



Microsoft Power BI- Data Analysis Practitioner (Second Edition)

Summary

Length: 16 hours Level: Experienced

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" is a direct result of the popularity and growth 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 advantages. Creating data-backed visualizations is key for data scientists, or any professional, to 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 it enables 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, enabling users to create compelling and interactive worksheets, dashboards, and stories that bring data to life and turn data into thoughtful action. This course may earn a Credly Badge.

Learning Objectives

In this course, you will analyze data with Microsoft Power BI. You will:

- Analyze data with self-service BI.
- Connect to data sources.
- Perform data cleaning, profiling, and shaping.
- Visualize data with Power BI.
- Enhance data analysis by adding and customizing visual elements.
- Model data with calculations.
- Create interactive visualizations.

Course Outline

- 1. Analyzing Data with Self-Service BI**
 - Data Analysis and Visualization for Business Intelligence
 - Self-Service BI with Microsoft Power BI
- 2. Connecting to Data Sources**
 - Create Data Connections
 - Configure and Manage Data Relationships
 - Save Files in Power BI
- 3. Performing Data Cleaning, Profiling, and Shaping**
 - Clean, Transform, and Load Data with the Query Editor
 - Profile Data with the Query Editor
 - Shape Data with the Query Editor
 - Combine and Manage Data Rows
- 4. Visualizing Data with Power BI**
 - Create Visualizations in Power BI
 - Chart Data in Power BI
- 5. Enhancing Data Analysis**

- Customize Visuals and Pages
- Incorporate Tooltips

6. Modeling Data with Calculations

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

7. Creating Interactive Visualizations

- Create and Manage Data Hierarchies
- Filter and Slice Reports
- Create Dashboards

Audience

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 services to perform numerical or general data analysis. They are responsible for connecting to cloud-based data sources, as well as shaping and combining data for the purpose of analysis. They are also 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.

Prerequisites

To ensure your success in this course you should have experience managing data with a spreadsheet program such as Microsoft Excel, which you could obtain by taking the following Logical Operations courses. Microsoft Excel for Office 365 (Desktop or Online): Part 1 or Microsoft Office Excel 2019: Part 1 Microsoft Excel for Office 365 (Desktop or Online): Part 2 or Microsoft Office Excel 2019: Part 2 Optionally, having experience with other data analytics tools, such as Google Analytics or Customer Relationship Management (CRM) systems such as Salesforce®, as well as an understanding of database design concepts and basic programming constructs such as looping and branching, will help you get even more out of this course. The following courses are helpful but not required: Google Analytics: Foundation (Second Edition) Database Design: A Modern Approach Microsoft Excel for Office 365: Data Analysis with Power Pivot or Microsoft Office Excel 2019: Data Analysis with Power Pivot Data Analysis and Visualization with Microsoft Excel