



<b>Course:</b>	<b>Advanced Microsoft Excel 2024</b>
<b>Contact Hours:</b>	<b>18</b>
<b>Pre-requisite:</b>	<b>Basic to Intermediate Knowledge of Microsoft Excel</b>

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### **Abstract**

This course is designed to introduce participants with basic to intermediate knowledge of Microsoft Excel 2024 to the advanced features in Microsoft Excel 2024. Participants will learn to calculate data using advanced formulas and functions, analyzing data and other advanced tools in Microsoft Excel.

### **Target Audience**

- Executives and Office Managers
- Administrators, Secretaries and General Office Staff
- Sales and Marketing Personnel
- Accounts and Human Resources Staff
- Secondary and Tertiary Level Students
- Self-taught users desirous of enhancing their knowledge
- Interested members of the general public

### **Learning outcomes**

On completion of this course, learners will be able to:

1. Calculate data using advanced formulas and functions; troubleshoot and solve function errors; assign names to cells and ranges; format values and create custom number types; enforce data validation.
2. Analyze and present worksheet data using Charts, Sparklines, Diagrams, PivotTables, PivotCharts, What-if Analysis, and features such as Quick Analysis Lenses, Chart Animations and Recommendations generated by Excel from sheet data.
3. Collaborate and import data into Excel.

## Course Content

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### 1. Working with Ranges

- Fill a range with the same data, a series of Values
- Flash fill a range
- Freeze Rows or Columns
- Transpose Rows and Columns

### 2. Using Range Names

- Understanding the benefits of using Range Names
- Define a Range Name
- Using Worksheet text to define a Range Name
- Navigate a Workbook using Range Names
- Change a Range Name.
- Add cells to a range name

### 3. Building Formulas

- Understanding Excel Functions
- Using Functions; Financial, Logical, Text, Date, Time, Lookup, Reference, Math & Statistical.
- Switch to Absolute Cell References
- Troubleshoot Formula Errors
- Using a Range Name in a Formula
- Reference Another Worksheet Range in a Formula

### 4. Printing Workbooks

- Insert a Page Break
- Set the Print Area
- Configure Titles to Print on Each Page

### 5. Working with Tables

- Get to Know Table Features
- Convert a Range to a Table
- Apply a Table Style
- Build a Custom Table Style
- Create and manage PivotTable and Pivot Charts
- Using PowerPivot

### 6. Analyzing Data

- Sort a Range or Table
- Filter a Range or Table
- Create advanced filters
- Set Data Validation Rules

- Create a Data Table
- Summarize Data with Subtotals
- Group Related Data
- Analyze Data with Goal Seek
- Analyze Data with Scenarios
- Remove Duplicate Values from a Range or Table
- Highlight Cells That Meet Some Criteria
- Highlight the Top or Bottom Values in a Range
- Create a Custom Conditional Formatting Rule
- Using functions to format cells
- Consolidate Data from Multiple Worksheets
- Load the Excel Analysis ToolPak

## **7. Visualizing Data with Charts**

- Change the Chart Source Data
- Add trendlines to Charts
- Creating a dual axis chart
- Add a Sparkline to a Cell
- Create a Fill Series of Charts

## **8. Importing Data into Excel**

- Understanding External Data
- Import Data from a Data Source
- Import Data from an Access Table
- Import Data from a Word Table
- Import Data from a Text File
- Import Data from a Web Page
- Import Data from an XML File
- Separate Cell Text into Columns

## **9. Collaborating with Others**

- Add a Comment to a Cell
- Protect a Worksheet's Data
- Protect a Workbook's Structure
- Share a Workbook with Other Users
- Track Workbook Changes, Accept or Reject Workbook Changes
- Save a Workbook to Your OneDrive
- Send a Workbook as an E-Mail Attachment
- Save Excel Data as a Web Page
- Make a Workbook Compatible with Earlier Versions of Excel
- Collaborate on a Workbook Online

## Assessment Criteria

In order to achieve Learning Outcome...	The Learner must...
1. Working with Ranges	Know how to fill a range with values, sort a range of data, transpose rows and columns and freeze rows or columns.
2. Using Range Names	Understand how to define, edit, and use range names.
3. Building Formulas	Build versatile worksheet functions in Excel and incorporate them into formulas.
4. Printing Workbooks	Be capable of printing specific or general parts of a worksheet(s) or workbook.
5. Working with Tables	Knowledgeably be aware of how a table is like a database, the advantages of tables, and how tables help with data analysis.
6. Analyzing Data	Know how to apply the tools and techniques to organize, study, and reach conclusions about a specific collection of information.
7. Visualizing Data with Charts	Utilize a wide variety of chart types, and a large number of chart options to use the appropriate chart to make the data easier to understand and analyze.
8. Importing Data into Excel	Able to use the number of tools that allows external data types to be imported into Excel.
9. Collaborating with Others	Know how to add comments, share a workbook, work on a spreadsheet online, protect worksheet data and track the changes that others make.