ONLINE COURSE

Introduction to **Construction Estimating**

Allows self-paced, online e-learning, accessible 24/7 on desktop, tablet, and mobile devices.

For people working in estimating or for any individual who wants to become an estimator.

Gain the knowledge and skills required to visualize the scope and magnitude of a construction project and produce accurate and reliable estimates.

Course work includes reviewing drawings through various phases of a project with the aim of determining the quantity and type of materials required for the project.

- ✓ Have a good understanding of estimating practices.
- ✓ Know site-specific conditions and regulatory requirements.
- ✓ Know how to handle purchasing and logistics, and how to manage materials on site.
- ✓ Organize cost data in a clear and logical manner.
- ✓ Be able to manage historical information related to costs and know how and when to update this information.
- ✓ Know how to assemble bids and meet bid. closure deadlines.
- ✓ Provide on-site solutions to work-related problems in relation to equipment and material placement.

This course uses interactive elements, scenarios, videos, and quizzes to reinforce learning.



\$150

COURSE DURATION

Approx. 4 hours

AVAILABLE LANGUAGES

EN | FR

SUPPORTED BROWSERS



















SUPPORTED **OPERATING SYSTEMS**









2 credits



E-Learning Course Outline

Lesson 1 - Introduction

Course Introduction

Course Lessons

Remainder of Lesson

What is Construction Estimating?

Factors that Influence Cost

Industry Sectors

Roles, Responsibilities and Qualifications

Owner

Construction Estimator

Consultants and Subconsultants

Prime Contractor or General Contractor

Project Manager or Construction Manager

Subcontractors

Site Foreman

Site Superintendent

Site Supervisor

Safety Authorities and Inspectors

Buyer/Purchaser

Accountant

Administrators

Who's Responsible?

Types of Contracts

Lesson Summary

Lesson Test

Lesson 2 - Building Practices

Building Practices Overview

The Rationale for Cost Estimating

Bid Decisions

The Construction Estimating Process: Information Gathering
The Construction Estimating Process: Construction Estimating

The Construction Estimating Process: Cost Estimate

Types of Estimates

Types of Estimates: Classifications

Codes and Legislation

Construction Project Stages

Types of Bids

Types of Risk

Liabilities and Risk - Accountability

Avoiding Liabilities and Risk: General Contractor

Avoiding Liabilities and Risk: Subcontractor

Quality Assurance and Quality Control (QA/QC) Provisions

Review Game

Lesson Summary

Lesson Test

E-Learning Course Outline

Lesson 3 - Labour and Operations

Lesson Overview

Factors that Affect Labour and Operational Costs

Labour Rates - Man Hours

Labour Rates - Production Rate

The Importance of Labour Costs

Labour Costs

Labour Costs: Example

Crew Rates

Crew Rates Example

Direct Costs

Indirect Costs

Other Indirect Costs

Impacts on Productivity

Calculation of Operational and Payroll Expenses

Operational Costs Associated with Labour

Other Operational Costs

Examples of Operational Costs

Equipment Costs

Lesson Summary

Lesson Test

Lesson 4 - Handling Materials on the Job

Lesson Overview

What are Materials?

Types of Materials: Indirect

Types of Materials: Direct

Examples of Direct Materials

Identifying Required Materials

Pricing Materials

Factors Affecting Material Costs

Additional Handling Costs

Allowances

Lesson Summary

Lesson Test

Lesson 5 - Keeping Records

Lesson Overview

Systems for Managing Records

Construction Estimate File

Historical Database

Bid Bucket

Tips on Keeping Good Records

Trivia Review

Lesson Summary

Lesson Test

E-Learning Course Outline

Lesson 6 - Producing Accurate Estimates

Lesson Overview

Estimating Tips

Design Elements

The Importance of Communication

Quantity Takeoffs

Quantity Takeoffs Sample

Completing a Quantity Takeoff

Quantity Takeoff Time Saving Tips

Creating Estimates

Project Schedule

Preparing the Initial Schedule

Preparing the Initial Schedule: Example

Importance of Project Schedule

Common Errors in the Estimating Process

Tips for Avoiding Estimating Errors

Lesson Summary

Lesson Test

Lesson 7 - Working on Tenders

Lesson Overview

About Tenders

Sections of Bidding Documents

Read Tender Documents

Pitfalls to Avoid

Reviewing Contracts Tips

Online Tender Process

Markup

Markup Factors

Types of Bid Bonds

Bid Bond Terminology

Subcontractor and Supplier Bids

Tender Document Inclusions

Evaluating Subcontractor and Supplier Bids

Assembling Final Bid Documents

Withdrawing Bids

Consequences of Withdrawing Bids

Lesson Summary

Lesson Test

Lesson 8 - Managing Change

Lesson Overview

Change Orders

Types of Change Orders

Processing Change Orders

Dispute in a Change Order

Markup on Change Orders

E-Learning Course Outline

Changes in Site Conditions Site Conditions Steps to Reduce Risk Types of Delays Claims Importance of Documentation **Documentation Best Practices** Trivia Review Resources

Lesson Summary

Lesson Test