

# € TRAINING

Advanced Excel Mastery Program





# Advanced Excel Mastery Program

## Introduction:

In the realm of Excel mastery, delving into advanced features such as Power Query, Power Pivot, and Macros opens up a world of enhanced data analysis and automation capabilities. This specialized training program is designed to equip participants with the expertise needed to harness the full potential of Excel's advanced functionalities. Through hands-on learning and practical applications, participants will unlock the power of data transformation, sophisticated modeling, and automated workflows, empowering them to elevate their analytical prowess and efficiency to new heights.

## Program Objectives:

By the end of this program, participants will be able to:

- Master advanced data manipulation techniques using Power Query.
- Understand how to create complex data models and perform advanced calculations with Power Pivot.
- Learn to automate repetitive tasks and streamline workflows using Macros.
- Gain proficiency in integrating and combining data from multiple sources for comprehensive analysis.
- Develop skills to optimize data visualization and reporting for enhanced decision-making.
- Apply advanced Excel features to real-world scenarios and projects.

## Targeted Audience:

- Excel users seeking to advance their skills beyond basic spreadsheet functionalities.
- Data analysts and business professionals aiming to enhance their data analysis and reporting capabilities.
- Professionals in finance, marketing, or operations roles who work extensively with data.
- Excel trainers or educators looking to expand their knowledge and curriculum to include advanced Excel features.
- Anyone interested in streamlining workflows, automating tasks, and gaining deeper insights from their data using Excel.

## Program Outlines:

Unit 1.

## Introduction to Power Query:

- Overview of Power Query and its benefits.
- Importing data from various sources such as Excel files, databases, and web sources.
- Transforming and cleaning data using Power Query editor.
- Combining data from multiple sources using merge and append operations.
- Removing duplicates and handling errors in data.
- Exporting transformed data to Excel or other destinations.

## Unit 2.

### Mastering Power Pivot:

- Understanding the basics of Power Pivot and data modeling.
- Creating relationships between different data tables.
- Building calculated columns and measures for advanced analysis.
- Utilizing DAX Data Analysis Expressions functions for complex calculations.
- Designing interactive pivot tables and pivot charts.
- Optimizing performance and memory usage in Power Pivot models.

## Unit 3.

### Automating Tasks with Macros:

- Introduction to Macros and VBA Visual Basic for Applications.
- Recording and editing simple Macros to automate repetitive tasks.
- Writing custom VBA code for more complex automation scenarios.
- Assigning Macros to buttons or keyboard shortcuts for quick execution.
- Debugging and troubleshooting Macros to fix errors.
- Protecting Macros and securing Excel workbooks.

## Unit 4.

### Advanced Data Analysis Techniques:

- Using Power Query and Power Pivot together for seamless data analysis.
- Applying advanced filtering and sorting techniques.
- Creating dynamic dashboards and interactive reports.
- Performing what-if analysis and scenario planning.
- Visualizing data trends and patterns using advanced charting features.
- Incorporating external data sources and APIs for enriched analysis.

## Unit 5.

### Real-world Applications and Projects:

- Working on real-world case studies and projects to apply learned concepts.
- Analyzing business datasets to derive actionable insights.
- Building customized solutions and tools using advanced Excel features.
- Collaborating with peers to solve complex data challenges.
- Presenting findings and recommendations to stakeholders.
- Receiving feedback and refining skills through practical experience.