



What can I do with a major in **CHEMISTRY** from Valparaiso University?

Description of major:

Studies the fundamental nature of matter and the changes in energy and properties accompanying compositional changes in matter. The programs of the Department provide balance between theoretical and practical aspects of chemistry. Students may choose to pursue the Biochemistry Concentration.

Relevant skills for a CHEMISTRY major:

- ◆ Make critical and accurate observations
- ◆ Collect & organize data
- ◆ Systematize/organize/classify
- ◆ Correctly maintain a laboratory notebook
- ◆ Operate specific scientific instruments
- ◆ Have manual dexterity
- ◆ Analyze & interpret numerical data
- ◆ Use a spread sheet
- ◆ Communicate with others in writing & verbally
- ◆ Conduct effective, thorough literature searches using information retrieval systems
- ◆ Solve problems at various levels of complexity
- ◆ Troubleshoot
- ◆ Perceive cause & effect relationships
- ◆ Plan pertinent experiments
- ◆ Conduct & clearly explain scientific research
- ◆ and others!

Sample work activities for Graduates in CHEMISTRY (some may require an advanced degree)

- Agricultural Scientist
- Analytic chemist
- Assayer
- Biochemist
- Brewer Lab Assistant
- Chemical Engineer
- Chemical Oceanographer
- Chemistry Technologist
- College Professor
- Cytotechnologist
- Dentist
- Environmental Health Specialist
- Enzyme Production Chemist
- Food Scientist
- Forensic Chemist
- Genetic Counselor
- High School Teacher
- Hospital Administrator
- Insurance Fraud Investigator
- Lab Coordinator
- Materials scientist
- Medical doctor
- Medicinal Chemist
- Occupational Safety Specialist
- Patent Attorney
- Perfumer
- Petroleum chemist
- Pharmaceutical Sales Representative
- Pharmacist
- Physician
- Polymer Chemist
- Product Development Chemist
- Product Testing Analyst
- Production Superintendent
- Quality Control Supervisor
- Risk Manager
- Synthetic Chemist
- Technical Salesman
- Technical Writer
- Tissue Technologist
- Toxicologist
- Veterinarian
- Wastewater Treatment Chemist
- Yeast Culture Developer
- and others!

Potential hiring institutions for CHEMISTRY majors:

- ◆ Analytical laboratories
- ◆ Chemical companies
- ◆ Drug stores
- ◆ Environmental organizations & labs
- ◆ Government laboratories (NASA, Argonne National Labs, state crime labs, etc)
- ◆ Industries related to petroleum, coal, wood products, plastics, textiles, and food
- ◆ Industries related to mining, electronics, and synthetic materials
- ◆ Industries involving electrical, nuclear, gas, heat, or light energy
- ◆ Museums
- ◆ Pharmaceutical companies
- ◆ Publishers
- ◆ Research & Medical Labs
- ◆ Schools
- ◆ Universities
- ◆ and others!

Area of further education for CHEMISTRY majors:

- Analytical Chemistry
- Biochemistry
- Biophysics
- Cell Biology
- Chemical Engineering
- Chemistry
- Chiropractic Medicine
- Dentistry
- Ecology
- Education
- Food Sciences & Technology
- Forensics
- Genetics
- Geochemistry
- Inorganic Chemistry
- Law
- Medicine
- Molecular Biology
- Nutrition
- Organic Chemistry
- Optometry
- Pharmacy
- Physical Chemistry
- Physical Therapy
- Podiatry
- Theoretical Chemistry
- Veterinary Medicine
- and others!

Sources of additional information for CHEMISTRY majors:

