



# Project Management Concepts, Tools & Techniques

Course ISI-1438

5 Days

Instructor-led, Hands on

## Introduction

This highly interactive 5 day, instructor-led workshop is designed to give participants a solid foundation in the concepts, tools and techniques of formal project management. While introductory in nature, this course is extremely comprehensive, covering the five key process groups and 38 core competencies associated with effective and efficient project management practice. Participants not only acquire technique-based proficiencies, but also explore and practice essential people skills and teamwork. The concepts and methods learned are immediately usable in the workplace, leading to a greater retention of newly acquired skills, measurable project improvements, and the achievement of desired project results.

Audience: Those who want to understand basic project management skills and concepts.

## Course Objectives:

Students will gain the following knowledge and skills:

- Build a Work Breakdown Structure (WBS).
- Use a network diagram to display a Project Evaluation and Review Technique (PERT) chart.
- Use the Critical Path Method (CPM) in the network diagram to ensure the correct project duration.
- Estimate and schedule project tasks.
- Apply resources to a project plan.
- Explore different personality types and learn how they affect project management.

## Prerequisites

- None

## Course Outline

### Module 1. Project Management Concepts

- Project Management in the Enterprise Environment
- Programs
- Projects and Sub-Projects
- Portfolios
- Project Management Offices (PMOs)
- So What is Project Management?

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- Project Management Activities
- Project Management Process
- Project Phases
- Project Life Cycle (PLC)
- Rolling Wave Planning
- What Defines a Successful Project?
- The Project Management Triangle
- Critical Success Factors
- The Project Manager's Skills and Knowledge
- The Project Manager's Role
- The Project Participants
- The Project Sponsor
- The Stakeholders
- The Project Team
- The Project Environment
- Culture and Style
- Structure
- Project Management System

## **Module 2: The People Side of Project Management**

- The People Side
- The Social Style Model™
- Behavioral Dimensions
- Assertiveness/Responsiveness
- The Social Style
- Social Style Characteristics
- Social Styles, Strengths and Challenges
- Social Style and Backup Behavior
- Versatility
- Working With Others
- Analytical Social Style
- Driving Social Style
- Working With Others (cont'd)
- Expressive Social Style
- Amiable Social Style
- Building on Your Strengths
- Classification Ethics
- The Communication Process
- Virtual Communications

## **Module 3: Initiating the Project**

- Project Initiation
- Defining Need
- Defining Feasibility
- Demonstrating Need and Feasibility
- Project Stakeholder Management

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- Project Charter
- Project Description
- Project Purpose
- Project Objectives
- Project Requirements
- Triangle Flexibility

## **Module 4: Planning the Project**

- Why Do You Plan
- Developing the Project Management Plan
- Components of the Project Management Plan
- Project Scope
- Project Scope Statement
- Project Deliverables
- Exclusions
- Constraints
- Assumptions
- Approach
- Plan Procurement Management
- Characteristic of an Effective Project Plan
- The Investment of Planning

## **Module 5: Decomposition Using a Work Breakdown Structure**

- Project Decomposition
- Benefits of Decomposition
- Decomposition Using a Work Breakdown Structure
- Benefits of the Work Breakdown Structure
- Work Breakdown Structure Hierarchy
- Work Breakdown Structure Format
- Work Package
- Work Breakdown Structure Graphic Conventions
- Work Breakdown Structure Diagramming Rules
- Work Breakdown Structure List Conventions
- Work Breakdown Structure Dictionary
- Activity Definition
- Skills Matrix
- Scope Baseline Activities

## **Module 6: Estimating**

- Estimating Accuracy
- Effort, Duration, and Cost
- Effort vs. Duration
- Methods for Estimating Effort
- Weighted Average
- Expert Judgment, Delphi, and Parametric Estimating

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- Analogous and Computerized Tools
- Analogous Estimating
- Computerized Tools
- Function Point Estimating
- Function Point Analysis
- Estimating Variables
- Estimating Cost
- Cost Budgeting
- Cost Baseline

## **Module 7: Sequencing and Scheduling**

- Determining Sequence and Schedule
- Precedence Diagramming Method (PDM)
- Dependencies
- Milestones
- Producing the Network Diagram
- Precedence Logic
- Estimating Activity Resources
- Estimating Activity Duration
- Lag
- Lead
- Apply the Calendar
- Network Terms
- Critical Path Method
- Determine the Critical Path – Forward Pass
- Calculating Float – Backward Pass
- Gantt and Bar Charts
- Time/Cost Target

## **Module 8: Organizing and Acquiring Staff**

- Human Resource Planning
- Acquire the Project Team
- Responsibility Assignment Matrix
- Constraints
- Resource Histograms
- Resource Leveling
- Develop the Project Team
- Team Website

## **Module 9: Control Plans**

- Planning for Control
- Quality Management Plan
- Quality Planning
- Quality Assurance
- Quality Control
- Communications Management Plan
- Developing the Communication Plan

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- Change Control
- Reasons for Change
- A Typical Change Control Procedure

## **Module 10: Risk Management**

- What is Risk?
- Elements of Risk Management
- Risk Management Planning
- Risk Identification
- Qualitative Risk Analysis
- Risk Response Planning
- Responses for Negative Risk
- Responses for Positive Risk and Opportunity
- The Risk Register
- Contingencies and Reserves
- Risk Management Method
- Risk Management Worksheet

## **Module 11: Executing the Project**

- Project Execution
- Guidelines for Executing a Project Phase
- Tools and Techniques for Executing the Project Plan
- Project Kickoff
- Work Results
- Tracking Progress via Status Reports
- Assessing Project Status via Status Meetings
- Pitfalls of Project Execution

## **Module 12: Monitoring and Controlling the Project**

- Project Control
- Key Control Activities
- Planning vs. Monitor and Control
- Prerequisites for Effective Monitoring and Control
- Performance Monitoring and Reporting
- Performance Reports
- Current State Report
- Original Baseline Report
- Trend Report
- Narrative Overview Report
- Trend Analysis
- Interpreting Trends
- Questions to Ask Yourself
- Taking Corrective Action
- To Control Quality
- To Shorten the Project Duration
- To Reduce Costs
- To Accommodate Increasing Scope
- Tracking and Logging Changes
- Requested Modifications
- Corrective Actions



- Guidelines for Monitoring and Controlling a Project Phase
- Pitfalls to Project Control

### **Module 13: Closing the Project**

- Closing
- Administrative Closure Activities
- Lessons Learned

### **Module 14: Summary and Conclusion**

- Critical Success Factors
- Project Management Functions
- Conclusion