

One-Day Intermediate Excel Training Curriculum

Duration: 8 hours (9:00 to 5:00, including breaks) **Audience:** Users comfortable with basic formulas, formatting, and sorting/filtering **Format:** Instructor-led, about 30% concepts and 70% hands-on exercises **Prerequisites:** Excel 365 or 2021 (needed for XLOOKUP and dynamic arrays)

Learning Objectives

By the end of the day, participants will be able to:

- Build robust formulas using lookups, logical functions, and text/date functions
- Clean and structure messy data
- Summarize data with PivotTables and charts
- Use validation, conditional formatting, and protection to make reliable workbooks
- Apply simple automation and time-saving techniques

Schedule

Time	Module	Duration
9:00 – 9:20	Welcome, goals, skills check	20 min
9:20 – 10:30	Module 1: Formula foundations and logic	70 min
10:30 – 10:45	Break	15 min
10:45 – 12:00	Module 2: Lookup and reference functions	75 min
12:00 – 1:00	Lunch	60 min
1:00 – 2:15	Module 3: Data cleaning and text/date functions	75 min
2:15 – 3:30	Module 4: PivotTables and PivotCharts	75 min
3:30 – 3:45	Break	15 min
3:45 – 4:30	Module 5: Workbook reliability and visualization	45 min

Time	Module	Duration
4:30 – 5:00	Capstone mini-project, recap, Q&A	30 min

Module Details

Welcome and Skills Check (20 min)

- Introductions and what each person wants to solve with Excel
- 10-question warm-up quiz to gauge baseline
- Quick tour of shortcuts: Ctrl+Arrow, Ctrl+Shift+L, F4, Ctrl+T, Alt+=

Module 1: Formula Foundations and Logic (70 min)

- Relative, absolute, and mixed references (F4 practice)
- Named ranges and structured table references
- IF, nested IF, IFS, AND, OR
- SUMIFS, COUNTIFS, AVERAGEIFS
- IFERROR and common error types (#N/A, #REF!, #VALUE!)
- **Exercise:** Sales commission calculator with tiered rates and error handling

Module 2: Lookup and Reference Functions (75 min)

- VLOOKUP limitations and why to move on
- XLOOKUP (exact match, approximate match, return multiple columns)
- INDEX + MATCH for older versions
- Intro to dynamic arrays: FILTER, SORT, UNIQUE
- **Exercise:** Match an orders sheet to a product master and customer list, then produce a filtered "top customers" report

Module 3: Data Cleaning and Text/Date Functions (75 min)

- TRIM, CLEAN, PROPER, UPPER/LOWER
- LEFT, RIGHT, MID, FIND, LEN, TEXTJOIN
- Text to Columns and Flash Fill
- Remove Duplicates and handling blanks

- DATE, YEAR, MONTH, EOMONTH, NETWORKDAYS, DATEDIF
- Intro to Power Query: import, split, change types, load
- **Exercise:** Clean an exported CRM file (inconsistent names, merged fields, text-formatted dates)

Module 4: PivotTables and PivotCharts (75 min)

- Preparing source data as an Excel Table
- Building PivotTables: rows, columns, values, filters
- Grouping dates and numeric ranges
- Calculated fields, "Show Values As" (% of total, running total)
- Slicers and timelines
- PivotCharts and refreshing data
- **Exercise:** Build a one-page sales dashboard by region, product, and month

Module 5: Workbook Reliability and Visualization (45 min)

- Data validation (drop-down lists, dependent lists, input messages)
- Conditional formatting (rules, icon sets, formula-based rules)
- Chart best practices: choosing chart types, combo charts, cleaning clutter
- Protecting sheets and locking formulas
- Documentation tips: input/calc/output sheet layout, cell comments
- **Exercise:** Add validation and conditional formatting to the Module 1 workbook

Capstone Mini-Project (20 min) and Wrap-Up (10 min)

- **Scenario:** Given a raw monthly sales export, clean it, enrich it with lookups, summarize it in a PivotTable, and add one chart and one validation control
- Group share-out of one key takeaway each
- Recap of key functions and shortcuts
- Post-training quiz and feedback form
- Next steps: Power Query/Power Pivot, macros, and recommended resources

Materials Needed

- Practice workbooks for each module (start files and solution files)

- Cheat sheet handout (functions, shortcuts, error meanings)
- Capstone dataset (about 2,000 rows)
- Pre- and post-training quizzes

Assessment

- Pre/post quiz to measure improvement
- Completion of exercises (checked by the trainer during rounds)
- Capstone deliverable reviewed against a simple checklist

Trainer Tips

- Keep a "parking lot" for advanced questions (macros, VBA, Power Pivot).
- Demo each concept for 5–10 minutes, then let participants try it right away.
- Pair stronger and weaker users during exercises.
- Plan for version differences: have INDEX/MATCH and non-dynamic-array alternatives ready for participants on older Excel.