

The field of chemistry features many sectors and pathways.

A bachelor's degree in chemistry is sufficient for entry-level positions such as lab coordinator, research assistant, product testing or analysis, and technical sales or service representative. Maintain a high grade point average and secure strong recommendations for graduate school admission, as a master's degree is sufficient for most applied research positions, industrial work, and some community college teaching. A Ph.D. degree is required for university teaching and advanced positions in management and research and development. Postdoctoral experience may be required for research positions in industry, universities, and government.

Develop strong computer, mathematics and science skills/knowledge and consider electives in computer science, engineering, business, public speaking and, writing. Seek coursework and opportunities to enhance laboratory skills as well as obtain part-time, volunteer, co-op, internship and/or research opportunities with professors to gain relevant experience. Develop contacts at government laboratories, research organizations, or in industry, and schedule informational interviews to learn about the profession and specific career paths.

- Product Development Research
- Process Development Management

AREAS OF OPPORTUNITY

- Analysis Testing
- Biotechnology
- Consulting
- Quality Assurance/ **Quality Control**
- Education

- Environmental Analyses
- Forensics
- Environmental Testing
- Regulation
- Healthcare
- Pharmaceuticals
- Local, State, and Federal Government Private Industry Companies Environmental Testing Firms **Regulatory Agencies** Qualitative Analysis Firms Quantitative Analysis Firms Instrumentation Design Companies Healthcare Agencies Pharmaceutical Companies Testing Firms Information Technology Companies **Consumer Products Companies**

COMMON **EMPLOYERS**



Metallurgy Companies **Ceramics Manufacturers** Plastics/Polymer Companies Farming and Food Production



PROFESSIONAL ORGANIZATIONS



- AAFS American Academy of Forensic Sciences
- **ACS American Chemical Society**
- AIChE American Institute of Chemical Engineers
- AMBMB American Society for Biochemistry & Molecular Biology
- ASM American Society for Materials International
- BIO Biotechnology Industry Organization
- CLA Crop Life America
- NASW National Association of Science Writers
- POLYED: National Information Center for Polymer Education
- STC Society for Technical Communication



STRATEGIES ON ENTERING THE FIELD

- Develop strong verbal, written, teamwork and problem-solving skills.
- Choose courses with laboratory components to build experimental and instrumentation skills.
- Gain experience in area of interest through internships, research with professors and/or complete a senior research project.
- Maintain awareness of current environmental issues including policy, conservation, and industry trends.
- Seek extensive laboratory and research experience along with courses in quantitative, qualitative, and instrumental analyses.
- Pursue advanced instrumentation and computer skills along with knowledge of statistics.
- Develop excellent communication skills for work with other disciplines including materials scientists, physicists, and engineers.
- Seek experimental design and analytical research chemistry experience.