WHAT CAN I DO WITH A MAJOR IN …Earth and Planetary Sciences

OCCUPATIONAL OVERVIEW:
According to the UNM Earth and Planetary website (2013), “Many of the grand challenges for present and future generations’ concern issues deeply imbedded within the Earth Sciences. The human capacity for environmental stewardship, and societal needs for understanding the availability and development of key resources require an understanding of the depth of geologic time and the Earth processes that affect rock, air, and water. Education and the scientific investigation of the Earth, the atmosphere, the hydrosphere, other planetary bodies, and the solar system are central to the activities within the Department of Earth and Planetary Sciences at the University of New Mexico.”

EMPLOYMENT REQUIREMENTS:
Extensive job preparation is needed. A bachelor’s degree is the minimum formal education required and is excellent preparation for entering graduate school or variety of diverse occupations that require excellent writing skills and competency in research. However, depending upon the student’s career interests, some occupations may require a graduate degree (Master’s, Ph.D., J.D.). 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 UNM Earth and Planetary Sciences Department offers many degree options. According to the UNM Earth and Planetary website (2013), “The Department offers a large and expanding variety of introductory and intermediate courses for undergraduate students who are interested in learning about how our fascinating planet works (including an option for a Minor in Earth Sciences). Undergraduate programs emphasize a solid foundation in a broad range of Earth and Planetary Science disciplines, with research opportunities for advanced undergraduates in particular fields. Graduate students may pursue studies emphasizing climatology and paleoclimatology; crystallography and materials science; environmental geology; geochemistry; geomorphology; geophysics; geodynamics; geospatial analysis; hydrology; igneous, metamorphic, and sedimentary petrology; invertebrate and vertebrate paleontology; mineralogy; paleomagnetism; planetary sciences, sedimentology; soils; stratigraphy; structural geology; tectonics; and volcanology.”

INDUSTRIES & TARGET EMPLOYERS:
A variety of employers specifically recruit UNM students and alumni. Consult UNM’s Lobo Career Connection for a complete list of employers and current job postings. Speak with a Career Development Facilitator at the UNM Office of Career Services for help with identifying employers or additional resources for your occupation of choice.

Education
Teaching, Research, Administration, Two and four year colleges and universities, University research institutes or laboratories, Campus museums

Resources
Consulting firms, Equipment suppliers, Federal government agencies (Department of Energy, Bureau of Land Management), Independent drilling companies, Petroleum industry (oil and gas exploration, production, storage, and waste disposal facilities), Private companies, State government

Minerals
Coal companies, Construction firms, Consulting Firms, Federal government agencies (Bureau of Mines, Office of Surface Mining, BLM), Mining Companies, Quarries, Railroad companies, Well services and drilling companies

Landscape

Astrogeology and Space Sciences
Federal government agencies such as the National Aeronautics and Space Association (NASA) and the US Geological Survey

Physical
Student Affairs:
Administration, Greek affairs, advising, multicultural affairs, residence life, student activities

Suggested Strategies
• Gain professional experience in your area of interest through involvement in internships, student employment, Co-ops, and/or volunteer opportunities.
• Consider working in multiple departments throughout campus to gain experience in areas you are interested in through work study or student employment.
• Make strong connections throughout campus organizations by networking and attending campus events and activities.
• Consider earning a second degree, minor, or pursuing additional coursework in a complementary field of study (e.g., business).
• Focus on developing “transferable skills” such as computer competency, written/verbal communication, and project management.
• Seek leadership opportunities on campus. Some positions may require an advanced degree.
• Students who are interested in graduate school should maintain a high undergraduate GPA and develop relationships with faculty and community leaders.
• Speak with mentors and faculty about career opportunities.
• Research government internship program and think about interning with a government agency to get a foot in the door, as well as building your resume.
• Make sure to research organizations’ values, so they are congruent with yours. Knowledge about organizations is critical, because it shows to employers that you’ve done your research and committed to work for them.

WHERE SHOULD I BEGIN?
USA Jobs (official job site of the federal government) www.usajobs.gov
Idealist.org (comprehensive site of international nonprofit opportunities) http://www.idealista.org/

STATE AND NATIONAL WAGES
Adapted from CareerOneStop (2013):

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INFORMATIONAL/ORGANIZATIONAL WEBSITES
UNM Department of Earth & Planetary Sciences http://epswww.unm.edu/
UNM Institute of Meteoritics http://epswww.unm.edu/iom/home.html
NASA Astromaterials Curation http://www-curator.jsc.nasa.gov/
NASA Astrobiology Institute http://astrobiology.nasa.gov/nai/

OTHER INFORMATIONAL WEBSITES

REFERENCES