

## **(4) Hydraulic Fracturing**

### **WHO SHOULD ATTEND**

This short course is intended for Drilling / Completion, Reservoir, Production Engineers, field supervisors and engineering technicians who involved in planning, designing and execution of hydraulic fracturing treatment.

### **COURSE OBJECTIVES**

Understanding the concepts and getting practical knowledge and learn how to get the optimum design of hydraulic fracture treatment for various reservoir types in order to improve well productivity. Also, the course will cover the execution and post treatment evaluation for real case histories.

### **COURSE CONTENT**

This training will cover all the related issues to Hydraulic Fracturing concepts including but not limited to the followings:

- Introduction to hydraulic fracturing
- Hydraulic fracturing selection criteria
- Data acquisition and core measurements
- MicroFrac & MiniFrac testing
- Determining In-Situ stresses
- Fracture initiation and growth analysis
- Fracture containment considerations
- Fracturing fluids and additives properties and selection
- Proppant properties and selection
- Hydraulic fracture treatment design
- Hydraulic fracturing models
- Acid fracturing
- Frac & Pack
- New developments in hydraulic fracturing
- Hydraulic fracture treatment execution
- QA/QC of fracturing treatments
- Post treatment evaluation
- Hydraulic fracture class exercise