

Economics Development & Planning for Construction Projects Training program

Introduction:

This course identifies economic factors that significantly influence construction projects. The objective is to introduce participants to the application of various economic analysis techniques such as project feasibility studies, lifecycle cost analysis, estimating and cost planning, and cost control techniques that will facilitate making sound construction economic decisions. The candidates will be able to explain the application of microeconomics concepts to project decisions. This course will be case study driven to demonstrate the principles discussed along the course.

This course identifies economic factors that are significantly influencing construction projects and how the aggregate of construction projects affect the economy. The objective of the course is to expose the candidates to the application of various economic analysis techniques such as market analysis, project feasibility studies, life cycle cost analysis, selection of the appropriate types and forms of construction contracts and the bidding process.

Who Should Attend?

Construction Engineers, Senior Construction Engineers, Construction Supervisors, Construction General Supervisors, Construction Project Managers, Engineering Technologists, Supervision Engineer, Inspection Engineers, Civil Inspectors, Foremen, Design Structural Engineers, Planners, Structural Engineers, Material Specialists, Quality Control and Quality Assurance Experts, Architects, Supervision Engineers, Team Leaders, Site Officers and Managers, Mechanical Engineers, Technical Professionals, Field Production Supervisor, Operation Engineers, Clients Representatives.

Course Objectives:

By the end of this course delegates will be able to:

- Perform construction economic planning & development
- Develop construction feasibility analysis to determine go/no go
- Analyze construction project bids and recommend selection
- Seek construction project finance for efficient implementation
- Simulate the investigation, preparation and completion of work assignments under resources constraints and with professional attitude

Course Outline:

Introduction and Learning Concepts

- Learning Concepts
- Approaches & Rules of Order
- Development Economics and Construction Projects
- Definitions
- Identify the role of the construction industry in the economy
- Structure of the construction industry
- Explain the role of various industry associations
- The regulatory environment

Market Assessment for Construction Projects

- Strategic Planning & Projects
- Land Development
- The Market Study
- Site Selection
- Site Analysis
- The Project Plan

Market Planning for Construction Projects

- Market Trends
- Supply & Demand for Housing
- Competitive Advantage
- Target Market & Qualification
- The Business Plan

Fundamentals of Construction Project Feasibility Analysis

- The Feasibility Plan & Analysis
- Capital Budgeting
- NPV, IRR, CB, SCB, Payback Method, ROI, Yield Rate
- Economic Modelling & Sensitivity Analysis

Construction Project Life Cycle Costing

- Developing and presenting a Construction Project Life Cycle Cost Analysis.
- Dispute Resolution Costs

Construction Project Contracts

- Types of Contracts & Risk: FFP, FPPI, CPFF, CPIF, CPPF
- Construction Documents
- Standard Forms: CCDC, FIDIC, Design & Build, Turnkey
- Bonds & Insurance

Contract Law & Construction Projects

- Contract Law
- General & Specific Conditions, Form of Agreement , Appendices
- Professional Agreements: PM, Architects, Engineers, QS
- Partnering: Partnerships, PPP, BOOT, CM, etc

The Bidding Process: The Developer

- Preparation of Bid Documents
- The Economics of Contracting
- Construction Budget & Cash Flow

- Formal procurement guidelines
- The Control Estimate

Competitive Bidding: The Contractor

- The Bid – Cost/Price
- Bidding Strategy
- Accuracy in Estimating
- Analysis of Bid Success Results
- Recommendations -Improving Bidding Efficiency & Effectiveness

Construction Project Financing

- Funding Gap
- Finance Plan & Loan Application
- Short & Long Term Financing
- Loan Security - Insurance & Bonds
- Hold Back (Retention) & Release
- Commissioning/Approvals /Take Over/Repayment