

Fundamentals of Field Development Planning

Consultant / Trainer

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The **Petrogenium** (in collaboration with EPTS) **Fundamentals of Field Development Planning** participants will gain a clear understanding of how to develop and evaluate a comprehensive Field Development Plan that integrates technical, operational, and economic considerations. They will learn to apply structured workflows that connect subsurface characterization with surface facility design and financial decision-making. The course will also enhance their ability to work effectively within multidisciplinary asset teams, improve their understanding of the reservoir life cycle, and strengthen their capability to contribute meaningfully to field planning, development, and optimization discussions within their organizations.



Participants

This **Petrogenium**. course aims at multi-disciplinary asset teams of operating companies comprising of engineers, geoscientists, and managers who are involved in or will be involved in developing hydrocarbon resources.



Learning Objectives

The Field Development Planning course aims to help participants understand the fundamentals of creating and applying a Field Development Plan throughout a reservoir's life cycle. It teaches the integrated decision-making process that combines geological, engineering, and operational inputs to develop a robust plan for exploring, producing, and maintaining hydrocarbon resources. Participants learn how the plan links subsurface data with surface facility design and serves as a foundation for financial and investment decisions. The course also builds appreciation for multidisciplinary collaboration within asset management teams to ensure coherent and economically sound field development strategies.

Programme

Day1

FDP Overview

- Reservoir Management Concepts and Processes
- Integrated Reservoir Study - People and Skills
- Essentials of Robust FDP
 - Field Development Options
 - Project Stakeholders
 - Risk Management Process
 - Risk Register
- Field Development Planning Template

On the first day, participants will learn the phases of a reservoir life cycle, the reservoir management process and concepts, team structure in integrated reservoir studies. Essentials of robust FDP will also be discussed. The day will end with a discussion on the Field Development Planning Template.

Day 2

Reservoir Model - Static

- Integrated Field Planning: Key Elements
- Structural Framework
- Faces Modeling - Depositional Systems
- Property Modeling - Petrophysics
- Property Modeling - Geophysics
- Elements of Static Model Building

Day two of this course will focus on the Static Reservoir Model. Participants will learn about the key elements of an integrated field planning. Elements of Static Model Building will also be discussed.

Day 3

Reservoir Model - Dynamic

- Dynamic Model - Upscaling
- Dynamic Model - Initialization
- Dynamic Model - Building
- Dynamic Model - Calibrating
- Predicting Performance
- Example Development Scenarios

Day three will focus on the Dynamic Reservoir Modeling. Specifically, on this day, participants will learn how predicting performance by dynamic model helps robust field development planning.

Programme

Day 4

Facilities, Economics and Optimization

- Surface Facilities
- Development Plan Optimization
- Project Ranking
- Expected Value and Value of Perfect Information

On day four, participants will learn the importance of surface facilities in field development planning. Economical analysis and optimization of development scenarios, project ranking will also be discussed. The day will end with learning the expected value and value of perfect information.

Day 5

Development Examples - New Field , Mature Field, Waterflood

- Field Development at Different Stages of Reservoir Life Cycle
 - Appraisal
 - Developing
 - Producing
 - Monitoring Production
 - Phases of Production
 - IOR/EOR
- FDP Examples
 - New Filed
 - Mature Field
 - Waterflooding

The last day of the course will continue with the review of Field Development Plan concepts. Participants will also learn about the reservoir appraisal and development planning. The day will end with generic examples of field developments.

Why select Petrogenium.?

The above support will be provided by principal consultants with 30+ years world-class experience in the technology and hands-on know-how from operation of refinery units.

Contact Petrogenium.:

Email: training@petrogenium.com
Website: <https://www.petrogenium.com/training/>

Because Experience Matters