



Introduction:

This course provides the candidates with an opportunity to learn the fundamental approach in working and writing a Field Development Plan. It is a document which is an output of a sequence of decision and discipline based tasks designed to come up with a Development Plan. It is a basis for coming up with a robust way of developing, producing and maintaining hydrocarbon resource including surface design. It forms an input for designing associated surface facilities. Combined documents, both subsurface and surface form the basis for financial decision. The structured approach is achieved by applying concepts borrowed from different industries. These include project management, making a road map, risk register and stake holder mapping. The candidates will be introduced to all these concepts as they are applied in the process of coming up with a development plan in relation to the reservoir life cycle.

Who Should Attend?

Geologists, Petrophysicists, reservoir engineers, production engineers, laboratory researchers, and gas field operators and managers involved in or will be involved in developing hydrocarbon resources

Course Objectives:

By the end of this course delegates will learn about:

- Fundamental approach in writing a Field Development Plan
- Appreciate the need for updating the reservoir development plan during the different stages of reservoir & field life
- The concept and importance reservoir monitoring and data collection
- Introduction to the different concepts of Road map, risk register and stake holder mapping
- Essentials of a robust FDP
- Assess reservoir productivity and ultimate oil recovery based on reservoir geological model, rock and fluid properties and stipulated drive mechanism

- Identify and manage uncertainties in terms of hydrocarbon volumes, reservoir variability, productivity, and drive mechanism
- Calculate well inflow performance, design completion in accordance to well deliverability, consider environmental and facilities issues, and assess economic benefits
- Come up with field development and further appraisal, data gathering strategy to develop a robust plan that minimizes exposure, and maintains flexibility
- Address field & reservoir management surveillance issues

Course Outline:

- The different phases of a reservoir life cycle
- Project Management and Field Development Plan
- Reservoir modelling, dynamic model
- Economic analysis and scenario design
- Development drilling
- Production operations
- The reason and the need to come up with a field development plan in order to exploit the reservoir in an appropriate manner
- Introduction of different field development options for the reservoir
- Data integration and their interdependence
- Integration and timing of subsurface and surface for decision making process
- The different interfaces and their relationship and data gathering and need for reservoir monitoring
- Wells & facilities
- Well completing design
- Treatment plant & pipeline sizing
- Various components of a Field Development Plan
- The different tasks and activities that need to be done and reported in a Field Development Plan
- Review the concepts of FDP
- Introduction to Opportunity Framing Workflow
- Road map