

Thinking about Your Geoscience Career Path? The AGI Student Exit Survey May Help You Make Informed Decisions

Making choices about career pathways is an important decision point for many students. Struggling with questions around whether or not to attend graduate school, which job sectors are hiring, what skills are needed by employers, and what should be expected as a starting salary are common. A resource that may help students make informed decisions around these topics is the American Geosciences Institute's (AGI) webinar, "Update on AGI's Geosciences Student Exit Survey Results," that was held on 30 November 2018. You can find a full recording of this webinar [online](#).

Started in 2013, the annual Student Exit Survey Report analyzes undergraduate and graduate students studying in the geosciences who are completing their degrees. This webinar focused on data spanning the last five years, and offered some general advice to students, faculty, and practitioners interested in the geoscience workforce outlook.

Build a stronger quantitative skill set. Employers seek students who have a foundation in higher level quantitative mathematics courses. Taking classes such as linear algebra, differential equations, computational methods, and statistics will help students better analyze work in the professional environment upon graduation. Based on the exit survey, students at the Masters and PhD levels are more likely than undergraduate students to take these classes.

Seek internship experiences. Internships are critical to building skills that will be used throughout one's career and gaining an understanding of the day-to-day jobs of geoscientists, as well as potentially providing you an open door to a job once you graduate. Surprisingly over 60% of undergraduate students are not gaining internship experience. In many instances students are not even applying to these opportunities. At the graduate degree levels, most Master's students have had at least one internship, while most PhD students have not had any.

For all students and at all levels, having one or more internships is advisable.

Know which job sectors are hiring. The geoscience job market fluctuates from time to time and being aware of these changes and where students are finding jobs after graduation can help determine where to begin the job search. According to students in the survey, the average time it took for a student to find a job was 2.3 months. For undergraduates, the top job sectors hiring those with a Bachelor's degree were the environmental services and federal government sectors. For students with a Master's degree, it was oil and gas and the federal government. PhD students were being hired more often by four-year universities and research institutes.

Consider starting salaries. Data on salaries provide reasonable expectations of what one might expect upon graduating and help determine starting points in salary negotiations. Results show that for the majority of students graduating with a Bachelor's the salary is between \$30,000 and \$40,000 a year. Students graduating with Master's degree may be between \$40,000 and \$110,000 with the majority of in the \$50,000 and \$60,000 range. Higher salary levels are mainly due to positions taken in the oil and gas sector. For students graduating with PhD's, the majority of salaries range between \$40,000 and \$50,000.

Build Professional Skills. Employers are looking at hiring individuals with not only strong technical skills, and research and internship experience, but those who are also fluent in non-technical skills. Some of skills mentioned by employers were communication, writing, and time and project management. Again, having one or more internships will help better development these necessary skills.

The best decision-making comes from those who are most informed and the workforce data gathered by the AGI can assist in this process. Making choices about a



career path do not need to be daunting, and the more data and information learned will ease the anxiety over expectations. To learn more about career planning and exploration, attend one of GSA's upcoming career workshops offered at each GSA Section Meeting (http://www.geosociety.org/GSA/Events/Section_Meetings/GSA/Sections/Home.aspx?hkey=88411fd7-3278-41be-aa78-f451032e17f3).

For additional resources and further reading the website below might be of assistance.

- Full recording of the AGI webinar:
<https://www.americangeosciences.org/workforce/webinars/update-agis-geoscience-student-exit-survey-results>
- AGI Workforce Currents:
<https://www.americangeosciences.org/workforce/currents>
- GSA Resources: Tips for finding internships/employment:
http://www.geosociety.org/documents/gsa/careers/Tips_Internship_Employment.pdf
- GSA Resources: Suggested coursework, degree requirements, and/or experience:
http://www.geosociety.org/documents/gsa/careers/Coursework_Requirements.pdf
- GSA Resources: Interviewing tips or strategies to help students get hired:
http://www.geosociety.org/documents/gsa/careers/Interviewing_Tips.pdf

