



Oil, Gas and Chemical

Enhanced Oil Recovery Fundamentals - ORE

Course Introduction

Enhanced Oil Recovery (EOR)

Enhanced Oil Recovery (EOR) is a crucial method to increase oil production from mature and declining fields. EOR techniques help extract additional oil that cannot be recovered through primary and secondary methods, improving field productivity and maximizing reservoir potential.

Understanding the fundamentals of EOR is essential for oil and gas professionals to select the right methods and optimize operations. Skilled application of EOR techniques can lead to better recovery rates and long-term production efficiency.

This training program covers the essential principles and practices of Enhanced Oil Recovery (EOR). The course includes an overview of EOR methods, selection criteria, planning, implementation, and optimization strategies. Each day focuses on a core topic with detailed subtopics for practical understanding. The program features interactive discussions, real-world case studies, and exercises to help participants apply their knowledge in field operations.

Training Course Methodology

This course is designed to be interactive and participatory, and includes various learning tools to enable the participants to function effectively and efficiently. The course will use sessions, exercises, and case applications, and presentation about proven-by-practice methods, new insights and ideas about the topic and its effects in a corporate world.

Target Audience

- Reservoir and petroleum engineers
- Oil and gas field operators
- Project managers in EOR operations

- Geoscientists and researchers in oil recovery
- Technical professionals in upstream oil and gas

Learning Objectives

- Understand the basic concepts and types of EOR techniques.
- Learn how to select suitable EOR methods based on reservoir conditions.
- Gain skills in planning and implementing EOR projects.
- Identify common operational challenges and effective solutions.
- Optimize EOR operations to enhance oil recovery rates.

Course Outline

• 01 Day One

Introduction to Enhanced Oil Recovery (EOR)

- What is EOR and why it is important.
- Differences between primary, secondary, and tertiary recovery.
- Overview of EOR techniques (thermal, gas, chemical).
- Key factors influencing EOR method selection.
- Understanding reservoir characteristics for EOR.
- Economic considerations in EOR projects.
- Safety and environmental concerns in EOR operations.

• 02 Day Two

Thermal EOR Methods

- Overview of thermal recovery techniques (steam flooding, cyclic steam).
- How heat improves oil mobility and production.
- Equipment and infrastructure requirements.
- Designing and planning thermal EOR projects.
- Challenges and solutions in thermal recovery operations.

- Monitoring and optimizing thermal EOR performance.
- Real-world examples of successful thermal projects.

• 03 Day Three

Gas Injection EOR Techniques

- Principles of gas injection (CO₂, natural gas, nitrogen).
- How gas injection improves oil displacement.
- Key design considerations for gas EOR.
- Injection patterns and reservoir monitoring.
- Managing operational risks in gas injection projects.
- Evaluating performance and adjusting operations.
- Case studies of gas injection applications.

• 04 Day Four

Chemical EOR Methods

- Introduction to chemical EOR (polymers, surfactants, alkaline flooding).
- How chemicals improve oil recovery efficiency.
- Selecting and designing chemical formulations.
- Managing chemical injection processes.
- Overcoming operational and environmental challenges.
- Monitoring performance and chemical efficiency.
- Lessons from field case studies in chemical EOR

• 05 Day Five

EOR Project Implementation and Optimization

- Planning and executing EOR projects.
- Monitoring and evaluating EOR performance.
- Troubleshooting common operational challenges.
- Strategies for optimizing recovery rates.
- Economic analysis and project viability.
- Post-project evaluation and continuous improvement.
- Future trends and technologies in EOR.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 4, 2025	May 8, 2025	5 days	4250.00 \$	Bahrain - Manama
Sept. 1, 2025	Sept. 5, 2025	5 days	4250.00 \$	UAE - Dubai
Dec. 8, 2025	Dec. 12, 2025	5 days	4250.00 \$	UAE - Abu Dhabi