GEOPHYSICS is the study of the structure and composition of the Earth. Geophysicists use sophisticated instruments to measure physical properties such as:

- Velocity of sound waves transmitted through the ground
- Density, electrical resistivity, electrical fields, and radioactivity of rocks
- Changes in gravity and magnetic fields of the Earth

The majority of geophysical technologists are employed in the oil industry, assisting geoscientists who determine the subsurface structure of the Earth for petroleum exploration and development. Geophysical technologists may also be involved in exploration for mineral deposits or solving environmental problems.

Geophysical technologists “push the envelope” of computer applications. Specialized computer skills and the use of complex graphics applications are part of your career. Computer technology is an integral component of geophysics.

Geophysics & Computer Technology

Seeking the Best and the Brightest.
What does a Geophysical Technologist do?

Geophysical Technologists perform a vital role in providing technical support to teams of Geophysicists and Geologists.

Many work in acquisition, processing or interpretation of seismic data for exploration of natural resources. They may also be involved in environmental studies, archaeological excavations, water resource management or natural disaster studies.

Technologists must have very good computer skills and can expect to use computer technology to organize and maintain geophysical files and databases, generate maps and prepare graphic presentations. They may also act as liaison between geophysicists and data processors or data vendors.

Education Requirements

To work as a Geophysical Technologist, you will need at least a 2-year Geophysical certificate or a diploma in Geophysics, Geology or Exploration Technology from an accredited post-secondary technical institution.

Who Hires Geophysical Technologists?

Many Geophysical Technologists work in the petroleum industry for companies that acquire, process or interpret seismic data. Other employers include mining companies, universities and governments.