

Chemistry

Curriculum

The undergraduate curriculum includes work in four major chemistry sub-disciplines: analytical, inorganic, organic and physical. Students can earn an ACS-certification or a departmental B.S. degree in Chemistry. We maintain an excellent faculty-to-student ratio which means personalized attention in the advanced courses, access to state of the art instrumentation and the ability to perform cutting edge undergraduate research.

Chemistry majors develop the following skills:

- Knowledge of chemical properties
- Materials and product testing to determine potential concerns, reactions and interventions
- Ability to make critical observations of environmental and chemical interactions
- Awareness and sensitivity to the health and safety of products, materials and environment
- The ability to plan, conduct, document, explain and present scientific research
- Knowledge of laboratory techniques for studying chemical processes and reactions
- Understanding of reactions and interactions of chemicals and chemical products
- The ability to locate and explain potential hazards
- Anticipate potential negative consequences of chemical and environmental incidents and plan for, minimize, and manage the impact of these incidents
- Use analytical thinking to learn to analyze and interpret research findings and other data related to your experiments and lab work

Job and Internship Websites

- American Chemical Society
<http://www.acs.org/content/acs/en/education/students/college/experienceopp.html>
- Association of Science - Technology Center
<http://astc.org/profdev/jobs/jobs.htm>
- Biospace
<http://www.biospace.com/jobs/homepage/>
- Center for Sustainable Materials Chemistry
<http://sustainablematerialschemistry.org/innovation/internships#.UqY-3eKB0S4>
- Chemical and Engineering News
<http://chemistryjobs.acs.org/jobs>
- Chemistry Jobs
<http://www.chemistryjobs.com/jobseeker/search/results/>
- Crime Scene Investigator Network
<http://www.crime-scene-investigator.net/employment.html>
- FBI Jobs
<http://www.fbijobs.gov/college/>
- Environmental Jobs
<http://www.environmentaljobs.com/>
- Jobs in Healthcare, Pharma and Science
<http://medzilla.com/>
- National Science Foundation
<http://www.nsf.gov/careers/openings/>
- National Institute of Health
<http://www.jobs.nih.gov/vacancies/student/>
- New Scientist Jobs
<http://jobs.newscientist.com/jobs/chemistry/>
- USA Jobs
<https://www.usajobs.gov/StudentsAndGrads>
- U.S. Dept. of Energy: Office of Science
<http://science.energy.gov/>

Get Involved

The American Chemical Society – Student Affiliate

A complete list of student clubs and organizations can be found online at:
<https://campuslink.okstate.edu>

College of Arts & Sciences Career Services

213 Life Science East
Tel: 405 744 5658

For appointments and resources:
<http://cascareers.okstate.edu>

Chemistry Career Paths...

Chemistry is the science of matter. Anything that can be touched, tasted, smelled, seen or felt is made of chemicals. Chemists transform the everyday materials into new things that serve new purposes. A bachelor's degree will qualify you for a laboratory job, which would allow you to run instrumentation and synthesize chemicals. A bachelor's degree in chemistry or education (with heavy course load of chemistry) is necessary to teach at the K-12 level. In the United States you generally need at least 18 graduate credit hours to teach at the college level (preferably a Ph.D.). A master's degree in chemistry, chemical engineering, or other field will qualify you for numerous other careers and jobs. A terminal degree, such as a Ph.D. or M.D., leaves the field wide open. Most scientists who design and supervise their own research programs have terminal degrees.

Job Titles

Crime Lab Analyst	Forensic Chemist
Medical Technologist	Oceanographer
Quality Control Manager	Technical Writer
Specification Writer	Anesthesiologist
Pharmaceutical Researcher	Hydrogeologist
Water Purification Chemist	Radiologist
Water/waste Plant Manager	Optometrist
Cooperative Extension Agent	Biochemist
Environmental Health Specialist	Chemist
Agricultural Scientist	Physician
Industrial Hygienist	Scientist
Library Science Information	Pharmacist
Science Lab Technician	Soil Toxicologist
Ceramic Engineer	Consultant
Veterinarian	Science Writer
Perfume Chemist	Pharmacologist
Chemical Analyst	Metallurgist
Medical Technician	Soil Scientist
Chemical Operator	Researcher
Atmospheric Chemist	Inventor
Government Advisor	Biotechnician
Pollution Control Officer	Agronomist
Scientific Translator	Assayer
Chemical Hazards Manager	
Materials Scientist	
Scientific Computer Programmer	
Water Scientist	
Food and Drug Inspector	
Teacher/Professor	
Occupational Safety Specialist	
Food Scientist	

Career Options:

Agrochemistry	Geochemistry
Analytical Chemistry	Government Policy
Astrochemistry	Inorganic Chemistry
Atmospheric Chemistry	Materials Science
Biochemistry	Medicine
Biotechnology	Metallurgy
Catalysis	Military Systems
Chemical Engineering	Oceanography
Chemical Information Specialist	Organic Chemistry
Chemical Sales	Patent Law
Chemical Technology	Pharmaceuticals
Colloid Science	Physical Chemistry
Consulting	Polymer Plastics
Consumer Products	R&D Management
Environmental Chemistry	Software Design
Environmental Law	Space Exploration
Ethnobotany	Surface Chemistry
Food Chemistry	Hazardous Waste
Forensic Science	Management

Types of Employers

Types of Employers:

- Agricultural Service Firms
- Department of Energy
- Biotechnical Firms
- Chemical Manufacturers
- Colleges and Universities
- Paper Industry
- Environmental Consulting Firms
- Plastics Industry
- Food Manufacturing Companies
- Textile Industry
- Petroleum and Natural Gas Industry
- Manufacturing
- Hospitals/Health Care
- Insurance Companies
- Laboratories /Research Institutes
- Public Health Service
- Pharmaceutical Firms
- Government Agencies
- Paint, Plastic or Coating Companies
- OSHA
- Agricultural Experiment Stations
- EPA
- Department of Agriculture
- Centers for Disease Control
- Food and Drug Administration
- Department of Defense
- Bulk Commodity Chemical Companies
- Personal, household or baby care product companies
- National Oceanic and Atmospheric Administration
- National Institute of Environmental Health Science
- Department of Health and Human Services
- Forensic Laboratories/ Police Departments