

What can I do with a major in Geophysics?

Geophysics

Job opportunities will be plentiful for Geophysicists. It is predicted that this field will grow because of the need for energy, the protection of the environment and the responsible management of natural resources. Geophysicists don't just work behind a computer typing data; a degree in Geophysics can serve as a bridge to many career opportunities. For example, one may be working out in the field studying the various features of the Earth, or working on computer models and applications to evaluate the Earth's crust, and its internal structures. In addition, they could be studying the interior features of the ocean, earthquakes and other parts of the Earth using other methods developed on computer models. Overall, this degree has the potential to lead you into jobs dealing with oil, gas, mining or research. Generally, one will be able to obtain a job with a minimum of an BS in Geophysics, but it is preferred to have an MS or a PhD since that will open up more opportunities. In addition to a BS, one will also need to obtain certification to practice Geophysics in some states.

Continuing Education

Although one will be able to gain an entry-level position with a BS in Geophysics, it is mandatory to obtain an MS in Geophysics since most upper-level jobs deem it necessary to have so one will be armed with the tools they need to be a successful Geophysicist, therefore you should consider whether graduate school will be necessary to satisfy your career goals. If you feel as though money may be a problem for attaining your education, realize that many universities offer funding of some sort through research, teaching assistant positions, or working for the school you're attending. In addition, your job may require you to obtain a Masters or a PhD to advance in your career; therefore, your company may pay you to go back to school to further your education; in addition, you could apply for scholarships and receive funding from the university you wish to attend to supplement your educational costs; however, if that is not the case, you may look into borrowing money to pay off your student loans, but use this in an last resort. There are plenty of ways to pay off your education that don't involve loans. If you are looking for resources to help you plan for graduate school, visit the Geosciences Career Center.

Desired Traits

In addition to growing your technical skills through your coursework, it is important to develop traits and skills that industries seek. Many of them are similar for different positions, but vary in what the industry desires. Some skills that most industries for Geophysicists desire would be technical computer skills such as being able to make models of the Earth's crust or other details of the Earth's interior, or mapping out data through the use of sophisticated programs. In addition to computer skills, it makes sense to have strong communication skills, both verbally

and written, as many other jobs would require this. Here are some important traits employers and the industry typically want to see in their Geophysicists.

- Communication (oral and writing)
- Analytical
- Technical
- Quantitative
- Programming
- Logical
- Critical Thinking
- Cooperation & Teamwork
- Adaptability
- Technological Oriented
- Leadership
- Works well with others

Industries That Hire JSG Graduates

- Engineering Industry
- Oil & Gas Exploration, Production or Services
- Gas Extraction Industry
- State, City or Federal Government
- Research & Development (National labs, academic institutions, etc)
- Education (K-12, Higher Education)

Possible Job Titles with a BS in Geophysics

This list represents actual jobs held by JSG alumni who majored in Geophysics, and possible job titles held by Geophysics Majors

- **Geophysicist**, Progressive Global Energy
- **Petrophysicist**, Concho
- **R&D Geophysicist**, Sandia National Laboratories
- **Geoscience Technician**, International Oil and Gas Company
- **Geological & Geophysical (G&G) Support Analyst**, Int'l Oil and Gas Company
- **Geoscience Team Leader**, BP
- **Research Geophysicist**, CGG
- **Geophysicist – Prospect Generator**, Saudi Aramco

Internships

There are many benefits to having done an internship. Some of them include gaining real world experience and exploring more about the field you want to go in. Jackson School students find summer internships in research programs, national parks, government agencies, and in other

various industries. Many companies like to hire interns for full-time positions, so think of an internship as an extended “try-out” for future employment. Visit the Geosciences Career Center for help finding and apply for internships.

Here are some internships that are available to those majoring in Geophysics. This list is not exhaustive.

- **Geophysicist R&D**
- **Nasa Planetary Geology and Geophysics Undergraduate Research Program**
- **IRIS Summer Undergraduate Internship**
- **URI Seismology**
- **Chevron Earth Science Internship**

Organizations

Here are some organizations that would fit well with someone interested in going into Geophysics, or who are interested in Geology as a whole.

- **Society of Exploration Geophysicists**
- **Geological Society of America**
- **American Geological Institute**
- **American Association of Petroleum Geologists**
- **American Geophysical Institute**
- **West Texas Geological Society**
- **Houston Geological Society**

Useful Links

- What Can You Do with a Degree in Earth Sciences
<http://www.geology.pitt.edu/careers>
- Geoscience Career FAQ
<https://www.agiweb.org/workforce/faqs/index.html>
- Preparing for a Career in Geophysics
<http://exploreddegrees.stanford.edu/schoolofearthsciences/geophysics/>
- The Geophysicist Experience
<http://earthquake.usgs.gov/learn/kids/become.php>
- What is Geophysics and why?
<http://cseg.ca/student/careers/whatis.htm>
- Find Internships
<https://www.internmatch.com/>
- Find research opportunities at UT
<http://www.utexas.edu/research/eureka/>