

# ME-EXL365DAV: MICROSOFT EXCEL 365: Microsoft DATA ANALYSIS AND VISUALISATION

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
2 Day	Intermediate	Office 365	Instructor Led	NA

### **INTRODUCTION**

Technology and the data that it both collects and makes accessible are now interwoven with businesses and lives. The era of "big data" has exploded due to the rise of cloud computing, which provides an abundance of computational power and storage, enabling organizations of all sorts to capture and store data. Leveraging that data effectively can provide timely insights and a competitive advantage.

Analyzing data to find issues, insights, and opportunities is now a critical part of many job roles. Beyond the analysis, data analysts in all job roles must be able to effectively present and communicate their findings in visually compelling ways.

Microsoft Excel is designed for this purpose. Excel can connect to a wide range of data sources, perform robust data analysis, and create diverse and robust data-driven visualizations to show insights and trends, as well as create reports. These capabilities enable people who use Excel for data analysis to turn data into thoughtful action.

### AUDIENCE PROFILE

This course is designed for students who already have foundational knowledge and skills in Excel and who wish to perform robust and advanced data and statistical analysis with Excel using PivotTables, use tools such as Power Pivot and the Analysis ToolPak to analyse data, and visualize data and insights using advanced visualizations in charts and dashboards in Excel.

### PREREQUISITES

To ensure your success in this course, you should have experience working with Excel and PivotTables. You should already understand spreadsheet concepts and be comfortable creating basic PivotTables. You can obtain this level of skill and knowledge by taking the following Logical Operations courses:

Microsoft Excel for Office 365 (Desktop or Online): Part 1

### **COURSE OBJECTIVES**

By the end of this course, users should be able to:

- Perform data analysis fundamentals.
- Visualize data with Excel.
- Analyse data with formulas and functions.
- Analyse data with PivotTables.
- Present visual insights with dashboards in Excel.
- Create geospatial visualizations with Excel.
- Perform statistical analysis.
- Get and transform data.
- Model and analyse data with Power Pivot.
- Present insights with reports.

### **COURSE CONTENT**

### Lesson 1: Data Analysis

- Fundamentals
- Topic A: Introduction to Data Science
- Topic B: Create and Modify Tables
- Topic C: Sort and Filter Data

## Lesson 2: Visualizing Data with Excel

- Topic A: Visualize Data with Charts
- Topic B: Modify and Format Charts
- Topic C: Apply Best Practices in Chart Design

#### Lesson 3: Analysing Data with Formulas and Functions

Topic A: Analyse Data with Formulas and Named Ranges



- Topic B: Analyse Data with Functions
- Topic C: Implement Data Validation, Forms, and Controls
- Topic D: Create Conditional Visualizations with Lookup Functions

### Lesson 4: Analysing Data with PivotTables

- Topic A: Create a PivotTable
- Topic B: Analyse PivotTable Data

#### Lesson 5: Presenting Visual Insights with Dashboards in Excel

- Topic A: Visualize Data with PivotCharts
- Topic B: Filter Data Using Slicers and Timelines

Topic C: Create a Dashboard in Excel

### Lesson 6: Creating Geospatial Visualizations with Excel

- Topic A: Create Map Charts in Excel
- Topic B: Customize Map Charts in Excel

#### Lesson 7: Performing Statistical Analysis

- Topic A: Visualize Trendlines and Sparklines with Excel
- Topic B: Analyse Data with the Analysis ToolPak
- Lesson 8: Getting and
- Transforming Data
- Topic A: Connect to Data with Queries
- Topic B: Clean and Combine Data

### ASSOCIATED CERTIFICATIONS & EXAM

On successful completion of this course, students will receive an attendance certificate.

**COURSE OUTLINE** 

Topic C: Shape and Transform Data

### Lesson 9: Modelling and

- Analysing Data with Power Pivot - Topic A: Install Power Pivot in Excel
- Topic B: Create Data Models with Power Pivot
- Topic C: Create Power Pivots
- Topic D: Perform Advanced Data Analysis and Visualization

### Lesson 10: Presenting Insights with Reports

- Topic A: Plan a Report
- Topic B: Create a Report