

Course No. 1131

Engineering Cost Control Training Course

ENGINEERING MANAGEMENT
INDUSTRIAL ENGINEERING, MAINTENANCE & OPERATIONS

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Engineering Cost Control Training Course is a comprehensive professional program designed to equip engineers, project managers, cost engineers, financial professionals, and technical leaders with the knowledge, methodologies, and practical skills required to effectively plan, monitor, control, and optimize engineering project costs throughout the project lifecycle. In today's competitive engineering environment, successful project delivery depends not only on technical excellence but also on the ability to manage costs efficiently while maintaining quality, safety, and project performance.

Engineering projects often involve significant capital investments, complex procurement activities, changing project scopes, resource constraints, and fluctuating market conditions. Without effective cost control, projects can experience budget overruns, schedule delays, reduced profitability, and operational inefficiencies. This course provides participants with internationally recognized cost control practices that support informed decision-making, financial accountability, and improved project governance across engineering and infrastructure projects.

Throughout the program, participants will develop practical competencies in engineering cost estimation, budgeting, forecasting, earned value management (EVM), cost monitoring, variance analysis, change management, cash flow planning, procurement cost management, and project financial reporting. The course combines engineering management principles with financial control techniques to enable participants to maintain project performance while optimizing the use of organizational resources.

The Engineering Cost Control Training Course also emphasizes the integration of cost control with project planning, scheduling, risk management, contract administration, procurement, and organizational performance management. By completing this course, participants will be able to establish effective cost control systems, improve project financial performance, support strategic decision-making, and contribute to the successful delivery of engineering projects across government entities, ministries, public sector organizations, financial institutions, oil and gas companies, utilities, manufacturing industries, construction firms, and multinational organizations.

Objectives

- Analyze engineering project costs and identify the key factors influencing project financial performance.
- Develop comprehensive project budgets and cost control plans aligned with project objectives.
- Evaluate project expenditures using internationally recognized engineering cost control methodologies.
- Apply cost estimation techniques to improve budgeting accuracy and financial planning.
- Design cost monitoring systems that support timely reporting and effective decision-making.
- Improve project financial performance through variance analysis and corrective actions.
- Strengthen cost management practices by integrating scheduling, procurement, contracts, and risk management.
- Implement Earned Value Management (EVM) techniques to measure project cost and schedule performance.
- Assess project cost risks and develop practical cost mitigation strategies.
- Align engineering cost control activities with organizational governance, financial accountability, and project performance objectives.

Who Should Attend

This course is designed for project managers, engineering managers, cost engineers, planning engineers, project control engineers, estimation engineers, quantity surveyors, procurement professionals, contract engineers, financial controllers, project accountants, construction managers, operations managers, maintenance managers, asset management professionals, and engineering consultants responsible for planning, monitoring, and controlling engineering project costs.

The program is also valuable for department managers, senior engineers, technical specialists, finance professionals supporting engineering projects, project sponsors, executive managers, commercial managers, business analysts, infrastructure planners, and decision makers involved in capital investment planning, project governance, and financial performance management.

Professionals working within government entities, ministries, public sector organizations, financial institutions financing infrastructure projects, oil and gas companies, energy providers, manufacturing organizations, transportation authorities, construction firms, mining companies, utility providers, and

multinational engineering organizations will benefit from the practical methodologies and internationally recognized cost control practices presented throughout the course.

Learning Outcomes

- By the end of this course, participants will be able to:
- Explain the principles and objectives of engineering cost control and project financial management.
- Develop detailed project budgets, cost baselines, and financial forecasts.
- Apply engineering cost estimation techniques for various project phases.
- Monitor project expenditures and evaluate cost performance using professional cost control tools.
- Perform variance analysis and recommend corrective actions to improve project financial outcomes.
- Apply Earned Value Management (EVM) to measure project cost and schedule efficiency.
- Integrate cost control with procurement, contract management, scheduling, and risk management.
- Prepare professional cost reports and financial performance dashboards for management.
- Evaluate project financial risks and implement appropriate cost mitigation measures.
- Contribute to organizational profitability, operational efficiency, and successful engineering project delivery through effective cost control practices.

Course Outline

DAY 01

Foundations of Engineering Cost Control

- Principles of engineering cost control and project financial management
- Cost management throughout the project lifecycle
- Types of project costs and cost classification
- Cost control frameworks and international best practices

PRACTICAL

Practical workshop on project cost structure and budgeting fundamentals

DAY 02

Cost Estimation, Budgeting, and Financial Planning

- Engineering cost estimating techniques
- Developing project budgets and cost baselines
- Resource planning and cost allocation
- Cash flow forecasting and financial planning

PRACTICAL EXERCISE

Practical exercise on developing engineering project budgets and cost estimates

DAY 03

Cost Monitoring and Performance Measurement

- Cost tracking and expenditure monitoring techniques
- Earned Value Management (EVM) principles and calculations
- Cost variance and schedule variance analysis
- Key performance indicators for engineering cost control

PRACTICAL APPLICATION

Practical application involving project performance measurement and variance analysis

DAY 04

Cost Risk Management and Change Control

- Engineering cost risk identification and assessment
- Managing project changes and cost impacts
- Procurement cost management and contract administration
- Corrective actions and financial recovery strategies

PRACTICAL

Practical workshop on cost risk analysis and change management scenarios

DAY 05

Strategic Cost Control and Continuous Improvement

- Financial reporting for engineering projects
- Executive cost reporting and decision support
- Integrating cost control with organizational governance and project management
- Continuous improvement in engineering cost management

FINAL WORKSHOP

Final workshop involving the development of a comprehensive Engineering Cost Control implementation plan that integrates budgeting, cost estimation, performance measurement, risk management, financial reporting, and continuous improvement to support successful engineering project delivery and organizational financial performance.

Register or Request More Information

Course page: <https://quest-training.com/courses/engineering-cost-control-training-course>

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