

# DATA ANALYSIS AND VISUALIZATION WITH EXCEL

## 2 DAYS

### Course summary

Technology and the data that it both collects and makes accessible is 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, allowing organizations of all sorts to capture and store data. Leveraging that data effectively can provide timely insights and 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-backed visualizations to show insights and trends, and create reports. These capabilities enable people who use Excel for data analysis to turn data into thoughtful action.

### COURSE CONTENT

#### DATA ANALYSIS FUNDAMENTALS

- Introduction to Data Science
- Create and Modify Tables
- Sort and Filter Data

#### VISUALIZING DATA WITH EXCEL

- Visualize Data with Charts
- Modify and Format Charts
- Apply Best Practices in Chart Design

#### ANALYZING DATA WITH FORMULAS AND FUNCTIONS

- Analyze Data with Formulas and Named Ranges
- Analyze Data with Functions
- Implement Data Validation, Forms, and Controls
- Create Conditional Visualizations with Lookup Functions

#### ANALYZING DATA WITH PIVOT TABLES

- Create a PivotTable
- Analyze PivotTable Data

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## PRESENTING VISUAL INSIGHTS WITH DASHBOARDS IN EXCEL

- Visualize Data with PivotCharts
- Filter Data Using Slicers and Timelines
- Create a Dashboard in Excel

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## CREATING GEOSPATIAL VISUALIZATIONS IN EXCEL

- Create Map Charts in Excel
- Customize Map Charts in Excel

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## PERFORMING STATISTICAL ANALYSIS

- Visualize Trendlines and Sparklines with Excel
- Analyze Data with the Data Analysis ToolPak

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## GETTING AND TRANSFORMING DATA

- Connect to Data with Queries
- Clean and Combine Data
- Shape and Transform Data

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## MODELING AND ANALYZING DATA WITH POWER PIVOT

- Create Data Models with Power Pivot
- Create Power Pivots
- Perform Advanced Data Analysis and Visualization

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## PRESENTING INSIGHTS WITH REPORTS

- Plan a Report
- Create a Report