

# What is Geophysics?

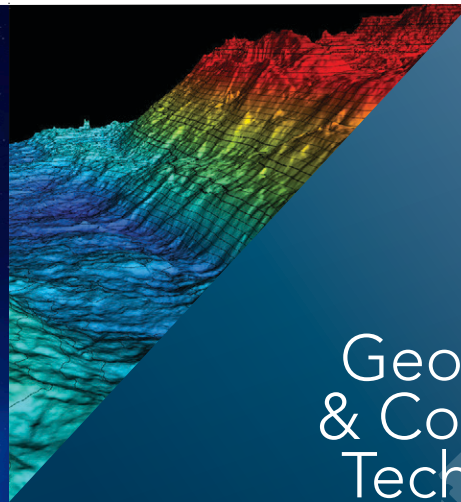


## GEOPHYSICS

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

Geophysics is used to gain an understanding of the structure and evolution of the Earth, earthquakes, the ocean and many other physical phenomena, such as tsunamis and climate change. Geophysics is critically important to the natural resource industry.



## Geophysics & Computer Technology

Geophysicists “push the envelope” of computer applications. Computer technology and the use of complex graphics applications are integral components of a career in geophysics.

## Careers in Geophysics

APPLIED SCIENCE  
THE PHYSICS OF THE EARTH  
TRAVEL & ADVENTURE  
COMPUTER WIZARDRY



## Seeking the Best and the Brightest.



### MORE INFORMATION

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## What do you want in your career?

- Would you like a dynamic career in science, with lots of challenges?
- Do you want to do work that benefits people?
- Do you want to develop your own ideas and see them become reality?
- Do you want excitement, adventure and travel?
- Do you like technology and want to be at the leading edge of new advances in computer applications?

## What are you good at doing?

- Do you like learning about the Earth?
- Are you good at math & science?
- Are you creative, a good communicator and a team player?
- Do you like working with computers?
- Do you like to solve problems?

All of these ambitions may be realized with a career in **Geophysics**.



## Who Hires Geophysicists?

Geophysicists work for many different employers. Many Geophysicists find employment in the petroleum industry. Companies involved in the acquisition, processing and interpretation of data for natural resource management employ large numbers of geophysicists. Other employers include engineering companies, mining companies, universities, governments and space agencies.

## Educational Requirements

To work as a professional Geophysicist, you will need a B.Sc. in geophysics, physics, mathematics or geology, and be licensed by your provincial regulatory association. Your University courses will typically include mathematics, physics, computer science, geophysics, and geology.

## Salary

Geophysicists are very well paid for applying creativity and knowledge in a highly technical field. The starting salary for a Petroleum Geophysicist working for an oil company is \$75,000 to \$85,000.



## Work Opportunities

Many Geophysicists work in data acquisition, processing or interpretation for natural resource management. Geophysicists are also involved in environmental studies, water resource management, archaeological excavations, forensic investigations, climate studies, and the causes of natural phenomena such as earthquakes, volcanic activity, landslides, and tsunamis. Some geophysicists have even become astronauts. Opportunities abound in both management and technical positions in geophysics.