WHAT CAN I DO WITH A MAJOR IN … CHEMISTRY

OCCUPATIONAL OVERVIEW:
The Department of Chemistry and Chemical Biology at the University of New Mexico has both undergraduate and graduate degree programs. An undergraduate B.A. or B.S. degree in chemistry provides a range of career choices from medicine to quantum theory. Undergraduate research opportunities exist in all fields and the Department encourages chemistry majors to pursue independent research with a faculty mentor. The graduate program offers the M.S. and Ph.D. degrees in analytical, biological, biophysical, inorganic, organic, theoretical and physical chemistry. (UNM Department of Chemistry and Chemical Biology website)

EMPLOYMENT REQUIREMENTS:
A bachelor's degree is the minimum formal education required. However, many employers also require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree). Consult O*Net for more information on the specific KSAs (Knowledge, Skill, Ability) that are required for this career.

THE UNIVERSITY OF NEW MEXICO:
The Chemistry and Chemical Biology department offers a Bachelor of Arts (B.A.) and a Bachelor of Science (B.S.) as well as M.S. and Ph.D. degrees. “The curriculum in chemistry exposes the student to the principal areas of modern chemistry, including organic, inorganic, biochemistry, and physical chemistry. The curriculum is designed to meet the needs of students who plan to end their formal education with a bachelor of arts or bachelor of science degree as well as those who wish to go on for an advanced degree.” http://chemistry.unm.edu/undergradAbout.html

INDUSTRIES & TARGET EMPLOYERS:
Please ask your Career Advisor (CDF) for identifying employers or additional resources for your occupation of choice.

Analytical:
Colleges and universities - Environmental protection organizations - Federal agencies including National Aeronautics and Space Administration - Federal, state, and local government - Industrial production and inspection agencies - Manufacturing firms including textile, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drug, and chemical industries - Research laboratories and organizations

Organic:
Colleges and universities - Federal/state government - Industries related to petroleum, wood products, plastics, textiles, and food - Manufacturing firms developing new synthetic materials and new production processes - Research organizations

Biochemical:
Biotechnology firms - Colleges and universities - Environmental protection organizations - Federal, state and local government, such as the Centers for Disease Control - Food processors - Industrial production and inspection agencies - Pharmaceutical and medical research firms - Plant and animal breeders and growers - Research laboratories and organizations

Other Areas:
Agricultural product companies - Drug stores - Environmental management organizations - Industries including textiles, petroleum, food, electronics, glass, paper, packaging, machinery, cosmetics, paint, drugs, and chemicals - Manufacturing firms - Medical/Pharmaceutical supply companies - Waste management firms

SUGGESTED STRATEGIES
• Gain related professional experience through involvement in internships, student employment, Co-ops, and/or volunteer opportunities.
• View the research and teaching opportunities available within the department
• Shadow professionals in the field to gain a better understanding of the occupation and to build relationships with professional mentors.
• Conduct undergraduate research with professors. Join related professional organizations.
• Try to get into a lab as a work-study person or a volunteer or as a research assistant.
• Build your network and get involved on campus through student organizations and campus events. Find organizations and events at the Student Activities Center website.
• Attend career related campus events such as career fairs, company information sessions, and or career workshops.
• Students who are interested in graduate school should maintain a high undergraduate GPA and develop relationships with faculty and community leaders. Opportunities for scholarships arise during the year—remember, someone has to know who you are and that you’re interested so we can connect you with these opportunities.
• Speak with mentors and chemistry faculty members about career opportunities. A list of the chemistry faculty and their research interests can be found on the chemistry web site
• Choose courses with laboratory work to gather experience.
• All students should check the announcements for summer research, internship and education programs which are posted on bulletin boards in the Biology, Chemistry and Biochemistry departments and on their website.

STATE & NATIONAL WAGES:
Adapted from CareerOneStop (2013)

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<th>Location</th>
<th>2012 10%</th>
<th>2012 25%</th>
<th>Median</th>
<th>2012 75%</th>
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<td>United States</td>
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INFORMATIONAL WEBSITES:

UNM Department of Chemistry and Chemical Biology
American Chemical Society
American Academy of Forensic Sciences
Science Careers
Sloan Career Cornerstone Center
Professional Science Masters
National Science Foundation
National Institutes of Health
U.S. Department of Energy
PhD’s.org
Science Jobs
Biospace.com

http://chemistry.unm.edu
http://www.acs.org
http://www.aafs.org/
http://recruit.sciencemag.org/
http://www.careercornerstone.org/
http://www.scientemasters.com/
http://www.nsf.gov/
http://www.nih.gov/
http://www.energy.gov/
http://www.phds.org/
http://www.scijobs.org/
http://online.onetcenter.org
http://www.bls.gov/oco/

REFERENCES

University of New Mexico, Department of Chemistry & Chemical Biology (2013). Degrees. Retrieved from http://chemistry.unm.edu/index.html