

# CHEMISTRY

COLLEGE OF ARTS + SCIENCES



## COURSES

Our program structure includes thorough course work in chemistry with supporting classes in mathematics, physics, and biology so you're prepared for anything. Here's a sample of what you can expect to learn and do:

### General Chemistry Lecture + Lab

This course covers the fundamental principles of general chemistry, including the development of modern atomic theory and its role in chemical bonding, structure and reactivity, an introduction to thermodynamics and kinetics, and development of equilibria concepts.

### Organic Chemistry Lecture + Lab

Students build a strong foundation in organic chemistry and combine knowledge with practical skills by synthesizing, purifying, and identifying organic compounds. Techniques include: acid/base extraction, recrystallization, distillation, organic reactions, IR spectroscopy, refractive index, melting point and NMR.

### Physical Chemistry II Lecture

This is an advanced course in physical chemistry treating elementary quantum theory and spectroscopy with an introduction to statistical thermodynamics.

### Instrumental Analysis

This lecture/lab applies advanced principles of electrochemical, spectrochemical, and chromatographic analysis through work on instrumentation, sample preparation, data analysis, and recent developments in analytical techniques

**THE WORLD IS FULL OF QUESTIONS.** We turn to scientists for answers to many of them. Is this water safe to drink? Will these two things explode if I mix them together? Whether you want to be a toxicologist testing the safety of our water and soil, a materials scientist designing the next solar cell, or a forensic chemist analyzing crime scene evidence, we need people like you—people with answers. Chemists work to remediate air pollution or create novel antibiotics. They study gold nanoparticles, crystal engineering, and organic superconductors. Our chemistry degree will prepare you to make a career out of solving problems and answering tough questions that have a real impact on our lives and environment.

### Possible Careers:

- Chemical engineer
- Forensic scientist
- Toxicologist
- Environmental chemist

**ATTENDING LOYOLA** means being in the heart of New Orleans. Our campus is located in the city's historic Uptown neighborhood, just a short drive from the Central Business District, the city's hub of innovation and strategic thinking. You'll learn to hone your talents in the city named #1 new brainpower city in America and the #5 city in the U.S. for women in tech.