



Project & Contract Management

Value Engineering and Cost Reduction

Course Introduction

This comprehensive training course consists of two modules:

- **Module 1** - Project Scheduling & Cost Planning Skills

Project scheduling is a mechanism to communicate what tasks need to get done and which organizational resources will be allocated to complete those tasks in what time frame. A project schedule is a document collecting all the work needed to deliver the project on time.

- **Module2** - Value Engineering Skills: Improving Performance & Profitability

This course focuses on how to deliver reliable estimates that can result in significant savings later in the project life. To develop reliable cost and schedule estimates is one of the critical management skills and is addressed in this course.

Target Audience

- Project Manager
- Business Administrator
- Marketing Coordinator
- Account Executive
- Chief Operating Officer
- Operations Manager
- Executive Administrative
- Risk Manager
- Program Manager
- Business Analyst

- Quality Control Coordinator
- Assistant Manager
- Team Leader
- Senior Supervisors
- Researcher
- Entrepreneur
- Management Consultant
- Public Relations Director

Learning Objectives

- Manage and mitigate schedule, cost, scope, and resource risks associated with the project.
- Develop a project recovery plan for budget and schedule overruns.
- Identify value mismatches through the ratio of whole life costing.
- Capture & incorporate stakeholders' input in the development of the project charter & plan.
- Know the fundamental concepts of Value Engineering and Analysis

Course Outline

- **Day 01**

- Module 1**

- Project Scheduling and Cost Planning Skills**

- Project Estimating Basics**

- Basic Project Management definitions
 - Triple Constraints – Time, Cost, Scope
 - Project Selection Methods

- Defining the Project Scope
- Cost & Schedule Estimation, cost Budgeting & Control
- Project Schedule Planning and Critical Path Method

Developing Project Budget and Schedule Control

- Project management inputs to cost budgeting
- Resource Requirements
- Direct & Indirect Project Costs
- Planning and Scheduling Limited Resources
- Options for Accelerating the Schedule
- Crashing the Schedule - How?

• Day 02

Managing The Risks

- Risk Identification, Analysis & Management
- Contingency Reserve
- PERT, Probability and Standard Deviation Formula
- Network Activity Risk Profiles
- Application: Estimating Project Duration
- Project Risk Strategies

Measuring Project Performance

- Balanced Project Schedule without Buffers (Finish-Start) and Inserting Buffers
- Comparison of Unbalanced with Balanced Schedules
- Measuring Planned Progress on Schedule
- Risk distribution in contracting
- Actual Progress and Work Conditions
- Managing Variable Conditions

• Day 03

Module 2

Performance and Profitability

Framework for applying Value Engineering Projects.

- Defining Value and Value Engineering concepts and principles
- How and when is Value Engineering applied?
- Project definition through stakeholder analysis and management
- Team player styles
- Identifying relationships between Value, Cost and Worth
- Overview of Different Value Engineering Phases

The Function Analysis Phase - Expressing Project Functional Needs and Constraints.

- The Information Phase – steps and procedures
- Developing Value Engineering Job Plan
- Defining project constraints
- What is function analysis and Function-Cost-Worth Analysis
- Developing FAST Diagrams to identify critical project components
- Cross-Functional Project Team Approach

• Day 04

Creative Thinking

- Creative thinking techniques
- Reaching consensus and leveraging the power of project team collaboration
- Project risk perception and identification
- Identifying priorities through paired comparison
- Output of the Creative Phase

The Evaluation Phase - Making Informed Project Decisions

- Project evaluation methods

- Performing project risk and scenario analyses
- Life-cycle costing techniques
- Incremental benefit-cost analysis for project evaluation
- Effective Decision-making in project environment
- Output of the Evaluation Phase

• Day 05

The Planning and Reporting Phases - Getting Results Through Effective Communication

- Develop and assess VE proposals to optimize project value
- Action planning roles and responsibilities
- Reporting VE findings to Senior Management and project stakeholders
- Incorporating VE into the early project phases
- Integrating VE with Continuous Improvement Techniques

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 25, 2025	May 29, 2025	5 days	4250.00 \$	KSA - El Dammam
July 7, 2025	July 11, 2025	5 days	4950.00 \$	Austria - Vienna
Oct. 6, 2025	Oct. 10, 2025	5 days	4250.00 \$	UAE - Dubai