

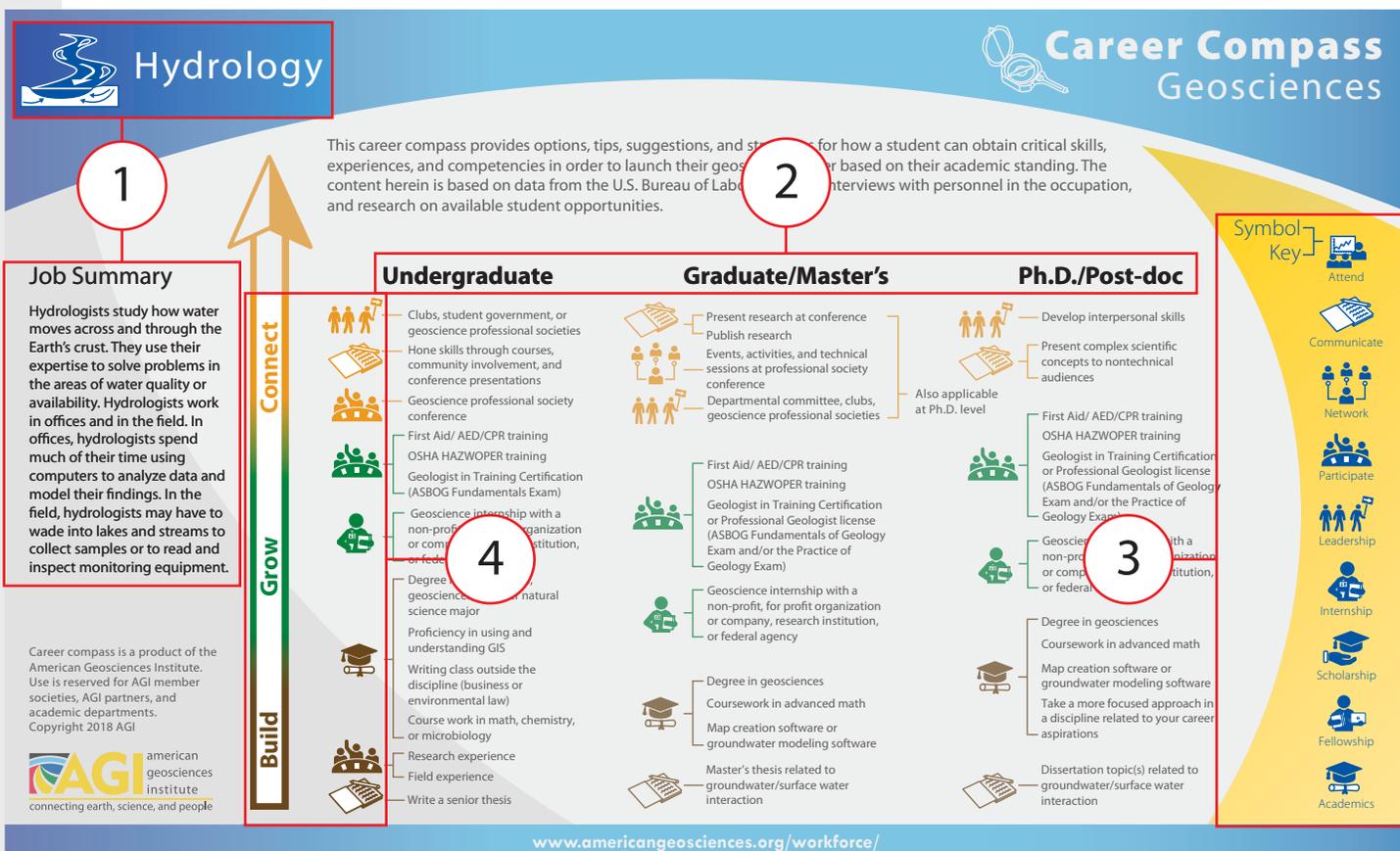
A Career Compass to Navigate into Geoscience Careers

Career preparation for many geoscience students begins when they choose their undergraduate major and develop practical workplace skills through internships, leadership positions, or research experiences. A new series from the American Geosciences Institute called Career Compass provides suggestions and strategies for students to obtain critical competencies and experiences that will launch their geoscience career based on their academic preparation. Each Career Compass is constructed using data from the U.S. Bureau of Labor Statistics, interviews with personnel in the occupation, content experts, employers, and research on available student opportunities.

Career Compass infographics are intended to help students, faculty, parents, and advisors identify key developmental pathways and milestones towards a range of careers based on geoscience discipline or occupation based on their academic standing.

To see the available Career Compasses, visit <https://www.americangeosciences.org/workforce/compass>

- 1 Identify your field of interest
- 2 Identify where you are in your academic preparation
- 3 Identify what types of skills you need to develop



- 4 Follow the vertical scaffolding from building skills via curricular experiences, through growing and learning from extra-curricular opportunities, to connecting with your professional community

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This career compass provides options, tips, suggestions, and strategies for how a student can obtain critical skills, experiences, and competencies in order to launch their geoscience career based on their academic standing. The content herein is based on data from the U.S. Bureau of Labor Statistics, interviews with personnel in the occupation, and research on available student opportunities.

Job Summary

Hydrologists study how water moves across and through the Earth's crust. They use their expertise to solve problems in the areas of water quality or availability. Hydrologists work in offices and in the field. In offices, hydrologists spend much of their time using computers to analyze data and model their findings. In the field, hydrologists may have to wade into lakes and streams to collect samples or to read and inspect monitoring equipment.

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Undergraduate

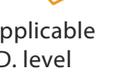
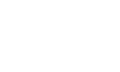
-  Clubs, student government, or geoscience professional societies
-  Hone skills through courses, community involvement, and conference presentations
-  Geoscience professional society conference
-  First Aid/ AED/CPR training
-  OSHA HAZWOPER training
-  Geologist in Training Certification (ASBOG Fundamentals Exam)
-  Geoscience internship with a non-profit, for profit organization or company, research institution, or federal agency
-  Degree in earth science, geosciences, or other natural science major
-  Proficiency in using and understanding GIS
-  Writing class outside the discipline (business or environmental law)
-  Course work in math, chemistry, or microbiology
-  Research experience
-  Field experience
-  Write a senior thesis

Graduate/Master's

-  Present research at conference
-  Publish research
-  Events, activities, and technical sessions at professional society conference
-  Departmental committee, clubs, geoscience professional societies
-  First Aid/ AED/CPR training
-  OSHA HAZWOPER training
-  Geologist in Training Certification or Professional Geologist license (ASBOG Fundamentals of Geology Exam and/or the Practice of Geology Exam)
-  Geoscience internship with a non-profit, for profit organization or company, research institution, or federal agency
-  Degree in geosciences
-  Coursework in advanced math
-  Map creation software or groundwater modeling software
-  Master's thesis related to groundwater/surface water interaction

Also applicable at Ph.D. level

Ph.D./Post-doc

-  Develop interpersonal skills
-  Present complex scientific concepts to nontechnical audiences
-  First Aid/ AED/CPR training
-  OSHA HAZWOPER training
-  Geologist in Training Certification or Professional Geologist license (ASBOG Fundamentals of Geology Exam and/or the Practice of Geology Exam)
-  Geoscience internship with a non-profit, for profit organization or company, research institution, or federal agency
-  Degree in geosciences
-  Coursework in advanced math
-  Map creation software or groundwater modeling software
-  Take a more focused approach in a discipline related to your career aspirations
-  Dissertation topic(s) related to groundwater/surface water interaction

