



Project & Contract Management

Value Engineering Masterclass

Course Introduction

Value engineering is a creative effort that mainly aims to increase the value for project owners and their clients, by analyzing project requirements and objectives, and striving to achieve them throughout the project's time frame, besides identifying and removing unnecessary costs, which contributes Efficiently in reaching the greatest return on investment at the lowest possible cost, and achieving the required efficiency in decision-making processes. This training program is designed to provide participants with the relevant concepts on budgeting and cost control. The training program highlights topics such as budgeting and cost analysis, Traditional vs. Advanced Techniques in Cost planning and control, understand the role of budgeting and cost planning in contemporary organizations. This training program will enable participants to master value engineering skills, and implement them in their projects with a greater emphasis on the development of project scope, cost estimates, and budgets. Plus, this training program will enhance participants' creative thinking, problem-solving, objective assessment, and decision-making skills to reach better management ability for their organization.

Target Audience

1. **Value Engineering Manager**
2. **Project Manager**
3. **Cost Engineer**
4. **Procurement Manager**
5. **Design Engineer**
6. **Construction Manager**
7. **Manufacturing Engineer**
8. **Risk and Compliance Officer**
9. **Operations Manager**
10. **Supply Chain Manager**

Learning Objectives

- ✓ Identify the essential concepts of accounting, budgets and finance, and their role in setting budgets and controlling costs.
- ✓ Develop a budgeting process based on cost measurement.
- ✓ Master building and developing budgets according to the organization's nature. ✓ Master controlling the strategic costs.
- ✓ Master analyzing the relationship between cost, volume of production and profits.
- ✓ Master the identification and development of cost management steps according to the organization's perspective.
- ✓ Integrate performance budgeting into organization's budget formulation process.
- ✓ Gain a comprehensive understanding of the concepts of value engineering and its impact in the effective project management.
- ✓ Assess and evaluate the relationships among key attributes such as cost, value, and function
- ✓ Gather and organize information and cost relevant to key elements of the project
- ✓ Report effectively to top management and project stakeholders in the context of proposing alternatives that improve the overall project value.
- ✓ Present a convincing case in support of certain project alternatives.

Course Outline

• Day 01

Contributing effectively to Strategic Planning

- ✓ Budgeting and Cost analysis
- ✓ Cost concepts and terminology

- ✓ Different costs for different purposes
- ✓ Fixed Vs Variable costs: the Cost-Volume-Profit analysis model
- ✓ Contribution Margin analysis
- ✓ Manufacturing vs. non-manufacturing costs
- ✓ Period Vs. Product costs: inventory evaluation and control

Linking Budgeting and Forecasting into the Business

' Strategy Traditional vs. Advanced Techniques in Cost-control

- ✓ Under-costing and over-costing: the consequences for profitability
- ✓ How to refine a costing system?
- ✓ Indirect (OH) Vs. Direct costs: Traditional Cost Allocations systems Vs. Activity-Based Costing (ABC)
- ✓ Cost hierarchy & Cost drivers
- ✓ Linking resources, activities and management
- ✓ Introducing Activity-Based Budgeting (ABB) and Management (ABM)

• Day 02

Preparing Rolling Forecasts

- ✓ Role of forecasts and the link to strategy
- ✓ Comparing and contrasting budgets and forecasts
- ✓ Identifying key business drivers
- ✓ The rolling forecast process
- ✓ Forecasting methods

Applying best practice' risk management:

- ✓ Role of risk management in corporate governance
- ✓ Finance' role in supporting risk management

- ✓ Understand Project Risk Strategies
- . ✓ How to Identify and analyse risks?
- ✓ Contingency Reserve
- ✓ PERT, Probability and Standard Deviation Formulae
- ✓ Network Activity Risk Profiles
- ✓ Risk Control “Practical Application”.

• Day 03

Managing Project Estimates

- ✓ Schedule Variances & Cost Variances
- ✓ Trend Analysis Techniques.
- ✓ Cost Variance

Forecasting and analysis: Tips and tricks.

- ✓ Design Cost Recovery plan.
- ✓ Cost Cutting Techniques.

Beyond the Budgets: Balanced scorecards and Six-sigma

- ✓ Broadening performance measurement systems
- ✓ Beyond budgeting: integrating financial and non-financial issues
- ✓ Introducing the Balanced Scorecard
- ✓ Introducing the Strategy maps
- ✓ Comparison of Unbalanced with Balanced Schedules.
- ✓ How to Measure Planned Progress on Schedule?
- ✓ Understand and manage Variable Conditions.

• Day 04

Applying Value Engineering in Projects:

- ✓ What is Value? What is Value Engineering? Why is it important?

- ✓ Objectives and Impact of Value Engineering
- ✓ What do cost-control and value engineering have in common?
- ✓ How and when is Value Engineering applied?
- ✓ Project stakeholder's analysis and management
- ✓ Understanding teamwork and cross-functional Project Teams and team player styles
- ✓ Introduction to project scope ✓ Value techniques
- ✓ The Total Value Management Concept
- ✓ VE phase relationships – Value management in design
- ✓ Types and Classes of Value

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

- ✓ Overview of Different Value Engineering Phases / Job Plan
- ✓ The Information Phase –steps and procedures
- ✓ The need for Function Analysis in projects
- ✓ Developing FAST Diagrams to identify critical project components and perform project value analysis
- ✓ Defining project constraints – relationships and trade-offs
- ✓ Aspects of Cost Estimating

• Day 05

The Creative and Evaluation Phases:

- ✓ Overview of the creative Phase.
- ✓ Creativity and Creative thinking within the project environment
- ✓ Creativity techniques as applied to optimize project value
- ✓ Blocks to creativity within the project team
- ✓ Reaching consensus and leveraging the power of project team collaboration
- ✓ Idea selection

- ✓ Evaluation methods and value criteria
- ✓ Development phase
- ✓ Techniques in problem-solving
- ✓ Life-cycle costing analysis

The Planning and Reporting Phases - Getting Results through Effective Communication:

- ✓ Effective Decision-making in a project environment
- ✓ Develop action plans and assign project roles and responsibilities
- ✓ Reporting VE findings to Senior Management and project stakeholders
- ✓ Integrating VE into the project process and Continuous Improvement and application at project initiation.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 16, 2025	June 20, 2025	5 days	4250.00 \$	UAE - Dubai
Aug. 25, 2025	Aug. 29, 2025	5 days	4950.00 \$	Indonsia - Jakarta
Oct. 5, 2025	Oct. 9, 2025	5 days	4250.00 \$	KSA - El Dammam