



Advanced Excel

Detailed Workshop Schedule

Session 1: Introduction to Excel & Spreadsheet Basics (60 mins)

- What is Excel? Where is it used in real-world jobs?
- Overview of the Excel Interface (Ribbon, Cells, Rows, Columns, Sheets)
- Formatting Basics (Fonts, Colors, Borders, Cell Styles)
- Data Types: Numbers, Text, Dates, Currency
- Shortcuts & Productivity Tips – *new*
- Activity: Create a formatted student score sheet

Session 2: Working with Data – Sorting, Filtering & Validation (60 mins)

- Sorting by text, number, and custom order
- Filtering data (Basic and Advanced Filters)
- Data Validation: Drop-down lists, Input messages – *new*
- Conditional Formatting (Highlight Top/Bottom, Custom Rules)
- Hands-on Task: Filter student grades and highlight low performers

Session 3: Excel Formulas and Functions (75 mins)

- Relative vs Absolute Cell Referencing (\$A\$1) – *new*
- Commonly used functions:
 - **Math:** SUM(), AVERAGE(), ROUND()
 - **Text:** CONCAT(), LEFT(), RIGHT(), LEN(), TRIM()
 - **Date:** TODAY(), NOW(), DATEDIF() – *new*
 - **Logical:** IF(), AND(), OR(), IFERROR()
 - **Lookup:** VLOOKUP(), HLOOKUP(), XLOOKUP() – *new*
- Practice Exercise: Grade calculator with VLOOKUP

Session 4: Data Analysis with Excel (60 mins)

- Pivot Tables and Pivot Charts – *Core Feature*
- Grouping and summarizing data
- Slicers & Timelines for interactivity – *new*
- Creating dashboards from multiple sheets – *new*
- Hands-on Task: Build a mini Sales Summary Dashboard

Session 5: Charts, Graphs & Visualization (60 mins)

- Creating Pie, Bar, Line, Column, and Combo Charts
- Best practices for choosing the right chart
- Formatting charts (legends, axis, labels, titles)
- Inserting Sparklines and Data Bars – *new*
- Case Study: Visualizing Marketing KPIs or Student Scores



Session 6: Automation & Data Cleanup (45 mins)

- Flash Fill and AutoFill features
- Remove Duplicates, Text to Columns
- Named Ranges – *new*
- Intro to Macros (recording simple tasks) – *new*
- Optional: Introduction to Power Query – *new advanced*

Bonus Session: Excel in Jobs + Certifications + Projects (30 mins)

- Real-world use cases: HR, Finance, Marketing, Admin
- Excel in Data Analytics, MIS Reporting, and Freelancing
- Overview of Excel Certifications (MOS, Coursera, etc.)
- GitHub/LinkedIn Portfolio ideas using Excel dashboards
- Interview Questions & Resume Tips

Optional Add-ons (Time Permitting)

- Nested IF formulas
- Dashboard Design Guidelines
- Importing from external files (CSV, Web) – *new*
- Excel-to-Power BI integration demo

Workshop Deliverables

- Certificate of Participation
- Excel Practice Files & Templates
- Formula Cheat Sheet (Printable)
- Mini Project Workbook (Dashboard-ready)
- Shortcut Keys Guide PDF

Learning Outcomes

Students will:

- Master essential Excel skills for academic and corporate use
- Build dynamic dashboards using real data
- Automate tasks and clean messy data effectively
- Be job-ready for roles involving Excel reporting and analysis