

Excel is far more than just a data entry tool—it's a critical engine for insight, efficiency, and informed decision-making across modern workplaces. Our live, instructor-led course, Fundamental Data Analysis & Reporting, is built to transform users from spreadsheet operators into data interpreters. This course dives straight into Excel's most valuable real-world applications for cleansing, structuring, analyzing, and presenting data. You'll learn how to organize and validate messy data, extract patterns with conditional visuals, and build structured summaries that communicate clearly. From preparing sortable lists and interactive tables to modeling what-if scenarios and building filtered reports, this hands-on class gives you the workflow, structure, and confidence to turn raw datasets into polished, reliable outputs. Whether you're preparing team metrics, audit-ready summaries, or distribution-ready merges, this course equips you with the strategies and tools needed to analyze and communicate data with clarity and control.

UNDERSTANDING STRUCTURED LISTS VS. FREEFORM DATA

- Define what makes a worksheet a proper database list
- Identify field headers, data ranges, and tabular structure
- Spot common problems like blanks, merged cells, and nested subtotals

SORTING, FILTERING & CONDITIONAL VISIBILITY

- Apply basic and custom sorts across one or multiple fields
- Use AutoFilter tools to isolate subsets of data quickly
- Filter by color, icon, number range, text match, or dynamic criteria

CLEANING & REFORMATTING DATA

- Split fields with Text to Columns and Flash Fill
- Use functions like TRIM, SUBSTITUTE, VALUE, and CLEAN
- Align inconsistent formats and remove invisible errors

UNIQUE RECORDS, DEDUPLICATION & VALIDATION

- Use Remove Duplicates and Advanced Filter techniques
- Extract distinct records or values from large datasets
- Add Data Validation drop-downs and rule-based inputs

CONDITIONAL FORMATTING FOR LIST-BASED RULES

- Apply rules that highlight values based on conditions
- Use color scales, data bars, and formulas to call out issues
- Shade duplicates, highlight errors, or flag key indicators

GROUPING, SUBTOTALS & QUICK SUMMARIES

- Use the Subtotal feature to group and summarize by category
- Collapse or expand outline levels for report-ready views
- Summarize by COUNT, AVERAGE, MAX, or custom formulas

DATABASE FUNCTIONS & LOGIC-BASED ANALYSIS

- Apply DSUM, DCOUNT, DAVERAGE, and DMAX
- Use COUNTIFS, SUMIFS, and IF logic across list data
- Combine filters and formulas to build dynamic data views

EXCEL TABLES & INTERACTIVE FILTERING

- Convert ranges to structured Tables with named columns
- Add slicers for point-and-click filtering and layout control
- Use total row options for automatic summaries

COLUMN-BASED SORTING & MATRIX CONTROL

- Sort data horizontally using Excel's 'Sort left to right' feature
- Rearrange columns by header values such as months or product codes
- Use matrix-style layouts to track and compare across time or categories

FORMULA-BASED DATA STRUCTURING

- Extract unique field values without repetition
- Generate dynamic dropdowns and lookup lists
- Use formulas to build always-current supporting data summaries

SCENARIO MODELING & WHAT-IF ANALYSIS

- Explore multiple business cases using Scenario Manager
- Calculate backward from a goal with Goal Seek
- Apply constraints and solve for optimal outcomes with Solver

EXTERNAL DATA INTEGRATION & CLEANUP

- Import data from CSV, TXT, and PDF files
- Manage delimiters and detect hidden formatting issues
- Standardize imported values for smooth integration

SUNBURST CHARTS & HIERARCHICAL REPORTING

- Visualize nested categories with Sunburst charts
- Represent contributions across multi-tier data groups
- Build dynamic visuals to clarify complex structures

REPORTING TECHNIQUES FOR CLARITY & COMMUNICATION

- Tie together tools into final reports with layered insight
- Design audit-ready, manager-friendly summary pages
- Apply formatting standards for consistent professional output