



Basic Petroleum Geology – Tools and Techniques

MODULE

About the Skill Module

This module explains basic concepts of key tools and techniques used by geoscientists in the exploration and development of petroleum resources. Topics covered include seismic data, drilling and completions, and formation evaluation. The main points of horizontal drilling and hydraulic fracturing, which are widely used in the development of unconventional resource plays, are presented. Also covered in this module is the estimation of reserves and resources.

[See example Geology eLearning module](#)

Target Audience

Petroleum industry personnel in need of basic geological training, including engineering, geophysical, technical support, and administrative personnel.

You Will Learn

- The basics concepts of 2D and 3D Seismic Data and how it is used to investigate the subsurface
- How seismic data is acquired, processed, and displayed for visualization and interpretation
- How to identify various types of drilling rigs and key pieces of equipment used in drilling, including bits and how they function
- How to understand the main points of the drilling process, including the basics of horizontal and directional drilling
- The basics of how a well is completed, including through hydraulic fracturing and other techniques of reservoir stimulation
- How rock and hydrocarbon information is gathered during the drilling of a well through mudlogging, coring, wireline logging, and testing
- To basic concepts of reserves and resource estimation
- How to use the Volumetric Method to estimate Hydrocarbons In Place

Product Details

Categories: [Upstream](#)

Disciplines: [Geology](#)

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 5 hours (approx.)

\$395.00