



Course Code

44-412117-4

## Reservoir Geology (RG)

### Course Overview

How does geology help us understand the reservoir? What do we need to know about the reservoir that the geology can help us with? How can we use our understanding of the geology to predict reservoir properties ahead of drilling?

These are the questions that we want to address in this course on reservoir geology.

The course will begin by establishing the fundamental geological controls on reservoir quality and then look at how we can use our geological models to predict reservoir quality.

### Who should attend?

This course has been designed for geologists, geophysicists, reservoir engineers, petrophysicists and reservoir modellers who need to understand the fundamentals of geology and learn how this understanding can be used to better describe and model the reservoir.

### Topics covered

- Understand the concepts of Stock-Tank Oil Initially In Place (STOIIP)
- Understand:
  - The principles of rock and fluid properties
  - The geological controls on those reservoir properties

- The depositional processes which determine the geological properties
- The carbonate and clastic depositional environments in which these processes occur
- The diagenetic and compactional processes that alter reservoir properties during sediment burial
- The fundamentals of sequence stratigraphy
- The fundamentals of structural geology

### ➤ Be able to:

- Determine the geological controls on reservoir quality from core analysis data
- Undertake a facies analysis and build a depositional model
- Use the geological models to predict reservoir properties
- Correlate reservoir layers constrained by geological models
- Map reservoir faults
- Undertake basic fault seal analysis

**Duration : 5 Days (40 hours in total, assuming an 8-hour day)**

