

Geology As A Profession

Geologists make use of their special knowledge for the benefit of others. No profession affects the public more than geology. "Civilization exists by geological consent, subject to change without notice, " a popular quotation with much merit.

Why register geologists?

The application of geologic data are integral parts of many actions involving public health, safety, and welfare (including the public's financial welfare). Professional geologists working with others can determine and apply sound geologic procedures that will serve to avoid endangerment of the public or the environment.

How will the public be protected?

First, no one may be represented as a geologist unless duly registered. Second, registration boards are typically endowed with the authority to monitor and enforce the registration law.

Who can become registered as a geologist?

While it will vary from state to state, typically individuals who have a college degree in geology and four more years of geological work experience can qualify for registration. In all states which have fully implemented their registration laws, two or more examinations are also required to demonstrate minimum competence in both the fundamentals and the practice of geology.

More specifics.

Registration assures that qualified reputable individuals provide accurate geologic information to the public in such areas as - a few of which may include the following:

- geologic mapping
- groundwater resource and development protection
- mineral-resource evaluation
- oil and gas development
- safe oil, gas, water, or mineral drilling
- accurate and reliable information to government agencies for public use
- environmental geology issues

- land surface stability
- sanitary landfill siting
- toxic, nuclear, and hazardous waste disposal siting
- contaminated soil and groundwater investigations
- mined-land reclamation
- acid mine drainage
- dam and impoundment construction
- highway construction

Geology sounds a lot like engineering. What's the difference?

Geologists are trained to consider the entire physical environment, the materials that compose it and the dynamic processes that drive it. Engineers are more concerned with facility design including material and structural properties, construction considerations, and safety factors.

Geologists and engineers generally work together making sure that all natural and man-made influences are considered in a project.

Why don't geologists register as engineers?

Geologists have education and professional experience that is specifically directed toward investigating the earthen materials that affect the public.

No other profession has similar education and professional experience.

Why not hire engineers to certify geologists' work?

For public protection, persons can only certify work for which they were trained in the fundamental geologic principles and have the necessary experience. Geologists are trained and have experience in geologic interpretation of earthen materials; engineers are trained and have experience in designing and building. These are two distinctly different professions. However, because of the close relations between those who interpret and those who design and build, geologists and engineers must work together and in a supportive fashion.

Can an engineer register as a geologist?

Yes, if *qualified* as a geologist.

How do they work together?

Geologists interpret, engineers design and build. Geologists investigate earth materials and processes and advise how to compensate for those conditions to assure safety. Engineers take this information, and working with geologists, determine how to design and build safe structures.

What will it cost taxpayers?

Nothing. Registration is typically self-funded by fees paid by the registrants.

Who serves on registration boards?

Ordinarily, these boards are composed of representatives from the profession and the public. The board members are generally appointed by state governors with the advice and consent of the legislature.

Do any states register geologists?

Yes. Twenty-eight states and one US territory (Puerto Rico) now have registration, licensure, or certification laws: Alabama, Arizona, Arkansas, California, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Maine, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, North Carolina, Oregon, Pennsylvania, South Carolina, Texas, Utah, Virginia, Washington, Wisconsin, and Wyoming.