# Enhanced Oil Recovery

*Hydrodynamic modeling*

## About the course

Enhanced Oil Recovery (EOR) processes improve the performance of mature oilfields after waterflooding projects by modifying different physical properties of the fluids and/or the rock in order to mobilize the oil that remains trapped. EOR projects are highly time-consuming and require extensive planning, laboratory studies, pilot testing and simulation before full field implementation. Hydrodynamic modeling of EOR process is essential and requires knowledge of basic simulation rules and deep understanding of process itself. This course will show all techniques and key points in hydrodynamic modeling of EOR methods, such as chemical EOR, CO2 injection, and Smart Water implementation.

## Designed for

Reservoir engineers, geologists, or anyone who participate in field development plans and monitoring of EOR projects.

## What will You learn

Hydrodynamic modeling of Enhanced Oil recovery methods – important parameters, keywords, application of laboratory testing results in the model, sensitivity analysis and efficiency analysis through practical examples.

## Course content

- Basic concepts of hydrodynamic modeling
- Basic concepts of Enhanced Oil recovery methods
- Hydrodynamic modeling of:
    - Chemical EOR
    - CO2 injection
    - Foam injection
    - Smart Water injection