

Reservoir Evaluation & Production Optimization

COURSE OVERVIEW

This course examines the basics of reservoir evaluation and production optimization. It focuses on using geological, geophysical, and engineering data to build reservoir models and develop field strategies. The training emphasizes data-driven decisions to assess reservoir potential, solve production issues, and improve recovery while managing costs for better asset value. Participants will learn rock and fluid properties, surveillance techniques, and production enhancement methods.

WHO SHOULD ATTEND?

This course is ideal for reservoir engineers, production engineers, petroleum engineers, geoscientists, and asset managers. It is also highly suitable for surveillance engineers, facilities engineers, and technical professionals from operator or service companies seeking to deepen their expertise in reservoir characterization, performance analysis, and production enhancement technologies for both conventional and unconventional assets.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Analyze and interpret core, log, and fluid data to characterize reservoir properties.
- Estimate hydrocarbons in-place and determine recoverable reserves.
- Apply decline curve analysis and reservoir simulation for production forecasting.
- Identify underperforming wells and diagnose production impairment mechanisms.
- Design and evaluate well stimulation and enhanced oil recovery (EOR) projects.
- Integrate real-time production data for proactive reservoir management.
- Develop optimization strategies to maximize asset value and recovery factor.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Fundamentals of reservoir rock properties, fluid phase behaviour, and drive mechanisms.
- Techniques for reservoir modelling, volumetric analysis, and reserves estimation.
- Application of nodal analysis for well and production system optimization.
- Well test design, interpretation, and pressure transient analysis.
- Principles and applications of key EOR methods (gas injection, chemical, thermal).
- Production surveillance methodologies and key performance indicator (KPI) tracking.
- Economic evaluation of production optimization and reservoir development projects.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded