

Career Guide:

CHEMISTRY

A career in chemistry can be challenging, rewarding and fun. Plus, it opens doors to a wide range of careers at academic institutions, government agencies and health-related fields.

INDUSTRY GROWTH IS HIGHEST IN:

BIOTECHNOLOGY RESEARCH

Related to the human genome and tied to the development of pharmaceuticals

ENVIRONMENTAL RESEARCH

Helps companies comply with federal regulations and clean up waste sites

DRUG MANUFACTURING

Creates new medications and protocols for treating disease



3%

JOB GROWTH
THROUGH 2024

2016 MEDIAN SALARIES

- | | |
|------------------------|----------|
| • Chemists | \$73,740 |
| • Materials Scientists | \$99,430 |
| • Physical Scientists | \$77,799 |

POTENTIAL CAREERS

- Analytical chemist
- Clinical technician
- Pharmacologist
- Associate chemist
- Food scientist
- Quality control technician
- Chemical engineer
- Laboratory technician
- Research chemist
- Chemist
- Pharmaceutical researcher

JOB TASKS AND DUTIES

- Plan and carry out complex research projects.
- Test and analyze the physical properties of materials.
- Prepare solutions, compounds and reagents used in laboratory procedures.
- Analyze substances to determine their composition.
- Conduct tests on materials to ensure that safety and quality standards are met.
- Write technical reports.
- Present research findings.

CHEMISTS ARE:

- Adaptive and innovative
- Good at math and science
- Organized and detail-oriented
- Creative and curious
- Collaborative, team players
- Persistent
- Problem-solvers
- Good time managers
- Critical thinkers



WHAT TO EXPECT IN A CHEMISTRY PROGRAM

A degree in chemistry prepares you for the study of literally everything around you. That's because as a chemist, you'll learn about matter—which makes up everything—and how it behaves. You will analyze the molecular makeup of matter and study how substances react to one another in order to develop products for a variety of industries. While many chemistry majors go on to do some form of postgraduate study or pursue a healthcare degree, there are many jobs available for those with a bachelor's degree.

CHEMISTRY MAY BE A GOOD FIT IF YOU...

- Enjoy spending time in the lab identifying compounds and creating chemical reactions.
- Are interested in pursuing an advanced degree.
- Have an open mind for new advancements and ideas.
- Enjoy experimentation and the scientific process.
- Have strong mathematical and collaborative skills.

CLASSES MAY INCLUDE:

- Analytical, organic, inorganic and physical chemistry
- Mathematics
- Biological sciences
- Physics
- Computer sciences
- Communications
- Statistics

LOOK FOR A PROGRAM THAT OFFERS:

- Up-to-date chemistry labs with state-of-the-art equipment.
- Opportunities for internships and research to gain experience outside the classroom and make connections in the field.

Before you declare your major in chemistry:

- Take classes in chemistry, biology, physics, computers and math to make sure you enjoy them.
- Sign up for a chemistry club or the National Chemistry Olympiad to gain experience in chemistry outside your classes.
- Gain practical experience working in a lab.
- Form connections within the chemistry community to find out what chemists do.

"To a synthetic chemist, the complex molecules of nature are as beautiful as any of her other creations. The perception of that beauty depends on the understanding of chemical structures and their transformations, and, as with a treasured work of art, deepens as the subject is studied..."

—Elias James Corey



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To learn about the Chemistry program at the University of Northern Colorado, visit us at [UNCO.EDU/NHS/CHEMISTRY-BIOCHEMISTRY](https://unco.edu/nhs/chemistry-biochemistry)