How are We Preparing Geoscience Graduates for Entering the Workforce?

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AGI’s Exit Survey

Distribution of participating graduating students and departments

Degree received by participating graduates
- BA/BS: 72%
- MA/MS: 18%
- PhD: 10%

1-17 Participants
18-34 Participants
35-51 Participants
52-68 Participants
69-85 Participants
86-102 Participants
Race/Ethnicity and Citizenship

Citizenship of graduating students

Highest education level of a parent/guardian of graduates

Graduates with a Ph.D.

Graduates with a MA/Ph.D.

Graduates with a MA/MS

Graduates with a BA/BS

Not applicable/Unknown: 6%
No college experience: 12%
Some college experience: 18%
Bachelor’s degree: 34%
Graduate or Professional degree: 50%
Graduate or Professional degree: 50%
Graduate or Professional degree: 30%
Graduate or Professional degree: 50%
Bachelor’s degree: 34%
How Does this Compare Nationally?

**Figure 2.7:** Underrepresented Minority Enrollments at Two-Year Colleges

**Figure 3.10:** Underrepresented Minority Enrollments at Four-Year Institutions

AGI Geoscience Workforce Program; Data derived from NCES Digest of Education Statistics, 2014
Chosen Degree Fields

Bachelor's Degree Graduates
- Earth Sciences: 7.5%
- Environmental Sciences: 5.5%
- Geological/Geophysical Engineering: 4.4%
- Geophysics and Seismology: 4%
- Geography/GIS: 2.4%
- Atmospheric Sciences/Meteorology: 1.8%
- Marine Sciences/Oceanography: 1.2%
- Geoscience Education: 1%
- Geosciences: 0.6%
- Hydrology and Water Resources: 0.4%
- Other: 0.4%
- Paleontology: 0.4%
- Geochemistry: 0.2%
- Geo-related Engineering: 0.2%
- Planetary Sciences: 0.2%
- Petroleum Geology: 0.2%

Geology: 65%

Master's Degree Graduates
- Hydrology and Water Resources: 10.2%
- Petroleum Geology: 10.2%
- Geological/Geophysical Engineering: 5.5%
- Petrology: 4.7%
- Environmental Geosciences: 3.9%
- Geophysics & Seismology: 13.4%
- Geology: 19.7%
- Geochemistry: 13.4%
- Environmental Sciences: 3.1%
- Marine Sciences/Oceanography: 3.1%
- Other: 3.1%
- Geo-related Engineering: 2.4%
- Atmospheric Sciences: 2.4%
- Paleontology: 2.4%
- Earth Science: 1.6%
- Geography/GIS: 0.8%

Doctoral Degree Graduates
- Marine Sciences/Oceanography: 11.4%
- Planetary Sciences: 8.6%
- Earth Sciences: 7.1%
- Paleontology: 5.7%
- Hydrology & Water Resources: 14.3%
- Geology: 14.3%
- Geophysics & Seismology: 20%
- Environmental Sciences: 4.3%
- Geochemistry: 4.3%
- Atmospheric Sciences/Meteorology: 2.9%
- Environmental Geosciences: 2.9%
- Petrology: 2.9%
- Geo-related Engineering: 1.4%
Experiences in Geoscience Departments

Number of internships held by graduating students

- BA/BS
- MA/MS
- Ph.D.

Percentage of Graduates

Number of Internships

- 0
- 1
- 2
- 3
- 4+

Percentage of Graduates:

- 70%
- 60%
- 50%
- 40%
- 30%
- 20%
- 10%
- 0%
Future Plans, Graduate Degree

**Students graduating with an undergraduate degree**

- Geology: 41%
- Marine Sciences/Oceanography: 5%
- Education: 4%
- Paleontology: 4%
- Geochemistry: 3%
- Geological/Geophysical Engineering: 3%
- Atmospheric Sciences/Meteorology: 3%
- Biological Sciences: 2%
- Planetary Sciences: 2%
- Environmental Sciences: 2%
- Petroleum Geology: 2%
- Other: 2%
- Civil Engineering: 1%
- Geo-Related Engineering: 1%
- Geography/GIS: 1%
- Petrology: 1%
- Law: 1%
- Soil Sciences: 1%
- Business: 1%
- Medical Sciences: 1%

Possible Future Graduate Degree

- MA/MS: 70%
- Ph.D.: 25%
- Undecided: 3%
- JD: 2%
- DNP: 0.54%

**Students graduating with a graduate degree**

- Geology: 36%
- Geophysics & Seismology: 12%
- Geological/Geophysical Engineering: 12%
- Marine Sciences/Oceanography: 4%
- Geochemistry: 4%
- Geography: 4%
- Environmental Sciences: 4%
- Other: 8%
- Earth Sciences: 4%

Possible Future Graduate Degree

- Ph.D.: 81%
- MA/MS: 19%
Future Plans, Employment in the Geosciences

2015 graduates that found employment in the geosciences:
- 10% bachelor’s graduates
- 40% master’s graduates
- 59% doctoral graduates

2015 graduates still seeking work in the geosciences:
- 51% bachelor’s graduates
- 40% master’s graduates
- 39% doctoral graduates
So For the Past Three Years...
Thanks!

- Please contact me, cwilson@americangeosciences.org, if you would like to participate in the Exit Survey.

- Check out our website for more information:
  - www.americangeosciences.org/workforce
    - Recent reports
    - Geoscience Currents
    - Career development resources