WHAT CAN I DO WITH A MAJOR IN … ASTROPHYSICS

OCCUPATIONAL OVERVIEW:
The Bureau of Labor Statistics (BLS) (2012) explains that Physicists and Astronomers research the nature of the universe. They measure, observe, interpret, and develop theories to explain celestial and physical phenomena using mathematics. In this occupation, researchers will study the fundamental properties of the natural world and apply the knowledge gained to design new technologies.

EMPLOYMENT REQUIREMENTS:
BLS notes Physicists and Astronomers require a Ph.D. for most research jobs. Many physics and astronomy Ph.D. holders initiate their careers in a temporary postdoctoral research position which typically last 2 to 3 years.

THE UNIVERSITY OF NEW MEXICO: The University of New Mexico Department of Physics and Astronomy offers a Bachelor of Science in Astrophysics and a Bachelor of Arts in Physics and Astrophysics. The department offers Graduate Degrees in Physics and Optical Science and Engineering. Further information can be found on the UNM Department of Physics and Astronomy website.

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, Astronomy Professor, Research Scientist, Associate Professor, Physics and Astronomy Professor, Two-and four-year colleges and universities, University research institutes or laboratories, Campus Observatories, science writer

Government
Site Management, Data Analyst, Excavation, Research, Museum Conservation, Legislative Compliance Review, Program Management/Evaluation, Policy Analysis, Urban Planning, Telescope Engineering, Extragalactic Astronomer, Astrophysicist, Galactic Astronomy, Meteorologist, Programmer, Radio Astronomer, Solar and Space Physics (positions in these areas can be found in a variety of federal and state agencies).

Target Employers
NASA, Smithsonian Astrophysical Observatory, 3M, SAIC Space Telescope Science Institute, The Aerospace Corporation, Honeywell, Akiom, MIT Lincoln Laboratory, Emerson Network Power, Alliant Techsystems, Trium, Lawrence Livermore National Lab, Fish & Richardson, P.C.

SUGGESTED STRATEGIES
- Gain related professional experience through involvement in internships, student employment, Co-ops, and/or volunteer opportunities.
- Develop statistical, analytical and computer skills and investigate research methodologies.
- As an undergraduate obtain a research assistant position, or attend a field school.
• Students who are interested in graduate school should maintain a high undergraduate GPA and develop relationships with faculty and community leaders.
• Research governmental application procedures. A graduate degree may be required for higher level positions.
• Shadow professionals in the field to gain a better understanding of the occupation and to build relationships with professional mentors.
• Build your network and get involved on campus through student organizations and campus events.
• Attend career related campus events such as career fairs, company information sessions, and or career workshops.
• Speak with mentors and faculty about career opportunities.
• Job leads can be found on your department’s website, list-serv, newsletters, and social media sites.

STATE AND NATIONAL WAGES:
Adapted from CareerOneStop (2013)

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<th>Location</th>
<th>10%</th>
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<th>Median</th>
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INFORMATIONAL WEBSITES:

- UNM Department of Physics and Astronomy
- Physics Today
- Harvard-Smithsonian Center for Astrophysics
- National Aeronautics and Space Administration
- National Optical Astronomy Observatory
- Physics and Astronomy Online

http://panda.unm.edu/
http://www.physicstoday.org
http://www.cfa.harvard.edu/
www.nasa.gov
www.noao.edu
www.physlink.com

http://online.onetcenter.org
http://www.bls.gov/oco

REFERENCES


University of New Mexico, Department of Physics and Astronomy (2013). Degrees. Retrieved from http://panda.unm.edu/