



Course Outline

Microsoft Power BI: Data Analysis Practitioner

Days: 2

Prerequisites:

To ensure your success in this course, you should have experience working with Excel and working with tables/lists of organized data. You should already understand spreadsheet concepts. Prior experience creating and analyzing basic PivotTables will be helpful. We also strongly suggest having prior use of Microsoft Power Pivot.

Overview:

As technology progresses and becomes more interwoven with our businesses and lives, more data is collected about business and personal activities. This 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 a competitive advantage.

The creation of data-backed visualizations is a key way data scientists, or any professional, can explore, analyze, and report insights and trends from data. Microsoft® Power BI® software is designed for this purpose. Power BI was built to connect to a wide range of data sources, and allows users to quickly create visualizations of connected data to gain insights, show trends, and create reports. Power BI's data connection capabilities and visualization features go far beyond those that can be found in spreadsheets, allowing users to create compelling and interactive worksheets, dashboards, and stories that bring data to life and turn data into thoughtful action.

Course Objectives:

In this course, you will explore and visualize data with Power BI by doing the following:

- Analyze data with self-service BI.
- Connect to data sources.
- Perform advanced data modeling and shaping.
- Visualize data with Power BI.
- Enhance data analysis.
- Model data with calculations.
- Create interactive visualizations.

Target Student:

This course is designed for professionals in a variety of job roles who are currently using desktop or web-based data-management tools such as Microsoft Excel or SQL Server reporting server to perform numerical or general data analysis. They are responsible for conducting data analysis and providing reports about their analysis, and are looking for alternative ways to analyze business data, visualize insights, and share those insights with peers across the enterprise. This includes capturing and reporting on data to peers, executives, and clients.

MODULE 1: Analyzing Data with Self-Service BI

- Data Analysis and Visualization for Business Intelligence
- Self-Service BI with Microsoft Power BI

MODULE 2: Connecting to Data

- Create Data Connections
- Model Data with Relationships
- Save Power BI Files

MODULE 3: Performing Advanced Data Modeling and Shaping

- Clean and Transform Data with the Query Editor
- Shape Data with the Query Editor
- Combine and Manage Data Rows

MODULE 4: Visualizing Data with Power BI

- Create Visualizations in Power BI
- Chart Data in Power BI

MODULE 5: Enhancing Data Analysis

- Enhance Analysis with Customized Visuals and Pages
- Enhance Analysis with Tooltips

MODULE 6: Modeling Data with Calculations

- Create Calculations with Data Analysis Expressions (DAX)
- Create Calculated Measures and Conditional Columns

MODULE 7: Creating Interactive Visualizations

- Create and Manage Data Hierarchies
- Filter and Slice Reports
- Create Dashboards in Power BI