

# Excel Course Outline

(Basic to Advanced)

## Basics

- Terminology
- Interface
- Quick navigation techniques
- Various ways to copy or move data
- Status bar settings
- Customizing ribbon and quick access toolbar
- Various ways to use ribbon
- Built-in and custom lists
- How to write a formula
- Autosum
- Find and Replace
- Hyperlinks

## Shortcut keys

- Most used shortcut keys
- For high efficiency
- Movement and Selection
- Formatting
- Insert / delete, show / hide
- Miscellaneous

## Applying Formatting

- Basic formatting
- The format cell dialog box
- Cell styles for consistency
- Using find and replace to apply formatting
- Themes
- Advanced conditional formatting

## Data Validation

- Apply data validation rules
- Identify cells with data validation rules
- Show custom messages
- Using custom formulas

## Understanding Date and Time

- Entering date and time
- Date functions
- Various date and time formats
- Doing calculations with date and time
- DATEDIF function

## Formulas and Functions

- Lookup functions
- Logical functions
- Statistical functions
- Information functions
- Text functions, Flashfill
- Data and Time functions
- Database functions
- Nesting of functions
- Named range
- Manual and Automatic calculation
- Linking sheets and files in formulas

Some of the advanced functions include:

- VLOOKUP, HLOOKUP
- INDEX, MATCH
- XLOOKUP, XMATCH
- IF, IFS
- MAXIFS, MINIFS
- SUMIF, SUMIFS
- AVERAGEIF, AVERAGEIFS
- COUNTIF, COUNTIFS
- SUMPRODUCT
- IFERROR, ISERROR
- SEQUENCE
- SUBTOTAL, AGGREGATE
- FILTER
- SORT
- UNIQUE
- NETWORKDAYS, DATEDIF
- OFFSET, INDIRECT
- FIND, SEARCH
- REPLACE, SUBSTITUTE
- DSUM, DCOUNT, DAVERAGE
- DMAX, DMIN, DGET
- SMALL, LARGE
- RANK
- FREQUENCY
- TEXTBEFORE, TEXTAFTER, TEXTSPLIT
- LET
- LAMBDA

and many more.

## Working with Lists & Tables

- Basic sorting
- Advanced sorting
- Auto filters
- Advanced filters
- Benefits of using a Table
- Extending table
- Formatting table
- Total row
- Removing duplicates
- Outlines (group/ungroup)
- Working with large data
- Using slicers

## Import / Clean Data

- Copy data from a text/CSV file
- Remove blank rows
- CLEAN function
- **PowerQuery**
  - Introduction to PowerQuery
  - Importing data from multiple sources
  - Transform data / Data cleaning
  - Combing data
- Text to columns functionality

## Pivot Tables and Pivot Charts

- Preparing data for pivot table
- Creating pivot tables and pivot charts
- Exploring pivot table options
- Using slicer and timeline to apply filters
- Customizing slicers / timelines
- More ways to filter pivot table
- Sorting data in pivot table
- Pivot cache
- Refresh pivot table / chart
- Formatting pivot table /chart
- Grouping data in pivot table
- Conditional formatting with Pivot table
- GetPivotData function
- Creating hierarchy of data
- Report filter pages
- Show values as percentage
- Adding custom fields
- Improving performance

## More Data Analysis

- What-if Analysis
  - Scenario Manager
  - Goal seek
  - Data table
- Consolidating data
- Subtotals

## Using Charts and Sparklines

- Creating charts
- Various types of charts
- Chart options
- Chart templates
- Fancy and Hybrid charts
- Printing charts

## Auditing

- Find and fix errors in formulas
- Using watch
- Add comments and notes
- Using functions to handle errors
- **Best Practices**

## Protect and Distribute

- Protect whole workbook
- Make workbook read-only
- Protect selective sheets
- Protect specific range
- Hide formulas
- Co-authoring / sharing
- **Data recovery techniques**

## Automation using Macros

- Create and edit macros to automate repetitive tasks
- Assign shortcut keys to macros
- Assign macros to objects
- Macro-enable your files

## Creating and Using Templates

- Create ready-to-use templates
- Introduce uniformity
- Reduce the probability of errors
- Write formulas for one and all
- Save time and effort

## Viewing and Printing

- Prepare sheet for printing
- Apply header/footer
- Print titles
- Rename/copy/move/color sheet tabs
- Delete/add sheets
- Hide/unhide sheets
- Explore various views
- View side-by-side
- Synchronous scrolling
- Various view options

## Other Topics

- **Improving efficiency**
- Other file formats
- Excel file behind the scenes