



Oil & Gas Fields Development Project  
Training Program



# Oil & Gas Fields Development Project Training Program

## Introduction:

Working within the oil and gas industry provides a complex project environment with unique project management challenges. This oil and gas field development plan and project training course is designed to support industry decision-makers, ranging from project selection to management and leadership of project components. It provides hands-on experience using industry project case studies.

This oil and gas field development plan and project course follows a current offshore project example through all its stages, from inception to completion. It equips participants with the skills to deliver projects effectively. It touches on decision-making processes used by business development and commercial departments, front-end engineering design FEED, and the planning and delivery stages.

This oil and gas field development plan and project training program emphasize industry best practice Project Management examples woven into actionable instructions. By delving into established processes and tools, the course aims to enhance the likelihood of future projects achieving their desired outcomes, with benefits delivered as planned by the project.

## Targeted Groups:

- Program and Project Managers.
- Project Management Professionals.
- Related Senior Project Support Managers.
- Senior Management Decision Makers.
- Commercial Management Personnel.
- Project Lead Engineers.
- Project Control and business services professionals responsible for planning and controlling project schedules and costs in client and contracting companies.

## Course Objectives:

At the end of this oil and gas field development plan and project course, participants will be able to:

- Understand the integration of Scope, time, resources, and cost management into a dynamic project management plan.
- Define, design, and integrate user requirements into the project systematically.
- Identify sources of risk and learn how to mitigate potential risks and deal with uncertainty.
- Develop project network diagrams for CPM and advanced PERT calculations to identify schedule and cost risks.
- Formulate a project recovery plan for budget and schedule overruns.
- Generate clear and concise project progress reports.
- Employ earned value techniques to measure, forecast, and control project performance.

## Targeted Competencies:

At the end of this oil and gas field development plan and project training program, participants' competencies will be able to:

- Undertake Front-End Design and Survey in an Oil and Gas Environment.
- Establish the essential requirements for approval of the oil and gas project.
- Appraisal of the strategic fit and options available for project delivery within Oil and Gas organizations.
- Achieve successful project integration and delivery.
- Leadership and management of successful project teams.

## Field Development Planning in Oil and Gas:

An ordered sequence of developmental phases is crucial throughout the lifecycle of an oil and gas project, from exploration through development and production. These phases typically include exploration, appraisal, field development planning, and field development execution, culminating in the production phase.

A well-structured field development plan lays a critical foundation, detailing how hydrocarbon reserves will be commercially extracted. Professionals engaged in field development projects will gain insights into the importance of each phase and how rigorous planning, coupled with the practical application of engineering principles, is pivotal to the successful development of oil and gas fields.

Field Development Planning FDP is a comprehensive process involving strategic planning and engineering to develop and manage an oil or gas field effectively. FDP encapsulates many facets, including selecting well-located, thorough project scheduling, resource allocation, and integrating infrastructure required to extract, process, and transport hydrocarbons.

A robust field development plan harnesses a detailed understanding of the reservoir and overlying production systems to maximize economic extraction. It underscores the significance of meticulous FDP in steering oil field development projects toward optimal production outcomes.

## Course Content:

### Unit 1: Concepts of Project Management & Project Approval Intricacies in the Oil & Gas Industry:

- The distinction between Projects and Programmes.
- Exploration of Project Life Cycles and Stage Gates.
- The Project Sanction and Approval Process PSAP for the Oil and Gas Industry.
- Development of the Strategic Project Business Case.
- The Significance of Project Identification and Accountability.
- An analysis of Exploratory Decision-making processes.

## **Unit 2: Project Context for Oil & Gas Projects:**

- Exploration of the Macro-environment concerning Project Choice.
- Identification and impact analysis of Project Stakeholders.
- Review of Regulatory Frameworks, Institutional Factors, and Infrastructure.
- Recognition of Project Feasibility Decision Makers.
- Assignment of Project Preparation & Planning Responsibilities.

## **Unit 3: Project Financial Modelling and Project Leadership Skills:**

- Structuring Project Finance Deals.
- Financing/Credit Risk Considerations for the Oil and Gas Project.
- The Time Value of Money.
- How does it apply to project finance?
- Yields and Rate of Return - Discounted Cash Flow DCF Analysis
- Build an Executive Leadership Style that guides the project toward more excellent performance and profit.
- Understand the Project Organisation in a typical Oil and Gas project.
- Project Manager - Unique Requirements.

## **Unit 4: Identifying Reasons for Project Failures & Preparing for Successful Delivery and Integration:**

- Understand Why some projects fail.
- Gain an Understanding of Successful Projects and Analyse Reasons for Success.
- Development of the Project Charter.
- Define the Success Criteria and KPIs of an example Oil and Gas Project.
- Capture Project Requirements.
- Understand the Need for a Project Team Approach.
- Importance of Communication in an Oil and Gas project.
- Working Collaboratively.

## **Unit 5: Developing Project Stakeholder Relationships & Enhancing Project Communication:**

- Identify and Plan to engage with the Project's Key Stakeholders.
- Creating Project Dashboards.
- Presenting Decisions to the Project Board.
- Recognizing the need for Project Recovery.
- Control Decision-making.
- Delivering Successful Projects within the Oil and Gas Industry.

## **Unit 6: Preparing for Project Delivery:**

- Understand the key stakeholders and how they may impact the project.
- Consider the implications of unclear needs and expectations.
- Understand the Project Success Criteria and How the Project will be measured as Successful.
- Define the Project Requirements.
- Develop the Scope - using product and work breakdown structures.
- Utilize Relevant Techniques for Project Estimating.

## **Unit 7: Project Planning - Schedule, Cost & Resources:**

- Develop a Network Diagram.
- Developing the Precedence Network Diagram with Total and Free Float Calculations.
- Develop a Gantt Chart -The Schedule Baseline.
- Understand How to Estimate Project Cost Baseline.
- Familiarise Yourself with Different Contract Types according to Risk Distribution.
- Learn the Difference between Fixed Price and Cost-Plus Contracts.
- Resource Allocation Algorithms for Resource Prioritisation.
- Planning and Scheduling Limited Resources.
- Options for Accelerating the Schedule and How to Deliver.

## **Unit 8: Managing Risks & Resources:**

- Risk Management Process and Model.
- Identifying Potential Risk Events Typical in an Oil and Gas project.
- Understand Qualitative and Quantitative Analysis Techniques.
- Design Appropriate Risk Response Planning Strategies.
- Challenges of an Oil and Gas Project Team.
- Learn about Different Leadership Models.
- Dynamics of Team Development and Motivation.

## **Unit 9: Managing Project Changes & Upholding Quality:**

- Change Management within Projects.
- Best Practice Change Processes for Projects.
- Tracking of Projects using Earned Value Management EVM.
- Management of Variable Conditions.
- Exploration of the Critical Chain Method in Oil and Gas Projects.
- Introduction to Project Support Office Benefits.
- Learn about Project Quality Management.
- Differentiating between Quality Planning, Assurance, and Control.
- Application of Quality Tools within Projects.

## **Unit 10: Focusing on Delivery & Project Closure:**

- Preparation for Operational Considerations in Project Delivery.
- Project Cost and Schedule Recovery Techniques for the Oil and Gas Industry.
- Understand the effects of Late Recovery Practices.
- Project Management Reporting.
- Techniques for Effective Project Handover and Closure.
- The Significance of Capturing Lessons Learned.