

# Career Pathways

## Education Level: Ph.D.

A Ph.D. in geoscience is traditionally pursued by students aiming for a career in academia (professor, researcher at a college or university).

However, the academic job market is extremely competitive, and many Ph.D. graduates find employment outside of academia after graduation. A Ph.D. in geoscience can be a pathway into non-academic research positions.

Many non-academic research jobs in government and industry require a Ph.D. This degree may also help graduates obtain more senior roles in government or industry earlier in their careers. Technical skills gained during a Ph.D. can also be desirable for laboratory manager or technician positions.



## Ph.D.

Specialized training and research in a geoscience sub-discipline.

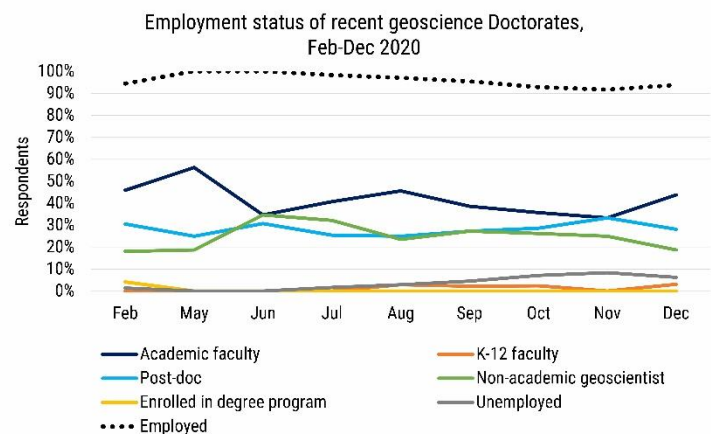
Required for most academic positions. Also desirable for government and industry researchers, as well as senior roles in these sectors.

### How do you get a Ph.D. in geoscience?

Applicants to Ph.D. programs in geoscience may have either a B.S. or M.S. in geoscience or a related field. Ph.D. students undertake research in an area of high interest, typically taking relevant classes for the first several years of their Ph.D. program before passing a qualifying examination. In the United States, geoscience Ph.D. students typically finish a dissertation in five to six years (though program length can vary depending on department, previous education, inevitable research challenges, and funding). Most geoscience Ph.D. students are funded by their departments, meaning that the department pays for students' tuition while students hold teaching assistant or graduate research assistant positions, which also provide a stipend for living expenses. Ph.D. programs are rigorous and are typically only pursued by students interested in a research career (in academia or non-academic sectors).

### Transferrable skills:

- 🌐 Grant writing
- 🌐 Communication
- 🌐 Deep subject-specific knowledge
- 🌐 Research skills
- 🌐 Technical/laboratory skills
- 🌐 Programming/software expertise



Credit: AGI; data from AGI's Geoscience COVID-19 Survey