



Oil, Gas and Chemical

Enhanced Oil Recovery

Course Introduction

Enhanced Oil Recovery

Enhanced Oil Recovery (EOR) techniques are essential for increasing the amount of crude oil extracted from oil fields. As conventional oil extraction becomes less effective, EOR methods help improve recovery rates and extend the life of reservoirs. Using EOR can significantly boost production, reduce operational costs, and make oil extraction more efficient. Understanding EOR techniques is critical for oil and gas professionals to maximize output and improve profitability.

This training program focuses on the main EOR methods and their practical applications. The program covers thermal, gas, chemical, microbial, and hybrid techniques. Each day highlights one main topic with key subtopics for in-depth learning. Participants will engage in workshops, real-life case studies, and practical exercises to strengthen their knowledge and skills.

Target Audience

- Process design
- Unit Operator
- Environmental
- Process safety engineer
- Gasoline blender engineer
- Lab supervisor
- Supply chain engineer
- Distillates analyst
- Models engineer
- Chemical Operator
- Chemical Plant Operator
- Chemical Process Technician
- Control Room Supervisor

- Gas Plant Process Operator
- Gas Production Operator
- Gas Terminal Operations and Storage
- Gathering Pipeline engineer
- Oil Terminal / Storage engineer
- Pipeline Maintenance / Equipment / Compliance / Repair
- Pipeline Testing / Technician / Supervisor / Safety
- Plant Equipment Operator
- Plant Operations Technician
- Plant Shutdown
- Plant Supervisor
- Power Distribution
- Power Plant Manager
- Process Supervisor
- Refinery Operations Technician / Manager
- Terminal Operator / Manager
- Utilities Operator

Learning Objectives

- Understand the fundamentals of enhanced oil recovery techniques.
- Learn how to select and apply the right EOR methods.
- Explore the advantages and challenges of different EOR techniques.
- Analyze real-life case studies to understand best practices.
- Prepare for future advancements and innovations in EOR.

Course Outline

• 01 Day One

Introduction to Enhanced Oil Recovery

- Definition and importance of EOR.

- Overview of primary, secondary, and tertiary recovery methods.
- Basic principles of EOR techniques.
- Key factors affecting EOR success.
- Economic and environmental considerations.
- Screening criteria for selecting EOR methods.
- Common challenges in EOR implementation

• 02 Day Two

Thermal EOR Techniques

- Introduction to thermal recovery methods.
- Steam injection and its applications.
- Cyclic steam stimulation (CSS).
- In-situ combustion techniques.
- Advantages and limitations of thermal EOR.
- Designing thermal EOR projects.
- Case studies on thermal EOR success stories.

• 03 Day Three

Gas Injection EOR Techniques

- Overview of gas injection methods.
- Use of CO₂ for enhanced recovery.
- Nitrogen and natural gas injection.
- Mechanisms of gas displacement.
- Monitoring and optimizing gas injection processes.
- Environmental impacts and mitigation.
- Real-life examples of gas injection projects.

• 04 Day Four

Chemical EOR Techniques

- Basics of chemical flooding methods.
- Polymer flooding to increase oil mobility.
- Surfactant and alkaline-surfactant-polymer (ASP) flooding.
- Design considerations for chemical EOR.
- Challenges and solutions in chemical injection.
- Economic analysis of chemical EOR projects.

- Case studies showcasing chemical EOR results.
- **05 Day Five**

Emerging and Hybrid EOR Techniques

- Introduction to microbial EOR (MEOR).
- Combining multiple EOR techniques for better results.
- Advances in nanotechnology for EOR.
- Use of AI and data analytics in EOR planning.
- Risk management in complex EOR projects.
- Trends and future innovations in EOR.
- Strategies for sustainable and efficient EOR applications.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 12, 2025	May 16, 2025	5 days	4250.00 \$	UAE - Dubai
July 7, 2025	July 11, 2025	5 days	5950.00 \$	switzerland - Geneva
Aug. 24, 2025	Aug. 28, 2025	5 days	4250.00 \$	KSA - Riyadh
Oct. 6, 2025	Oct. 10, 2025	5 days	4250.00 \$	UAE - Abu Dhabi