


Geo Career MaPS

Welcome to the homepage for the Geoscience Career Master's Preparation Survey!

Geoscience departments are wonderful for teaching the raw, content knowledge and information needed for technical geoscience degrees. Unfortunately, students often still feel lost in how to actually land one of those coveted geoscience positions post-graduation. Are you wondering what types of employment opportunities are out there for geoscience degree holders and don't know what practical skills are desired by employers? Understanding the geoscience job market will help you get your foot in the door to start your career. In collaboration with the Association of American Geographers, AGI is conducting a study on Master's degree programs and comparing what is being taught (and subsequently learned) with what skills employers are looking for in new hires.

There are several resources developed from this study:

- Check out the data briefs from our Geoscience Currents channel, which can be found [here](#).
- To review the results of this study in web form, check out our [report page](#).
- To view a full report of statistical analyses performed on each of the surveys, see:  [Geoscience Career Master's Preparation Survey Statistical Report](#)
- The Final Report discussing all the data collected through this research can be found on our [Workforce Reports Page](#).

Information about the research:

The American Geosciences Institute (AGI) and the Association of American Geographers (AAG) conducted surveys of Geography and Geology Master's degree programs in an effort to determine the types of competencies taught and developed in graduate curricula (including internships and related professional training experiences). The results of the surveys, which were administered from November 2013 through August 2014, can be found in the [Geoscience Career Master's Preparation Survey Final Report](#). **Funding for the research was provided by the National Science Foundation's Geoscience Education program (Award GEO- 1202707).** Heather Houlton (AGI, Principal Investigator), and Michael Solem (AAG, Co-PI) led the research.

Through this research project, named **Geo Career MaPS** ([Geoscience Careers Master's Preparation Survey](#)), AGI and AAG **developed resources** that can help academic programs better align curricula and advising practices with workforce demands. The surveys developed for this project build directly on prior work by AGI and AAG to create conceptually valid measures of professional competencies and studies of industry trends in the geosciences. In practical terms, the results can be used to assist Geography and Geology Master's programs by providing them with additional approaches to assess learning outcomes in relation to workforce demands. This is an important issue for all graduate programs, but especially for Master's programs for which little is known empirically about curricula, students' career paths, and advising and mentoring practices by faculty.

As the graduate degree for most entry-level professional careers in geology and geography, a focus on Master's education is needed as part of a broader engagement by AGI, AAG and their sister organizations to address future workforce needs in science, technology, engineering and mathematics (STEM) geoscience careers. This project is expected to improve the preparation of the STEM workforce in broad geoscience fields by providing information that can be used to guide students in their selection of academic courses and other educational experiences that will equip them with the competencies they need for entry-level positions. By establishing and enhancing dialogues and relationships between academic programs and employer organizations, the project may also communicate the value of academic and professional training in the geosciences for work in various public and private sector careers. Although this is conceived as a pilot project focusing on geography and geology programs, there is potential

for future expansion to other sub-fields through partnerships with other professional societies and academic programs in the geosciences.

If you or your department have questions, or would like additional information about the Geo Career MaPS project, please contact us at workforce@americangeosciences.org.
