



## Naturally Fractured Reservoirs: Geologic and Engineering Analysis - FR

### COURSE

#### About the Course

This course covers geologic and engineering concepts, methodology, and technology used to characterize, evaluate, and manage naturally-fractured reservoirs. Applications and limitations of geologic and engineering procedures and tools are discussed. Field examples and case studies demonstrate the importance of integrated geologic and engineering studies in developing effective, economical reservoir management strategies for different types of reservoirs.

This course covers conventional reservoirs.

*"Liked real case examples on reservoirs from different fields. Effects of hydrocarbon production on reservoir fluid behavior."* - Senior Reservoir Engineer, Bahrain

*"Excellent instructor, presentation material. Increased understanding of the effect of pore pressure and stress on the natural fractured reservoir."* - Senior Reservoir Engineer, United States

#### Target Audience

Engineers and geoscientists interested in a multi-disciplinary approach to evaluating and predicting the overall effect of natural fractures on subsurface fluid-flow and subsequent reservoir performance.

#### You Will Learn

Participants will learn how to:

- Detect and predict subsurface natural fracture occurrence and intensity from cores and well logs
- Determine fractured rock properties affecting reservoir performance
- Design and analyze pressure transient tests in naturally-fractured reservoirs
- Evaluate reservoir performance in naturally-fractured reservoirs
- Develop and apply numerical simulation models to fluid-flow in naturally-fractured reservoirs
- Apply coupled geomechanics/fluid-flow behavior to reservoir management strategies in naturally fractured reservoirs
- Evaluate the impact of natural fractures on hydraulic fracture stimulation

#### Course Content

- Characterization of natural fractures and fracture systems
- Influence of mechanical stratigraphy and structure on fracture development
- Detection and prediction of subsurface natural-fracture occurrence and intensity from cores and well logs
- Fractured rock properties affecting reservoir performance
- Classification of naturally-fractured reservoirs with reservoir examples and potential production problems
- Naturally-fractured reservoirs: fluid-flow, well performance and well testing, reservoir performance, numerical simulation
- Geomechanics/fluid-flow
- Behavior and stimulation of naturally-fractured reservoirs
- Effects of natural fractures on reservoir permeability, anisotropy, drainage area, and waterflood sweep efficiency

## Product Details

Categories: [Upstream](#)

Disciplines: [Reservoir Engineering](#) [Geology](#)

Levels: [Specialized](#)

Product Type: [Course](#)

Formats Available: [In-Classroom](#)

Instructors: [PetroSkills Specialist](#) [Steven Ogilvie](#)