

Project Management Fundamentals

Course Outline

2 day course

Objectives

After completing this course you will know how to:

- Understand the characteristics of a project
- Understand Product and Project Management and the Project Life Cycle
- Recognize Common Pitfalls when managing a project
- Understand the skills, responsibilities and challenges of the Project Manager
- Understand the Project Team and the Project Office
- Know how to initiate a project and create the scope statement
- Understand a Work Breakdown Structure (WBS) and Work Packages
- Know how to manage changes to the scope of a project
- Understand effective time management using tasks, activities and events
- Know how to develop, control and present Project Schedules
- Know how to identify resources and approximate costs
- Understand Budgeting and Cost control

Pre-requisites

None

Course Contents

Introduction to Projects

What is a Project?
Characteristics of a Project
Understanding Product and Project Management
The Project Management Process (Life Cycle)
Common Pitfalls when managing a Project

Characteristics of a Project

The Project Environment
Internal and External Environments
Project Stakeholders
Socioeconomic and Organisational Issues

Organisational Structure
Project Organisational Structure
Matrix Organisational Structure

The Project Manager

Project Management Skills
Project Manager Responsibilities
Project Manager Challenges

The Project Team

Skills Inventories
Consultants and Vendors
Managing difficulties and logistics
Team Building
The Project Office

Project Initiation and Scope Planning

- Project Initiation
- Authorising Project
- Project Deliverables
- Project Charters
- Constraints and Assumptions
- Scope Planning
- Creating a Scope Statement

Scope Definition, Verification and Change Control

- Scope Definition
- Work Breakdown Structure
- Work Packages
- Scope Verification
- Requirements
- The timing of scope verification
- Scope Change Control
- Scope Change Control Systems
- Database of lessons learnt

Time Management

- Activity definition and sequencing
- Tasks, Activities and Events
- Activity Relationships
- Activity Dependencies
- Diagramming Techniques
- Activity Duration
- Assessing activity duration
- Activity Duration and Work Effort
- Estimation Techniques
- Unit Summary

Schedule Development and Control

- Risk Management and Schedule Development
- Network Diagrams and Schedule Development
- Schedule Development Techniques
- CPM Terms and Calculations
- Comparing CPM, PERT, and GERT
- Duration compression methods
- Presenting Project Schedules
- Schedule Control
- Resource Allocation
- Schedule Adherence
- Schedule Updates
- Schedule Variance

Resource Identification and Cost Approximating

- Resource Identification Tools
- Types of Resources
- Assigning Resources
- WBS and Cost Approximating
- Life cycle costing
- Effects of risks on cost estimates
- Cost budgeting techniques
- Project Estimating Pitfalls

Budgeting and Cost Control

- Cost budgeting
- Value engineering and S Curves
- Cost Management Plans
- Capital Budgeting
- Methods of calculating depreciation
- Cost Control (Earned Value)
- Variance Analysis and Calculation
- Performance Index Calculation
- Completion Calculations