatograph (HPLC); and a Computer-Interfaced Electroanalytical System.
- Since laboratory research is an integral part of the University's program, students work closely with faculty to carry out individually-tailored research projects. Some areas in which students may conduct research are atmospheric chemistry, chemical education, forensic chemistry, fuel-cell chemistry, peptide engineering, porphyrin chemistry, and structural biochemistry.
- Students have the opportunity to work in the chemistry department as laboratory and teaching assistants, which will hone their scientific skill and proficiency.

What are some career options for chemistry majors?

Chemists are involved in all of the following areas/industries:

- Basic research
- Environmental work
- Food science
- Clinical medicine
- Quality control in all types of manufacturing
- Research in developing new and better technologies
- Industrial analysis of foods, pharmaceuticals, and materials
- Sales and marketing of chemicals, pharmaceuticals, and instrumentation
- Technical writing for newspapers, magazines, textbooks, and electronic media
- Teaching at all levels
- Patent law
- Instrument development
- Forensics

What kind of courses do chemistry majors take?

CHEM 111	General Chemistry
CHEM 321	Analytical Chemistry
CHEM 331	General Organic Chemistry
CHEM 351	Biochemistry
CHEM 411	Inorganic Chemistry
CHEM 441	Physical Chemistry
CHEM 422	Instrumental Analysis

Whom can I contact for more information?

- Louis Keiner, Ph.D., chair of the department, 843-349-2226 or lkeiner@coastal.edu
- Mary Sue Keasler, administrative assistant, 843-349-2379 or mkeasler@coastal.edu
- You can also obtain more information at www.coastal.edu/science

**Coastal
Carolina
University**

P.O. Box 261954
Conway, S.C.
29528-6054

1-800-277-7000
www.coastal.edu