



Cost Estimation Training Course



Cost Estimation Training Course

Introduction:

Cost Estimation presents certain challenges, requiring cost estimation engineer skills and understanding of cost estimation methods and techniques. Costs must be managed without compromising safety or production, highlighting the importance of cost estimation.

This cost estimation training course introduces practical tools and techniques, including detailed cost estimation methods, which can easily be applied within various companies and work environments. It also introduces delegates to emerging cost estimation tools and techniques developed for future use within the domain of cost estimation engineering.

This cost estimation training course will assist delegates in implementing cost-saving measures that do not adversely affect the business. It will feature practical, engaging, and innovative techniques from different organizations and emphasize the benefit of cost estimation training. Participants will also help the delegates identify and deliver savings without damaging performance, capability, cost estimation, strategy, cost estimation approaches, delivery, or safety.

Understanding the Role of the Cost Estimation Engineer:

In the cost estimation course, participants will learn about the roles and responsibilities of a cost estimation engineer. They will explore cost estimation definitions and models and delve into the cost estimation process. It is designed to equip cost estimation managers and engineers with the knowledge and skills to perform accurate and effective cost estimations.

Understanding the cost estimation and analysis process is critical for organizations. This training will explain why cost estimation is important and how it can impact business decisions, project outcomes, and, ultimately, the company's financial health.

Targeted Groups:

- Finance Managers.
- Budget Holders.
- Project Managers.
- Professional Engineers.
- People are providing direct support to the above.

Course Objectives:

By the end of this cost estimation course, the participants will be able to:

- Proactively manage costs utilizing advanced cost estimation techniques.
- Seek opportunities for cost reduction using different types of cost estimation methods.
- Effectively control costs with the application of cost estimation methods and tools.
- Make better use of cost budgets, plans, and forecasts incorporating cost estimation tools.
- Understand project appraisal.
- Manage the investment with a strong grounding in cost estimation analysis.

Targeted Competencies:

Participants competencies in this training will:

- Analytical skills.
- Financial forecasting.
- Risk assessment.
- Project management.
- Budgeting techniques.
- Resource allocation.
- Data interpretation.
- Cost control methods.
- Economic evaluation.
- Negotiation skills.

Course Content:

Unit 1: Cost, Profit, Risk, and Cash:

- Costs and Profit:
 - Objectives - Mission and Vision - Profit Now vs. Profit Later.
 - Strategy and How It Guides Cost Management Decisions / Strategy Models and Costs Management.
 - Cost vs. Value / Value-Focused Approaches Profit Drivers.
- Costs and Cash:
 - Cash vs. Profit.
 - Cost - Cash and Non-cash.
 - Costs Management vs. Cash Management / Capital vs. Revenue Managing Capital Cost / Managing Revenue Cost.
- Cost and Risk:
 - Introduction to Risk.
 - Cost and Risk.

Unit 2: Costs & Costing:

- Understanding and Working with Costs.
- Cost vs. Value.
- Value-Based Cost Management / Thinking.
- Plan for Cost Reduction and Profit Improvement.
- Fixed and Variable Costs Income Statement.
- Break-even Analysis / Contribution Margin.
- Costing Approaches - Full Absorption, Marginal, ABC.
- New Ideas in Cost Management - Lean Principles / ABC - Big data.

Unit 3: Planning and Forecasting Costs / Risk:

- OPEX Planning Approaches.
- Forecasting Tools and Techniques.
- What is Risk?
- Modeling Costs and Profit and Risk.
- OPEX Long-term Forecast.
- OPEX Planning and Performance Monitoring.
- Software Used in OPEX Planning and Performance.

Unit 4: Investment Appraisal and Projects - Capital Budgeting:

- Building Cashflow Models for Decision-Making.
- CAPEX Planning System.
- Factors Used to Evaluate the Efficiency of CAPEX Projects, Annual Investment Program.
- Applying Time-adjusted Measures - The Time Value of Money.
- Net Present Value NPV and Internal Rate of Return IRR / EVA and NPV.
- Sensitivity Analysis, Scenario Analysis, Simulation, and NPV Break-even / Monte Carlo Analysis.
- The Importance of Flexibility and Options.
- Dealing with Risk and Changing Circumstances.

Unit 5: Importance of Detailed Cost Estimation:

- Estimating in a World of Limited Resources.
- Increased Productivity as a Solution.
- Productivity and the Profit Motive.
- At Stake is the organization's Reputation.
- In-Depth Cost Estimating.
- Possible: A Standardized Basic Estimating Procedure.

Unit 6: The Basics of Estimating:

- Four Kinds of Work Output.
- Cost Estimating Defined.
- Cost and Price Explained.
- The Estimating Process: Ingredients and Tools Required.
- The Cost Estimator: The Human Element.
- The Anatomy of an Estimate.
- Discussion of Types of Costs.
- Collecting the Ingredients of the Estimate.

Unit 7: Defining The Work:

- The First Questions to Ask and Why.
- The Estimate Skeleton: The Work Breakdown Structure.
- Explore The Hierarchical Relationship of a Work Breakdown Structure.
- Functional Elements.
- Physical Elements.
- Treatment of Recurring and Nonrecurring Activities.
- Work Breakdown Structure Interrelationships.
- Defining the Estimate Ingredients.
- Building in Cost-Effectiveness.

Unit 8: The Tools Required For Estimating:

- Four Basic Tools.
- Information to Be Collected Before Starting an Estimate.
- Methods Used in the Estimating Process.
- The Technology Improvement Function.
- Establishing an Estimate Schedule.
- Needed Estimating Skills.

Unit 9: Budgets and Cost Control:

- The Budgeting Process.
- The Role of Budgeting.
- Annual Budgeting Process.
- Identifying and Resolving Budgeting Variances.
- Different Budgeting Systems in Use Today.
- Budgeting Tips and Techniques.
- Variance Analysis.
- Beyond Budgeting.