



N841: Effective Project Management for the Oil and Gas Industry

Instructor(s): David Silar

3 Days

Competence Level:
Not Applicable



Classroom Course

Summary

This course provides a comprehensive understanding of cross sector project management best practice and how this can be applied in an E&P environment. The attendees will be equipped with the tools and techniques to deliver their projects on time, on budget and to an extremely high standard. This course is designed for those working within technical teams and uses an energy industry simulation project throughout the course.

Learning Outcomes

Participants will learn to:

1. Employ best practice tools and techniques using an energy industry simulation project.
2. Compare and contrast organizational structures and roles.
3. Examine different project life cycles and relate to their own work environment.
4. Define contexts and environments in which projects can be delivered and apply best practice tools and techniques.
5. Establish the needs and requirements for governance of project management.
6. Establish the benefits of structured methodologies.
7. Determine the need for effective communication within project environments.
8. Establish the principles of leadership and teamwork and correlate its contribution to project success.
9. Determine the requirements, inputs and outputs of effective project planning.
10. Understand project scope management and employ different techniques to increase understanding.
11. Use and interpret schedule and resource management techniques, tools and documents.
12. Understand project procurement and establish key inputs to procurement strategies.
13. Demonstrate an understanding of project risk management, generate risk response plans and critique those plans.
14. Differentiate between project risk and issue management and establish roles and responsibilities.
15. Determine the key areas of project quality management and examine a number of quality management tools and techniques.
16. Establish the needs for effective project monitoring and control and interpret project data.
17. Generate personal action plans to maximize the benefits of learning back into the workplace.

Duration and Training Method

A three-day classroom based course. This course is highly interactive and uses presentations, group exercises, models, case studies and simulations. The use of the energy industry case studies contextualizes the learning through the use of participative exercises that increase the retention of the knowledge gained. The course is delivered by a fully accredited project professional.

Who Should Attend

This course is designed for technical staff working in a project environment and all those who would benefit from exposure to best practice in project management within the oil and gas industry.

- Existing project managers keen to experience best practice as defined by the Project Management



Institute (PMI) *See Additional Information Section for more details

- Those new to projects looking to add new Skills to their technical tool kit
- Project team members who wish to better understand the responsibilities and activities involved in project management
- Project team members who wish to progress into a career as a project manager

Prerequisites and Linking Courses

There are no prerequisite courses.

Course Content

Introduction and Definitions

Project context and environments

- Distinguish between projects and business as usual (BAU)
- Differentiate between project management and portfolio and program management
- Determine the characteristics of program management and its relationship with strategic change
- Determine the challenges a project manager may face working within a program.
- Determine where the use of portfolio management may be appropriate
- Determine how environmental factors affect projects (including the sector, geography and regulation)
- Apply tools and techniques used to assess a project's context (including PESTLE, SWOT)

Governance of project management and the use of structured methodologies

- Determine the principles of governance of project management; policies, regulations, functions, processes, procedures and responsibilities
- Determine the advantages of using standard project management methodologies across an organization

Project life cycles

- Define a project life cycle and project life cycle phases (including concept, definition, development, handover and closure and benefits realization)
- Establish why projects are structured as phases (including the use of end of phase reviews, go/no go decisions and high level planning)
- Determine the differences between a project life cycle and an extended life cycle
- Determine the benefits of conducting reviews throughout the project life cycle (including project evaluation reviews, gate reviews, post project reviews, peer reviews, benefits reviews and audits)

How organizations and projects are structured

- Differentiate between types of organization structures highlighting advantages and disadvantages of each (including functional, matrix, project)



- Demonstrate the way in which an organizational breakdown structure is used to create a responsibility assignment matrix
- Determine the role and key responsibilities of the project manager
- Differentiate between the responsibilities of the project manager and project sponsor throughout the project life cycle
- Distinguish between other roles within project management including users, project team members and the project steering group/board
- Determine the functions and benefits of different types of project office (including project support office (PSO), enterprise project management office {EPMO}, project services or centers of excellence)

Planning for Success

- Determine the purpose of a business case and its importance during the project life cycle
- Determine who has authorship and approval of the business case
- Examine benefits management (including success criteria and key performance indicators and their uses in measuring project success)
- Define an information management system (including collection, analysis, storage, dissemination, archiving, destruction of information)
- Define the purpose of the project management plan and its importance throughout the project life cycle
- Determine the typical contents of a project management plan
- Analyze estimating techniques (including analytical, comparative, parametric, three-point, PERT formulae)
- Determine the reasons for and benefits of re-estimating through the project life cycle and the concept of the estimating funnel
- Demonstrate the stakeholder management processes
- Analyze advantages and disadvantages of earned value management
- Perform earned value calculations and interpret earned value data

Communication within project management

- Determine the key contents of a project communication plan
- Determine the benefits of a project communication plan
- Demonstrate the importance of effective communication in managing different stakeholders
- Compare factors which can positively or negatively affect communication
- Determine how to plan and conduct different negotiations (including formal, informal, competitive and collaborative)

Project scope management

- Determine scope in terms of outputs, outcomes and benefits (including use of product breakdown and work breakdown structures)
- Determine how to manage scope through requirements management processes (such as capture, analysis, justifying requirements, baseline needs) and configuration management processes (such as planning, identification, control, status accounting, audit and verification)



- Differentiate between the different stages of change control (such as request, review, assessment, decision, implementation)
- Quantify the relationship between change control and configuration management
- Examine the advantages and disadvantages of a change control process

Schedule and resource management

- Determine the process for creating and maintaining a schedule
- Employ different techniques for depicting a schedule (including network diagrams, critical path analysis, Gantt chart, milestone chart)
- Examine advantages and disadvantages of using software scheduling tools
- Determine categories and types of resources (such as human resources, consumable and re-usable equipment, materials, space)
- Define how resources are allocated to a schedule
- Differentiate between resource smoothing and resource leveling
- Determine what is meant by budgeting and cost control

Project Procurement

- Determine the purpose, typical content and importance of a procurement strategy
- Distinguish between different methods of supplier reimbursement (including fixed price, cost plus fee, per unit quantity, target cost)
- Distinguish between different contractual relationships
- Illustrate a supplier selection process

The principles of leadership and teamwork

- Determine typical leadership qualities
- Determine the principles and importance of motivation
- Define the impact of leadership on team performance and motivation (using models such as Maslow, Herzberg and McGregor)
- Define the characteristics and benefits of effective teams and teamwork
- Determine factors involved in the creation, development and management of teams (models such as Belbin, Margerison-McCann, Myers- Briggs, Tuckman, Katzenbach and Smith)

Risk management and issue management

- Analyze each stage in a risk management process (such as initiate, identify, assess, plan and implement responses)
- Determine the benefits of project risk management
- Distinguish between risks and issues
- Determine the advantages and disadvantages of risk and issue escalation

Project quality management

- Define quality management



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- Define quality planning, quality assurance, quality control and continual improvement
 - Determine the benefits of the quality management process

* Additional Information

This course follows the Project Management Institute (PMI) Professional Syllabus.

PMI's standards for project, program and portfolio management are the most widely recognized standards in the profession and increasingly the model for project management in business and government.

On completion of this course, participants may choose to demonstrate their knowledge by taking the PMI Professional (PMP) examination, meaning that they will possess a globally 'portable' credential recognized in other countries. Please discuss this with your Nautilus representative who will advise on how this can be achieved.