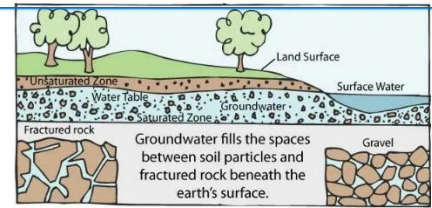


Careers in Geoscience and Geological Engineering

Most people don't know what a geoscientist or a geological engineer does for a living. If asked, they probably think we look at rocks and fossils all day. While rocks are important and fossils are cool, they are only one part of what we do.

Geoscientists and engineers work in many different areas, including:

Groundwater protection and remediation: Most of the water we drink and much of the water in our lakes and streams comes from groundwater. Geoscientists and engineers help figure out how much groundwater we can use and how much needs to be left for nature. We also clean up contaminated groundwater to make it safe again!



Surface water protection: The biggest threats to our lakes and streams come from chemicals that wash off the land surface and end up in the water. Geoscientists and engineers work with farmers, land developers, mining companies, and others to make sure we don't pollute the water while we're focusing on something else.



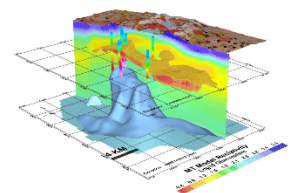
Natural hazard protection: Natural hazards such as floods, landslides, and earthquakes impact human safety. Geological engineers help design flood control structures, fix landslides before they happen, and can improve the ground to make earthquakes less hazardous. We also identify areas we should just not build!



Renewable energy: Batteries and solar panels require special minerals. Geoscientists and engineers help find where those minerals are, how we can access them safely, and how to restore the land after mining is done. We also identify good locations for geothermal energy and design systems to use it.

Remote Sensing and Geospatial Data: Satellite-based data is increasingly important and is used in applications like landslide detection, predicting groundwater use and aquifer depletion, and predicting earthquakes. This is a great way to combine interests in the outdoors and computers!

Geophysics: Understanding the underground can be difficult, since we can't see it. Geophysics involves using tools at the earth's surface to measure the subsurface. We use these measurements to help with water protection, natural hazards, geothermal energy, and mining.



Geoscientists and Engineers:

- Can work outdoors or indoors – choose the location you like!
- Can work at home or can travel. You can see new states and new countries if you want.
- Have a good salary – average annual salary with a bachelor's degree is \$84,000 for geoscientists and \$97,000 for geological engineers.
- Have good job security - jobs in Geoscience and Engineering are projected to grow by ~8% over the next 10 years.