CHEMISTRY

What can I do with this degree?

AREAS	EMPLOYERS	STRATEGIES
ANALYTICAL Research Development Analysis and Testing Consulting Environmental Forensics	Federal, state, and local government Federal agencies including National Aeronautics and Space Administration Manufacturing firms including textile, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drug, and chemical industries Industrial production and inspection agencies Research laboratories and organizations Environmental protection organizations Colleges and universities	Familiarize yourself with federal, state, and local government job application processes. Gain experience in a laboratory setting. Develop proficiency with high-tech scientific equipment. Take electives in your area of interest.
BIOCHEMICAL Research Development Analysis and Testing Consulting Quality Control Medical Environmental Industrial Health & Safety Hospital Administration	Research laboratories and organizations Pharmaceutical and medical research firms Biotechnology firms Plant and animal breeders and growers Food processors Industrial production and inspection agencies Environmental protection organizations Federal, state and local government, such as the Centers for Disease Control Colleges and universities	Take additional courses in biology, biochemistry, molecular biology, genetics, cytology, and physiology. Develop excellent laboratory and computer skills. Get involved with undergraduate research with professors. Join related professional organizations. Complete a related internship with an organization in the area of your interest.
ORGANIC Research Development Analysis and Testing Quality Control Consulting	Industries related to petroleum, coal, wood products, plastics, textiles, and food Manufacturing firms developing new synthetic materials and new production processes Research organizations Federal and state government Colleges and universities	Gain additional laboratory and research experience through internships and summer jobs. Get involved with undergraduate research with professors.

AREAS	EMPLOYERS	STRATEGIES
GEOCHEMISTRY Environmental Remediation Research & Development Analysis & Testing	Research laboratories and organizations Industries involved in mining, electronics, and synthetic materials Federal and state government Colleges and universities	Take geology & environmental science electives.
INORGANIC Research Analysis and Testing Quality Control Consulting	Environmental organizations Water processing plants Natural resources organizations	Choose appropriate coursework to specialize in an area. Develop additional laboratory skills and experience.
POLYMER CHEMISTRY Analysis & Testing Research & Development	Industries involving textiles and plastics	Gain research experience through internships, part-time employment, and summer jobs.
PHYSICAL Research Development Analysis and Testing Quality Control Consulting	Research laboratories and organizations Industries involving electrical, nuclear, gas, heat, or light energy Federal government Colleges and universities	Take related courses in social sciences and economics. Develop strong mathematical background.
EDUCATION Teaching Research Administration	Private and public secondary schools Colleges and universities	Obtain certification/licensing for teaching in public schools. Acquire a master's degree for community college teaching and a Ph.D. for colleges and universities. Take courses in public speaking.
BUSINESS Technical Sales/Marketing Pharmaceutical Sales Management Consulting Industrial Quality Control Research & Development	Manufacturing firms Drug stores Medical/Pharmaceutical supply companies Industries including textiles, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drugs, and chemicals. Agricultural product companies Environmental management organizations Waste management firms	Obtain a minor in business. Develop strong verbal and written communication, interpersonal, and organizational skills. Hold leadership positions in campus organizations. Join related student organizations, e.g., American Marketing Association, Financial Management Association, Public Relations Student Society of America, etc.

AREAS	EMPLOYERS	STRATEGIES
TECHNICAL WRITING Writing Editing	Research product development departments and organizations Publishing firms including books, scientific and research journals, technical press, large newspapers, and wire services Internet sites	Take advanced technical writing courses. Develop word processing and desktop publishing skills.
LAW Patent Law Legislation and Lobbying	Manufacturing firms Research and development firms Law firms Private practice Environmental agencies	Obtain law degree to become an attorney.
INFORMATION SPECIALISTS/TECHNICAL LIBRARIES	Special libraries Research organizations Colleges and universities Large manufacturing firms, especially chemicals and pharmaceuticals	Obtain master's degree in library and information science. Develop computer retrieval skills. Join Special Libraries Association, Chemistry Division.

GENERAL INFORMATION

- Undergraduate degree sufficient for entry-level positions such as lab coordinator, research assistant, product testing or analysis, technical sales, or service representative.
- Maintain high grade point average and secure strong recommendations for graduate school.
- Master's degree sufficient for most applied research positions, industrial work, and some community college teaching.
- Find research opportunities with professors and other experts in the field to gain experience.
- Ph.D. degree required for university teaching and advanced positions in management and research and development. Postdoctoral experience is preferred for research positions in industry, universities, and government.
- Advanced degrees help speed career advancement.
- Develop strong computer, mathematics, and science skills/knowledge.
- Obtain part-time, volunteer, co-op, internship, or summer experience.
- Obtain practical experience using various laboratory equipment and high-tech scientific equipment and data.
- Complete an undergraduate research project.
- Consider electives in computer science, engineering, business, public speaking, and writing.
- Join related student professional organizations.

Prepared by the Career Planning staff of Career Services at The University of Tennessee, Knoxville. (1995, Revised 2000, 2005)