



Project Cost Estimating Skills Training

Description

Introduction

The estimating techniques covered in this course will provide delegates with the necessary skills to forecast accurately the anticipated costs of projects with a focus on estimates for pre-construction services, estimating sub-contractor work, estimating general conditions, pricing self-performed work, and estimating negotiated contracts.

The development of reliable cost estimates during the design and early conceptual stages of a proposed project is of critical importance since the decision to proceed with a project is often based almost exclusively on early conceptual cost estimates. These estimates also provide the basis for the cash flow projections and forecasts used during the project feasibility study.

Objectives

- Apply techniques used in Project estimating, from the conceptual stage to the final detailed estimate
- Understand the different types of contracts based on the distribution of risk between contracting parties
- Synthesize innovative incentive arrangements to get the best results from the contract
- Apply proper risk analysis to effectively mitigate risks at minimal costs, and to determine appropriate contingencies for residual risks
- Prepare lump-sum, unit-price, cost plus, and time-and-materials estimates and contracts

Content

Day One

Cost Estimating Basics

- Basic Project Management definitions
- Cost Selection Methods

- Typical project terminology & setting up for success
- Project cost management, Cost Control
- Resource & Cost Allocation
- Understanding project management inputs to cost estimation

Day Two

Pricing, Contracts and Risk

- Project management inputs to cost budgeting
- Resource Requirements
- Direct & Indirect Project Costs
- Probability and Standard Deviation Formulae
- Contract types according to risk distribution
- Fixed Price Contracts, Cost-Plus Contracts

Day Three

Developing the Project Budget & Cost Control

- Risk Identification, Analysis & Management
- Qualitative Risk Analysis
- Quantitative Risk Analysis
- Risk & Probability Matrix
- Risk Response Strategy
- Cash Flow management

Day Four

Approximate & Detailed Estimating Methods

- Material Estimating
- Civil/Construction Estimating
- Labor estimating, Detailed estimating with labor crews
- Procurement Management
- Risk distribution in contracting
- Project risk profiles

Day Five

Advanced Estimating Methods

- Building Information Modeling (BIM)
- Cost Estimating Relationships (CER)
- Computer Estimating
- Control Charts