

# Microsoft Excel Intermediate to Advanced

**Course Duration: 2-day; Instructor-led**

Time Schedule: 9am-5pm

Lunch: 1:00pm- 2:00pm

Morning Tea-break: 10:30am-10:45am

Afternoon Tea-break: 3:30pm -3:45pm

## COURSE OBJECTIVES/LEARNING OUTCOMES

Upon completion of this program, participants should be able to:

- Create simple to complex formulas and functions, like:
  - COUNTA & COUNTIFS Function
  - AVERAGEA & AVERAGEIFS Function
  - SUMIF & SUMIFS Function
  - IF Functions
  - Nested Functions
  - Database Function
  
- Create Subtotal Using the Subtotal Function
- Analyze data Using Pivot Tables
- Perform What If Analysis using:
  - Goal Seek
  - Solver
  - Input Table
  - Scenarios
- Use VLOOKUP function to extract data
- Nesting INDEX and MATCH Function
- Combining & Consolidating Data
- Summarizing & Analyzing with Pivot Table and Pivot Charts
- Record and Run a Macro
- Validate data in a Worksheet
- Filter data using Auto & Advanced Filters
- Advanced Chart Formatting
- Clean Duplicate Records
- Visualizing Data as a Graphics

## TARGET AUDIENCE

This course is designed for Clerks, Officers, Executives, Supervisors, Administrators, Managers of all levels; and personnel who already know and understand and want to further enhance their knowledge and practical uses of Microsoft Excel.

## PREREQUISITES

Basic knowledge of Microsoft Excel is essential with the following pre-requisites:

- Have attended Microsoft Excel – Foundation Level; OR able to
  - switch between task applications
  - create a spreadsheet with simple formatting
  - create a basic chart
  - print a spreadsheet with headers and footers added
  - use Auto Filter command
  - apply Freeze Pane command
  - create basic formulas – Addition, Subtraction, Multiplication and Division
  - use basic functions – AutoSum, Count, Max, Min and Average functions.
  - validate data in a Worksheet
  - apply Filter data using Auto & Advanced Filters
  - clean Duplicate Records

## METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentation, discussion and practical exercise.

## COURSE OUTLINES

Microsoft Excel Intermediate (1 Day)

### Module 1: Referencing Calculations

Topic A: Formula Reference

- Relative References
- Absolute References
- Mixed References

### Module 2: Working with Functions

Topic A: Data Summary with Function

- COUNTA
- AVERAGEA

Topic B: Conditional Data Summary 1

- COUNTIF
- AVERAGEIF
- SUMIF

### Topic C: Conditional Data Extraction

- IFERROR
- IF

## **Module 3: Organizing Dynamic Data Range with Tables**

### Topic A: Create and Modify Tables

- Create table
- Styles and Quick Style Sets
- Removing Duplicate Values

### Topic B: Sort and Filter Data

- Sorting Data
- Filtering Data
- Advanced Filtering

### Topic C: Use Subtotal to Calculate Data

- Total Row with SubTotal Functions

## **Module 4: Visualizing Data as a Graphics**

### Topic A: Conditional Formatting

- Highlight Cell Rules
- Using Data Bars
- Using Icon Sets
- Creating New Rules with Formula

### Topic B: Create Charts

- Charts
- Chart Types
- Chart Insertion Methods
- Resizing and Moving the Chart
- Adding Additional Data
- Switching Between Rows and Columns

### Topic C: Modify and Format Charts

- Difference Between Modifying and Formatting
- Chart Elements
- Minimize Extraneous Chart Elements
- The Chart Tools Contextual Tabs
- Formatting the Chart with a Style
- Adding a Legend to the Chart

## **Module 5: Setting Up Reports as Pages**

### Topic a: Managing Multiple Windows

- Arranging Workbooks
- Comparing Workbooks Side by Side
- Synchronous Scrolling and Resetting a Window

Microsoft Excel Advanced (1 Day)

## **Module 1: Getting Different Views on Your Data**

### Topic A: Outlining and Grouping Data

- Using Automatic Outlining
- Displaying and Collapsing Levels
- Grouping Data Manually
- Creating Subtotals

## **Module 2: Advanced Functions**

### Topic A: Working with Array Formulas

- What are Array Formulas?
- Using Functions within Array Formulas

### Topic B: Using the LOOKUP Function

- Using VLOOKUP to Find Data
- Find Exact Match with VLOOKUP
- Find Closest Match with VLOOKUP
- Find with HLOOKUP

### Topic C: Linking, Consolidating, and Combining Data

- Linking Workbooks
- Consolidating Workbooks
- Combining Worksheets

## **Module 3: Summarizing and Analyzing Data with PivotTable, Slicer and Pivot Charts**

### Topic A: Create a PivotTable

- Create PivotTable Dialog Box
- PivotTable Fields Pane
- Summarize Data in a PivotTable
- Show Values as Functionality of a PivotTable

- Personalize the default PivotTable layout

#### Topic B: Filter Data by Using Slicer

- Slicers
- Insert Slicers Dialog Box

#### Topic C: Analyzing Data with PivotChart

- Creating PivotChart
- Editing a PivotChart

#### Module 4: Prevent User Changes with Protection

##### Topic A: Protecting Worksheet and Workbook

- Protecting the Current Sheet
- Protecting an Entire Workbook
- File Protection