

# Excel Foundations for Construction

## CREATING PROFESSIONAL CONSTRUCTION TRACKING & ANALYSIS DOCUMENTS

(2 SESSIONS × 3.5 HOURS EACH)

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### Course Overview

This hands-on course introduces the essential functions of Microsoft Excel in the context of commercial construction workflows. Participants will learn how to build and format spreadsheets for estimating, daily reporting, material tracking, and project management — with practical examples drawn directly from jobsite and office environments.

### Who Should Attend

Designed for estimators, project coordinators, site administrators, forepersons, and trade office staff who want to use Excel more effectively for construction-related tasks such as budgets, takeoffs, logs, and summaries.

### Course Format

Duration: 2x3.5-Hour sessions on back to back days

Delivery Method: Instructor Led Online via Zoom

Materials Provided:

- Course workbook (PDF)
- Practice spreadsheets and construction templates
- Quick reference guide to common Excel formulas and shortcuts

### Pre-Requisites

- Basic computer knowledge and familiarity with construction documentation.
- No prior experience with Microsoft Excel is required.

### Learning Outcomes

1. Confidently navigate Excel and create new workbooks for construction tasks.
2. Enter, format, and calculate data relevant to project budgets, materials, and scheduling.
3. Use formulas and functions to improve accuracy and speed.

4. Sort, filter, and present data clearly using charts and tables.
5. Produce professional, construction-ready spreadsheets for internal and client use.

Microsoft Excel Basics for the Commercial Construction Industry

## **Session 1 - Spreadsheet Foundations & Core Tools (3.5 Hours)**

### **Module 1 - Excel's Role in Construction Projects**

- Where Excel fits into estimating, scheduling, and reporting workflows
- File organization and version control best practices

### **Module 2 - Interface & Navigation**

- Understanding the Ribbon, worksheet tabs, and cell grid
- Keyboard shortcuts and mouse navigation efficiency

### **Module 3 - Creating & Managing Workbooks**

- Starting new spreadsheets and saving versions
- Managing multiple sheets for project tracking

### **Module 4 - Entering and Formatting Data**

- Data types: text, numbers, dates, and currency
- Formatting cells for construction-specific information (quantities, unit costs, etc.)

### **Module 5 - Basic Calculations & Formulas**

- Introduction to formulas (=, +, -, \*, /)
- Using AutoSum, AVERAGE, MIN/MAX, and cell references
- Relative vs. absolute references explained with simple examples

### **Module 6 - Workshop Activity #1**

- Build a materials quantity and cost sheet from scratch

## **Session 2 - Building Useful Tools for Everyday Construction Tasks (3.5 Hours)**

### **Module 1 - Formatting for Readability & Print**

- Using borders, shading, and alignment to organize data
- Setting print areas, page breaks, and headers/footers

### **Module 2 - Sorting & Filtering Data**

- Managing equipment or material logs
- Using AutoFilter to find specific information quickly

### **Module 3 - Introduction to Functions**

- Practical formulas for construction data: SUMIF, COUNTIF, ROUND
- Examples: calculating total costs per trade, tracking days worked

### **Module 4 - Charts & Visual Summaries**

- Creating bar and pie charts for cost breakdowns or schedule progress
- Adding labels and titles for professional reporting

### **Module 5 - Basic Data Validation & Error Prevention**

- Dropdown lists for consistent entry (e.g., trade type or material)
- Protecting key cells from accidental edits

### **Module 6 - Workshop Activity #2**

- Create a daily progress log or project budget tracker using formulas and formatting