Planetary Sciences

Career Compass Geosciences

This career compass provides options, tips, suggestions, and strategies for how a student can obtain critical skills, experiences, and competencies in order to launch their geoscience career based on their academic standing. The content herein is based on data from the U.S. Bureau of Labor Statistics, interviews with personnel in the occupation, and research on available student opportunities.

Job Summary

Planetary scientists work to improve understanding of the planets, satellites, and smaller bodies in the solar system through studying their atmosphere, surface and interior. They work to understand the origins of planetary bodies and the physical processes they undergo. They also search for asteroids that may pose a hazard to Earth. Research is carried out in laboratories in astronomical facilities worldwide and from spacecraft.

Build Grow Connect

Undergraduate

- Clubs, student government, or geoscience professional societies
- Hone skills through courses, community involvement, and conference presentations
- Geoscience professional society conference
- NASA's Minority University Research and Education Project Lunar and Planetary Science summer internship
- Universities Space Research Association internship
- NASA internship*
- Research Experience for Undergraduates
- ORISE internship
- Space Grant Consortium internships* (by state)
- Government contractors
- Planetary Geology Geophysics undergraduate scholarship
- Research experience
- Laboratory, field, observational, or instrumentation experiences
- Degree in geosciences, physics, chemistry, astronomy, or planetary science
- Coursework in advanced math or physics, planetary science, GIS, and remote sensing
- Write a senior thesis

Graduate/Master's

- Present research at conference
- Publish research
- Events, activities, and technical sessions at professional society conference
- Geoscience professional society conference
- Departmental committee, clubs, student government, or geoscience professional societies
- NASA internship*
- ORISE internship
- Space Grant Consortium Fellowships* (by state)
- Government contractors
- NASA's ESSFP, STRF, National Space Grant College and Fellowship Project, NASA Pathways Program, MUREP
- The National GEM Consortium GEM Fellowship Program

Also applicable at Ph.D. level

- Coursework in applied math and physics, remote sensing, and courses with computing component
- Field, observational, or instrumentation experiences
- Master's thesis topic(s) related to planetary science

Ph.D./Post-doc

- Events, activities, and technical sessions at professional society conference
- Departmental committees, geoscience professional society
- Present research at conference
- Publish research
- Geoscience professional society conference
- NASA Postdoctoral Program, NASA Astrobiology Institute postdoctoral fellowship, NASA Hubble Fellowship program, NASA Pathways Program, NASA Pathways Presidential Management Fellows Program, Jet Propulsion Laboratory postdoctoral program
- Coursework in applied math and physics, remote sensing, and courses with computing component
- Field, observational, or instrumentation experiences
- Dissertation topic(s) related to planetary science

*U.S. citizenship may be required

Symbol Key

- Attend
- Communicate
- Network
- Participate
- Leadership
- Internship
- Scholarship
- Fellowship
- Academics

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