

Project Cost Estimation Techniques Training Course

Professional Development Training Course Outline

Category	Project Management	Duration	5 Days
Base Fee	\$1,500 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

Project cost estimation is a critical competency for effective project planning, budgeting, and financial control across public and private sector initiatives. Accurate cost estimation enables organizations to allocate resources efficiently, manage financial risks, and improve decision-making throughout the project lifecycle. Project Cost Estimation Techniques Training Course provides a comprehensive understanding of modern project cost estimation techniques, combining traditional estimation methods with data-driven, analytical, and risk-adjusted approaches. Participants will gain practical knowledge of cost modeling, forecasting, and control mechanisms that support project success and financial accountability.

The course emphasizes real-world application by integrating quantitative techniques, estimation software concepts, and scenario-based analysis. Participants will explore cost estimation across different project phases, industries, and levels of complexity, while addressing uncertainty, inflation, scope changes, and risk factors. By strengthening estimation accuracy and governance, this course supports improved project performance, reduced cost overruns, and stronger stakeholder confidence.

Programme Curriculum

Project Cost Estimation Techniques Training Course

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Course Objectives

1. Understand the principles and importance of project cost estimation in project management.
2. Apply structured cost estimation techniques across the project lifecycle.
3. Differentiate between top-down and bottom-up estimation methods.
4. Use historical data and benchmarking for accurate cost forecasting.
5. Incorporate risk and uncertainty into cost estimates.
6. Develop detailed cost breakdown structures and estimates.
7. Apply parametric and analogous estimation techniques.
8. Integrate cost estimation with scheduling and resource planning.
9. Improve accuracy through validation, reviews, and sensitivity analysis.
10. Use estimation outputs for budgeting and funding decisions.
11. Manage cost changes and re-estimation during project execution.
12. Strengthen governance, documentation, and auditability of estimates.
13. Develop practical skills to produce defensible and reliable cost estimates.

Organizational Benefits

- Improved project budgeting accuracy and financial predictability
- Reduced cost overruns and financial risk exposure
- Stronger decision-making during project approval and planning
- Enhanced transparency and accountability in cost management
- Better alignment between scope, schedule, and budget
- Improved stakeholder confidence and reporting credibility
- Stronger cost control and performance monitoring capabilities
- Consistent estimation standards across projects and teams
- Improved resource allocation and investment prioritization
- Enhanced institutional project management maturity

Target Audiences

- Project managers and project coordinators
- Cost engineers and quantity surveyors
- Finance and budgeting professionals
- Planning and strategy officers
- Procurement and contract management staff
- Program and portfolio managers
- Engineers and technical project leads

- Consultants and project management trainers

Course Duration: 5 days

Course Modules

Module 1: Fundamentals of Project Cost Estimation

- Definition and purpose of project cost estimation
- Types of cost estimates across project phases
- Cost estimation within the project management framework
- Key cost components and cost drivers
- Common causes of inaccurate cost estimates
- Case Study: Cost estimation failures and lessons learned

Module 2: Cost Classification and Cost Breakdown Structures

- Direct, indirect, fixed, and variable costs
- Developing cost breakdown structures (CBS)
- Linking CBS to work breakdown structures (WBS)
- Resource-based cost identification
- Documentation and traceability of cost elements
- Case Study: Building a CBS for an infrastructure project

Module 3: Estimation Techniques and Approaches

- Analogous estimation techniques
- Parametric estimation models
- Bottom-up estimation processes
- Expert judgment and Delphi techniques
- Strengths and limitations of each method
- Case Study: Selecting the right estimation technique for a project

Module 4: Data, Benchmarking, and Historical Analysis

- Using historical project data for estimation
- Data normalization and adjustment techniques
- Industry benchmarks and cost indices
- Inflation and escalation considerations
- Managing data quality and assumptions
- Case Study: Benchmark-based cost estimation for a capital project

Module 5: Risk, Uncertainty, and Contingency Estimation

- Identifying cost-related project risks
- Quantifying uncertainty in estimates
- Contingency and management reserve calculation
- Sensitivity and scenario analysis
- Risk-adjusted cost estimation techniques
- Case Study: Incorporating risk contingency into a project budget

Module 6: Estimation Accuracy and Validation

- Accuracy ranges and confidence levels
- Independent estimate reviews and validation
- Cross-checking and reconciliation techniques
- Assumption analysis and documentation
- Improving estimates through iterative refinement
- Case Study: Independent review of a major project estimate

Module 7: Cost Estimation for Budgeting and Control

- Translating estimates into project budgets
- Cost baselines and control thresholds
- Integrating cost estimates with schedules
- Monitoring cost performance against estimates
- Managing scope changes and re-estimation
- Case Study: Budget adjustments due to scope change

Module 8: Governance, Reporting, and Best Practices

- Cost estimation governance frameworks
- Documentation and audit requirements
- Ethical considerations in cost estimation
- Communication of estimates to stakeholders
- Establishing organizational estimation standards
- Case Study: Implementing standardized cost estimation guidelines

Training Methodology

- Instructor-led presentations and conceptual explanations
- Practical exercises and numerical estimation workshops
- Group discussions and problem-solving sessions

- Case study analysis and guided reflections
- Estimation templates and worked examples
- Knowledge checks and facilitated feedback sessions

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- The participant must be conversant with English.
- Upon completion of training the participant will be issued with an Authorized Training Certificate
- Course duration is flexible and the contents can be modified to fit any number of days.
- The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- One-year post-training support Consultation and Coaching provided after the course.
- Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
21 Sep 2026	25 Sep 2026	Online	\$1,000
21 Sep 2026	25 Sep 2026	Physical	\$1,500
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

Start Date	End Date	Location	Price
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

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