

# Improved and Enhanced Oil recovery

## *Basic concepts*

### About the course

As oil production via primary recovery is declining, the World needs production of additional oil reserves through secondary and tertiary production methods. This course will distinguish clearly what are those methods and their mechanisms of acting through comprehensive overview of reservoir engineering concepts. The course will outline different improved and enhanced oil recovery methods, general screening criteria for implementation and their applicability on different oil reservoirs. Practical examples will be shown and how one can predict total oil recovery for different methods via analytical calculations.

### Designed for

Reservoir engineers, geologists, or anyone who participates in field development plans and monitoring.

### What will You learn

How oil production can be increased through careful analysis and applicability screening of reservoirs and additional recovery methods, stating along all pitfalls, uncertainties and risks, having in mind economical limits.

### Course content

- General overview of oil recovery methods
- Basic concepts in Reservoir Engineering related to fluid displacement
- Screening criteria of reservoirs and methods
- Waterflooding and immiscible gas injection efficiency analysis and optimization
- Enhanced oil recovery methods and their key points
- Prediction of total oil recovery using analytical calculations