# **Advanced Excel with Copilot for Managers**

Hours: 24

#### **Course Overview**

In the modern data-driven business environment, managers are expected to make informed decisions using accurate, well-structured, and timely data insights. This Advanced Excel with Copilot course empowers professionals to go beyond traditional spreadsheet skills by integrating advanced Excel functions, Power Query, Power Pivot, and AI-powered features like Copilot.

Participants will learn how to efficiently manage and transform large datasets, design dynamic dashboards, and use Excel's Copilot to generate insights, build formulas, and solve complex analytical problems faster.

By the end of the program, managers will be able to:

- Use advanced Excel functions for data analysis and decision-making.
- Clean, transform, and model data using Power Query and Power Pivot.
- Design interactive dashboards to visualize key business metrics.
- Leverage Excel Copilot and AI tools to enhance productivity and reporting accuracy.
- Apply Excel as a strategic decision-support tool for managerial reporting.

## **Target Audience**

This course is designed for:

- Mid to Senior-Level Managers who rely on data for decision-making.
- Business Analysts and Team Leads who prepare reports and dashboards.
- Finance, Operations, HR, and Supply Chain Professionals managing complex datasets.
- Department Heads seeking to integrate AI tools like Copilot into their workflow.
- Anyone looking to move from intermediate to advanced Excel and Alassisted analytics proficiency.

## **Prerequisite:**

Participants should have a good working knowledge of Excel fundamentals (basic formulas, charts, and data handling). No programming background is required.

#### Day 1: Advanced Excel Functions & Decision-Making Tools

### Module 1: Logical & Analytical Excel Functions

- Understanding Excel's Role in Managerial Decision-Making
- Logical Functions (IF, AND, OR, IFS, SWITCH)
- Conditional Aggregations: SUMIF, SUMIFS, COUNTIF, COUNTIFS
- Text Manipulation: TEXTJOIN, CONCAT, LEFT, RIGHT, MID
- SUMPRODUCT & FILTER Functions for Complex Data Scenarios
- XLOOKUP vs. VLOOKUP Smart Data Retrieval
- Using Dynamic Arrays and Spill Formulas for Efficiency

## Module 2: Data Organization & Validation

- Advanced Sorting & Custom Filters
- Creating Dropdowns with Data Validation
- Preventing Data Entry Errors Using Form Controls
- Conditional Formatting for Data Insights
- Using Color Scales, Icon Sets, and Custom Rules

#### Module 3: Pivot Tables, Slicers & Dashboards

- Building Interactive Pivot Tables
- Using Slicers and Timelines for Dynamic Analysis
- Creating Summary Reports from Large Datasets
- Designing Dashboard Layouts with Managerial KPIs

## Day 2: Data Cleaning & Modelling with Power Excel

## **Module 1: Introduction to Power Excel**

- When to Use Power Query vs. Power Pivot
- Integrating Excel with Modern Data Workflows

# Module 2: Power Query - Data Cleaning & Transformation

- Getting Started with Power Query Editor
- Connecting to Various Data Sources (Files, Folders, Web, Databases)
- Basic to Advanced Transformations (Split, Merge, Replace, Append)
- Working with Text, Numbers, and Dates in Power Query
- Creating Conditional Columns & Index Columns

- Grouping, Aggregating, Pivoting & Unpivoting Data
- Best Practices for Clean Data Models

#### Module 3: Power Pivot - Data Modelling & Relationships

- Introduction to Data Modelling Concepts
- Understanding the Excel Data Model
- Database Normalization & Relationship Management
- Creating and Managing Table Relationships
- Using Data vs. Diagram Views
- Understanding Relationship Cardinality (One-to-One, One-to-Many)

## Day 3: Building Dashboards & Leveraging Copilot

#### **Module 1: Creating Business Dashboards**

- Linking Power Query + Power Pivot + Excel Charts
- Using Relational Data to Create Interactive Dashboards
- Building KPI-Driven Dashboards for Management Reports
- Designing with Purpose: Layouts, Color Coding & Storytelling
- Real-Time Dashboards: Updating and Refreshing Data

#### Module 2: Introduction to DAX (Data Analysis Expressions)

- Overview of DAX and Its Role in Power Pivot
- Basic DAX Functions (CALCULATE, RELATED, SUMX, FILTER)
- Building Measures for Business Scenarios
- Using DAX for Financial, Sales & Performance Metrics

## **Module 3: Automating with Excel Macros**

- Introduction to Excel Macros for Non-Programmers
- Recording Macros
- Automating Repetitive Data Processing Tasks
- Macro Security & Best Practices

#### **Module 4: Excel Copilot for Managers**

- Understanding Excel Copilot: What It Can and Can't Do
- Attaching Data and Asking Copilot the Right Questions
- Using Copilot for:

- Writing Formulas and Fixing Errors
- Sorting, Filtering and conditional formatting
- Generating Pivot tables and charts
- Generating VBA Code
- o Highlighting data with prompt
- o Generating Reports and Insights
- Data Summaries and Trend Analysis
- Real-Time Scenarios: "Ask Copilot" for Managerial Insights
- Privacy, Accuracy & Responsible Use of AI in Excel