

Location: Taaeen/ ADNOC

Date: April 2025

Duration: 4 Days

Fee: English

Course Title: Hampson and Russel Software Seismic inversion and AVO

Learning Objectives:

- Utilize Hampson and Russell software for seismic data analysis.
- Perform seismic inversion to predict reservoir properties.
- Analyze amplitude variation with offset (AVO) for fluid identification.

Target Audience:

- Geophysicists and seismic interpreters
- Exploration and production engineers
- Reservoir characterization professionals

Daily Course Outline:

Day 1: Introduction to Hampson and Russell Software & Seismic Inversion Basics

- Overview of seismic inversion and AVO techniques
- Data preparation, QC, and preprocessing
- Acoustic and elastic impedance inversion

Day 2: Seismic Inversion Techniques & AVO Fundamentals

- Model-based and geostatistical inversion
- AVO principles and classification
- Fluid and lithology prediction using AVO attributes

Day 3: Advanced Workflows & Integration with Well Data

- Integrating seismic inversion with well log data
- Machine learning applications in seismic interpretation
- Case studies on real-world applications

Day 4: Hands-on Workshop & Practical Applications

- Practical exercises with real datasets
- Project-based learning and final presentations
- Discussion on challenges and best practices

