

GEOPHYSICS

(1) Quantitative Seismic Analysis for Exploration and Production Applications

WHO SHOULD ATTEND

This course is intended for geophysicists engaged in the oil and gas industry, in particular for seismic interpreters who want to maximize the value of their conventional 3D seismic data. Exploration and asset managers who want to understand what is achievable with advanced seismic analysis techniques will also benefit.

COURSE OBJECTIVES

Upon completion of this course, participants will understand the physical basis and have a practical appreciation for advanced seismic analysis techniques such as seismic attribute analysis, direct hydrocarbon indicators, seismic inversion, amplitude-variation with offset, spectral decomposition, quantitative prediction of rock properties, and methods for resolution enhancement.

CONTENT

*Overview *Fundamental Concepts in Reflection Seismology and Rock Physics *3D Seismic Attributes *Seismic Inversion *Multiattribute Analysis *Geostatistics *Reservoir Characterization *TimeLapse Monitoring *Conventional Direct Hydrocarbon Indicators *AVO Theory *AVO Interpretation *AVO Problems and Pitfalls *Elastic Inversion *Spectral Decomposition *High Resolution Methods

INTENDED FOR

*Seismic Interpreters *Asset Managers