What can I do with this degree?

Chemistry is the science of matter. Chemists study the composition, properties and transformation of substances and various elementary forms of matter. The curriculum at Texas State prepares the students to work in research, production, quality control, technical services, and/or sales. According to the Department of Chemistry, “graduates have an excellent record of job placement in such diverse areas as the petrochemical industry, computer chip manufacturing, aerospace companies, pharmaceutical companies, the food industry, or as teachers in secondary schools. Many also seek advanced degrees or pursue careers in medicine, dentistry, or pharmacy.”

Chemistry Skills
Leadership skills
Managing time, energy and resources effectively
Ability to work independently and as a team
Organizing, analyzing and conceptualizing

Communication/Writing skills
Writing factual material clearly and concisely
Comprehending scientific material

Analytical/Research/Problem Solving
Ability to conduct and clearly explain scientific research
Managing data and instruments
Understanding and using organizing principles
Making critical observations and appropriate decisions

Artistic/Creative skills
Designing experiments, charts, graphs
Developing theories and testing hypothesis

Good vision and manual dexterity
Maintaining precision and accuracy
Technological, Science and Math skills

Possible Work Settings
Aerospace firms
Agricultural chemical/product companies
Airlines
Analysis and testing
Atomic energy firms
Beverage manufacturers
Biotechnology firms
Ceramics manufacturers
Chemical equipment manufacturers
Chemical industries/manufacturers | Packing Industry
Construction companies | Paint manufacturers
Consulting organizations | Petroleum and Coal Firms
Cosmetics industry | Petroleum refineries
Drug industry | Pharmaceutical manufacturers
Electronic companies | Photographic products
Environmental engineering companies | Plastics manufacturers
Food manufacturers and processors | Public health service
Forestry centers | Pulp and paper manufacturers
Fuel dealerships | Research Laboratories
Glass & Textiles industry | Rubber processing firms
Hazardous waste removal companies | Scientific journals
Hospitals | Soap and detergents manufacturers
Machinery industry | Specialty chemical companies
Medical laboratories/services | Textile manufacturers
Metallurgical companies | Tobacco companies
Mineral Products Companies | Utility companies
Mining Companies | Veterinary hospitals
Oil and gas companies | Waste treatment facilities

AREAS OF SPECIALIZATION

General Chemistry | Physical Chemistry
Analytical Chemistry | Geochemistry
Organic Chemistry | Polymer Chemistry
Inorganic Chemistry | Chemical Engineering
Biochemistry | Forensic Chemistry

CAREER PATHS
(Some of the occupations outlined in this brochure may require additional education or training)

...in Education

Sample Job Titles
Adjunct faculty | Instructor | Teacher
Assistant faculty | Lecturer | Lab Assistant/Manager
Associate faculty | Professor |

Possible Work Settings
Colleges | Universities | High Schools
Professional Organizations
American Association for the Advancement of Science, http://www.aaas.org/
American Association of University Professors, http://www.aaup.org/aaup
National Education Association, http://www.aaup.org/aaup

...in Science Management and Support (Business)

Areas of Interest
Acquisitions and mergers
Commercial development
Consulting
Investment and financial analysis
Licensing (Patent Examiner)
Product Tester
Quality Control Manager
New ventures
Research Analysis
Product management
Purchasing/Marketing
Sales (Pharmaceutical)
Patent Agents

Professional Organizations

...in Research

Sample Job Titles
Analytical chemist
Application chemist
Assayer
Assistant chief chemist
Chemical laboratory
Technician
Chief
Director
Cell Research Chemist
Clinical chemist
Colorist
Organic Chemist
Inorganic Chemist
Food chemist
Lab technician
Laboratory Tester
Pharmaceutical
Environmental Chemist
Proteins Chemist
Yeast culture developer
Geneticist
Soil scientist
Quality Analyst

Professional Organizations
American Association for Clinical Chemistry, www.aacc.org
American Chemical Society, http://portal.acs.org/portal/acs/corg/content
American Institute of Chemical Engineers, http://www.aiche.org/
American Petroleum Institute, http://www.api.org/
Areas of Interest
Forensic toxicologists
Medical and clinical toxicologists
Veterinary toxicologists
Environmental toxicologists

Professional Organizations
Chemical Industry Institute of Toxicology, http://www.thehamner.org/

Sample Job Titles
Researcher
Lab technician

Possible Work Settings
Nuclear regulatory commission
National aeronautics and space administration
National institutes of health
Center for Disease Control and Prevention
Food and Drug Administration
Chemical Industries
State environmental management agencies

Sample Job Titles
Biomedical specialist
Compliance officer
Environmental engineer
Plant engineer

Sample Job Titles
Process design engineer
Project engineer
Quality control engineer
Technical services engineer

What can I do with this degree?
**Professional Organizations**
American Chemical Society, http://portal.acs.org/portal/acs/corg/content
American Institute of Chemical Engineers, http://www.aiche.org
American Petroleum Institute, http://www.api.org/
Society of Plastics Engineers, http://www.4spe.org/

...in Preparation for Other Careers

**Sample of Careers**
<table>
<thead>
<tr>
<th>Medicine</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>Forensics</td>
</tr>
</tbody>
</table>

**RESOURCES**

**Texas State University-Student Organizations**
Biochemistry Society
Chemistry Club

**Professional Organizations**
American Society for Biochemistry and Molecular Biology, http://www.asbmb.org/
American Institute of Biological Sciences, http://www.aibs.org/core/index.html
Royal Society of Chemistry, http://www.rsc.org/
Chemical Heritage Foundation, http://www.chemheritage.org/

**Job Search**
Science Jobs, www.sciencejobs.com/search.action;jsessionid=CLEFGPLFHCPJ
ChemistryJobs.com, www.chemistryjobs.com
Chemistry.org Jobs, www.chemistry.org/
Science Careers, http://sciencecareers.sciencemag.org/

Additional Resources
Occupational Outlook Handbook
Chemical Week, http://www.chemweek.com/home/
Oklahoma State University, http://ascareers.okstate.edu/pdf/Chemistry.pdf
University of Tennessee, Knoxville,
http://career.utk.edu/students/majors/pdf/chemistry.pdf

Career Library Resources
Great Jobs for Chemistry Majors by Mark Rowh, 2006 & 1999
Career Opportunities in Science by Susan Echaore-McDavid, 2003
Careers in Science by Thomas Easton, 2004

Information for this handout compiled from:
Texas State University Career Services, Career Center at Augusta State University, Career Services at University of Wisconsin-Eau Claire, The Career Center at University of North Carolina Wilmington, Trent Career Center at Trent University, Career Center at Portland State Career Center