



Estimating, Planning & Scheduling of
Projects for Oil & Gas Production



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Introduction:

Working within the Oil & Gas industry provides a complex project environment that throws up its particular project management challenges. This detailed and integrated training course will assist anyone in the industry to make better decisions on projects, whether they are involved in project selection, management, or leading aspects of projects. This course provides the opportunity for hands-on experience using industry project case studies - and follows one current offshore project example from the cradle to the grave.

This interactive training course provides participants with the skills required to deliver projects effectively, from decision-making concepts used by business development and commercial departments, through to FEED and into planning & delivery.

This course focuses on industry best practice Project Management examples merged into practical instruction. Digging deep into tried and tested processes and tools, to best support the likelihood of future projects achieving their desired results and benefits delivered by the project.

This course has been designed as a roadmap to ensure that the reasoning behind project selection is understood. When we combine that with the development of skills in detailed planning, organizing, and execution delivery, and closing out the project successfully, we are looking to progress our project management career with confidence

Targeted Groups:

- Project Managers
- Senior related Project Support Managers
- Senior management decision-makers
- Commercial Management Personnel
- Project Lead Engineers
- Project Control and business services professionals who have the responsibility for planning and controlling project schedules and costs in client and contracting companies

Course Objectives:

At the end of this course the participants will be able to:

- Cover the management techniques for mitigating projects with compressed schedules
- Identify project success factors and characteristics
- Apply advanced applications of Lead/Lag scheduling in construction
- Discuss the unique problems related to schedule updating, cost control, and cash flow
- Gain negotiation skills that can diffuse conflicts and resolve disputes thus saving time and money
- Explain important warranty and contractual issues
- Recognize the challenges of integrating state-of-the-art management methods and technologies for construction projects

Targeted Competencies:

- Identifying and managing stakeholders and communication needs in the Oil & Gas industry
- Maintaining continuous project performance and delivery control
- Accurately estimate and allocate project costs and resources
- Compressor accelerate the schedule when required by adverse circumstances
- Developing a project close-out plan in line with expected success criteria

Course Content:

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

- Projects and Programs
- Project Life Cycles and Stage Gates
- Project Sanctioning and Approval Process. PSAP for the Oil & Gas Industry
- Development of the Strategic Project Business Case
- Project Identification-Awareness of accountability of Project Ideas
- Exploratory decision-analysis.

Unit 2: Project Context for Oil & Gas Projects:

- Appreciation of macro-environment about project choice
- Understand who stakeholders are and how they may impact upon the project
- Regulatory framework, institutional factors and infrastructure
- Project Feasibility Decision-makers
- Project Preparation & Planning responsibilities
- Project Financial Modelling and Project Leadership Skills:
- Structuring project finance deals
- Financing/ credit risk considerations for the Oil & Gas project
- The time value of money - how it applies to project finance
- Yields and rate of return - Discounted Cash Flow DCF analysis
- Build an executive leadership style that guides the project toward greater performance and profit
- Understand the Project Organisation in a typical Oil & Gas project
- Project Manager-Unique Requirements

Unit 3: Identify Reasons for Project Failures & Prepare for Successful Delivery and Integration:

- Understand why some projects fail
- Gain an understanding of successful projects and analyze reasons for success
- Development of the Project Charter
- Define success criteria and KPI's of an example Oil & Gas project
- Capture Project Requirements
- Understand the need for a project team approach
- Importance of communication in an Oil & Gas project
- Working Collaboratively

Unit 4: Development Project Stakeholder Relationships & 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

Unit 5: Preparing for Project Delivery:

- Understand who the key stakeholders are and how they may impact upon the project
- Consider 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 6: 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 & Cost-Plus Contracts
- Resource Allocation Algorithms for Resource Prioritisation
- Planning and Scheduling Limited Resources
- Options for accelerating the schedule and how to deliver

Unit 7: Manage Risks & Resources:

- Risk Management Process & Model
- Identifying Potential Risk Events typical in an Oil & Gas project
- Understand qualitative and quantitative analysis techniques
- Design appropriate risk response planning strategies
- Challenges of an Oil & Gas project team
- Learn about different leadership models
- Dynamics of Team Development & motivation.

Unit 8: Managing Project Changes while Maintaining Quality:

- Managing change in projects
- Understanding the best-practice change processes used in projects
- Tracking the project - using Earned Value Management EVM
- Managing Variable Conditions - managing the tensions
- Learn about the critical chain and its growing popularity in the Oil & Gas industry
- The benefits of utilizing a Project Support Office
- Project Reviews
- Learn about Project Quality Management
- Differentiate between Quality Planning, Assurance & Control
- Understand how quality tools can be used

Unit 9: Staying Focused, Delivering, and Closing your Project:

- Recognizing the operational considerations that need to be met and prepared for
- Learn about Project Cost and Schedule Recovery Techniques relevant to the Oil & Gas industry
- The implications of late recovery practices
- Project Management Reporting
- Project Handover & closure