



# Microsoft Power BI: Data Analysis Practitioner

Course ID #: 7000-003-ZZ-Z

Hours: 14

## Course Content

### Course Description:

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.

### At Course Completion:

In this course, you will explore and visualize data with Power BI.

You will:

- 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.



# Microsoft Power BI: Data Analysis Practitioner

Course ID #: 7000-003-ZZ-Z

Hours: 14

## Prerequisites:

To ensure your success, you should have experience managing data with a spreadsheet program such as Microsoft Excel or Google Sheets. To meet this prerequisite, you can take any one or more of the following Logical Operations courses:

- *Microsoft® Office Excel® 2016: Part 1 (Desktop/Office 365™)*
- *Microsoft® Office Excel® 2016: Part 2*
- *Using Google G Suite™*

## Topics:

### Lesson 1: Analyzing Data with Self-Service BI

**Topic A:** Data Analysis and Visualization for Business Intelligence

**Topic B:** Self-Service BI with Microsoft Power BI

**Topic B:** Create Calculated Measures and Conditional Columns

### Lesson 7: Creating Interactive Visualizations

**Topic A:** Create and Manage Data Hierarchies

**Topic B:** Filter and Slice Reports

**Topic C:** Create Dashboards in Power BI

### Lesson 2: Connecting to Data

**Topic A:** Create Data Connections

**Topic B:** Model Data with Relationships

**Topic C:** Save Power BI Files

### Lesson 3: Performing Advanced Data Modeling and Shaping

**Topic A:** Clean and Transform Data with the Query Editor

**Topic B:** Shape Data with the Query Editor

**Topic C:** Combine and Manage Data Rows

### Lesson 4: Visualizing Data with Power BI

**Topic A:** Create Visualizations in Power BI

**Topic B:** Chart Data in Power BI

### Lesson 5: Enhancing Data Analysis

**Topic A:** Enhance Analysis with Customized Visuals and Pages

**Topic B:** Enhance Analysis with Tooltips

### Lesson 6: Modeling Data with Calculations

**Topic A:** Create Calculations with Data Analysis Expressions (DAX)