- ◆ VU Department of Chemistry: <http://www.valpo.edu/chemistry/>
- ◆ Occupational Outlook Handbook: the US Bureau of Labor Statistics compiles information about various occupations, including the nature of the work, the job outlook, the earnings, and other relevant information. <http://www.bls.gov/oco/oco1002.htm>
- ◆ American Association for the Advancement of Science: the world's largest general science organization and publisher of the peer-reviewed journal Science. Serves as an authoritative source for information on the latest developments in science and bridges gaps among scientists, policy-makers and the public to advance science and science education. Site includes a Careers page that includes information on fellowships, internships, career fairs, and job listings. <http://www.aaas.org/>
- ◆ American Chemical Council: represents the leading companies engaged in the business of chemistry. Includes job opportunities. <http://www.americanchemistry.com/>
- ◆ BioExchange: Job board for biotechnology & pharmaceutical industries, hundreds of jobs, entry-level to executive. <http://career.bioexchange.com>
- ◆ Chemistry Jobs.com: Lists chemistry jobs, chemical engineering jobs & other chemistry-related positions. Also includes internships. <http://www.chemistryjobs.com>
- ◆ Chemistry.org: Sponsored by the American Chemical Society, provides resources for chemists in industry and education as well as students and individuals that want reliable, accurate information about the chemistry-related sciences and the American Chemical Society. Site includes a "Build Your Career" section that includes jobs and salaries. <http://www.chemcenter.org/portal/chemistry>
- ◆ Hirehealth.com: A national database of jobs in the pharmaceutical, biotechnology, life science, clinical research, medical & health industries. <http://www.hirehealth.com>
- ◆ Journal of Chemical Education: a publication of the Division of Chemical Education, Inc. of the American Chemical Society. Available for a fee. <http://jchemed.chem.wisc.edu/index.html>
- ◆ National Science Foundation: an independent U.S. government agency responsible for promoting science and engineering through programs that invest over \$3.3 billion per year in almost 20,000 research and education projects in science and engineering. Site includes a listing of scholarships and fellowships as well as a page for Students under their "Special Programs" and Vacancy announcements under their "Online Documents". <http://www.nsf.gov/>
- ◆ Science Magazine's Next Wave: the career development resource for scientists. <http://nextwave.sciencemag.org/>
- ◆ Sciencejobs.com - Jobs available in bioscience and chemistry. <http://www.sciencejobs.com/>

VU Career Center Resource Library Materials:

- *Book Of U.S. Government Jobs : Where They Are, What's Available, And How To Get One*
- *Career Opportunities In Health Care*
- *Career Opportunities In Law And The Legal Industry*
- *Careers For Introverts & Other Solitary Types*
- *Directory Of Consultants*
- *Essays That Worked For Law Schools : 35 Essays From Successful Applications To The Nation's Top Law Schools*
- *Federal Personnel Guide 2003*
- *Graduate Programs In Physical Sciences*
- *GRE Exam 2005*
- *Great Jobs For Chemistry Majors*
- *Guide To America's Federal Jobs : A Complete Directory Of Federal Career Opportunities*
- *Healthcare Careers : Chicago, Your Kind Of Town*

- *Hospital Blue Book*
- *Job Surfing : The Sciences--Research And Medicine : Using The Internet To Find A Job And Get Hired*
- *LSAT 2005*
- *MCAT Workbook*
- *Opportunities In Biological Science Careers*
- *Opportunities In Chemistry Careers*
- *Opportunities In Chiropractic Health Care Careers*
- *Opportunities In Clinical Laboratory Science Careers*
- *Opportunities In Environmental Careers*
- *Opportunities In Forensic Science Careers*
- *Opportunities In Government Careers*
- *Opportunities In Health And Medical Careers*
- *Opportunities In Law Careers*
- *Opportunities In Medical Technology Careers*
- *Opportunities In Occupational Therapy Careers*
- *Opportunities In Osteopathic Medicine Careers*
- *Opportunities In Physical Therapy Careers*
- *Opportunities In Physician Careers*
- *Opportunities In Technical Sales Careers*
- *Opportunities In Veterinary Medicine Careers*
- *Optometry, A Career With Vision*
- *Peterson's Game Plan For Getting Into Law School*
- *Peterson's Graduate Programs In Business, Education, Health, Information Studies, Law & Social Work*
- *Peterson's Graduate Programs In Engineering & Applied Sciences*
- *Peterson's Graduate Programs In The Biological Sciences*
- *Peterson's Graduate Programs In The Physical Sciences, Mathematics, Agricultural Sciences, The Environment & Natural Resources*
- *Resumes For Health And Medical Careers*
- *Resumes For Scientific And Technical Careers*
- *And others!*

For more information about majoring in CHEMISTRY, contact:

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For more questions about your career decisions, please make an appointment with a VU Career Counselor by calling 464-5005, stopping by the Career Center in Alumni Hall or e-mailing us at Career.Center@valpo.edu
