

### **Seismic Inversion and Attributes**

#### MODULE

### **About the Skill Module**

What is done to the data is very simple, but the impact on our interpretation has become a huge issue. In this skill module, we learn to 'inverse' the seismic data into a rock property, specifically impedance. Also discussed are the types of inversion algorithms and their application. Seismic data is typically not viewed in frequency or phase domain, but they are becoming popular displays. This skill module introduces the concept of attributes and explains what they are and how they are used to determine prospectivity of hydrocarbons.

See example Geophysics eLearning module

## **Target Audience**

Geoscientists, engineers, team leaders, geoscience technicians, asset managers, and anyone involved in using seismic data that needs to understand and use this data at a basic level or to communicate with others that use it

### You Will Learn

You will learn how to:

- Explain the seismic inversion processes, both forward and inverse
- Identify relative and absolute impedance in seismic inversion
- · Identify the inversion algorithms and their application
- Define attributes
- · Identify the importance of attributes
- Describe spectral decomposition attributes
- · Explain spectral notching
- · Identify the concepts of attenuation and Q
- Describe the Hilbert Transform attributes
- List the multi-trace attributes
- Describe the coherency attribute
- Describe the curvature attribute
- Explain the application of self-organizing maps in predicting reservoir rock properties
- · Identify the duplicity of attributes
- Relate how the application of attributes is far more important to know than the different types of attributes

# **Product Details**

Categories: <u>Upstream</u>

Disciplines: <u>Geophysics</u>

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 4 hours (approx.)

\$395.00