



Civil Engineering

## Construction Cost Estimation and Control

# Course Introduction

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## Construction Cost Estimation

This comprehensive training course on Construction Cost Estimation and Control provides participants with the essential skills and knowledge required to effectively estimate and manage costs throughout the lifecycle of a construction project. It covers the systematic approach to forecasting costs, from the initial design phase to project completion. By understanding different types of cost estimates, tools, and methodologies, learners will be equipped to develop accurate project budgets, monitor expenditures, and implement effective cost control strategies.

The course also emphasizes the significance of cash flow management and financial oversight, allowing participants to minimize risks and maximize profitability.

## Target Audience

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- Construction Managers
- Construction Cost Estimators
- Project Managers
- Engineers (Civil, Structural, Electrical)
- Property Developers
- Quantity Surveyors
- Construction Workers aspiring to move into management roles

## Learning Objectives

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- Understand the principles of construction management and cost estimation.
- Differentiate between various types of cost estimates and their application.

- Master tools and methods used for effective cost estimation.
- Learn techniques for controlling costs and monitoring cash flow.
- Conduct break-even analyses for construction projects.
- Enhance their understanding of project material management and its impact on costs.
- Gain insights into factors influencing construction costs and how to mitigate them.

## Course Outline

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### • DAY 01

#### **Introduction to Construction Cost Estimation**

##### **Session 1:** Overview of Construction Management

- Roles and responsibilities in construction projects
- Importance of cost estimation in project success

##### **Session 2:** Fundamentals of Cost Estimation

- Definition and significance of cost estimation
- Phases of construction projects and their cost implications

##### **Workshop:** Introduction to Estimation Tools

- Overview of software and tools commonly used in cost estimation

### • Day 02

#### **Types of Cost Estimates**

##### **Session 1:** Understanding Different Types of Cost Estimates

- Conceptual estimates, preliminary estimates, and detailed estimates
- Comparison of different estimation techniques (top-down vs. bottom-up)

##### **Session 2:** Tools and Methods for Estimating Costs

- Estimation templates and their use in construction
- Utilizing historical data for accurate forecasting

## **Workshop:** Hands-On Estimation Practice

- Participants will create preliminary estimates based on given project scenarios

### • **Day 03**

#### **Cost Control Techniques**

##### **Session 1:** Importance of Cost Control in Construction

- Definition and objectives of cost control
- Key performance indicators (KPIs) for monitoring costs

##### **Session 2:** Managing Project Cash Flow

- Understanding cash flow statements and their relevance to construction projects
- Techniques for forecasting cash flow needs

## **Workshop:** Break-Even Analysis

- Participants will conduct a break-even analysis of specific construction tasks

### • **Day 04**

#### **Advanced Cost Estimation Strategies**

##### **Session 1:** Factors Influencing Cost Estimation

- Identifying and analyzing variables that affect project costs (labor, materials, overhead)
- Risk assessment and its impact on cost estimation

##### **Session 2:** Leveraging Technology for Cost Estimation

- Introduction to advanced software solutions for cost management
- Integrating Building Information Modeling (BIM) in cost estimation

## **Workshop:** Case Study Analysis

- Analyze a real-world project to identify cost estimation challenges and solutions

### • **Day 05**

#### **Project Material Management and Course Wrap-Up**

**Session 1:** Effective Material Management

- Understanding the role of material management in controlling costs
- Techniques for procurement and inventory management

**Session 2:** Final Review and Future Trends in Cost Estimation

- Recap of key concepts covered throughout the course
- Discussion on emerging trends in construction cost management

**Workshop:** Group Presentations

- Participants present their cost estimation strategies for a hypothetical project

**Closing:** Q&A Session and Course Evaluation

- Open floor for questions and feedback
- Discussion on continuous learning and career development opportunities

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 16, 2025	June 20, 2025	5 days	4950.00 \$	Spain - Madrid
Sept. 29, 2025	Oct. 3, 2025	5 days	4250.00 \$	UAE - Abu Dhabi
Nov. 23, 2025	Nov. 27, 2025	5 days	4250.00 \$	KSA - Jeddah