

Microsoft Power BI Data Analysis Professional

Course PBI-4

3 Days

Instructor-led

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

- Microsoft Excel Level 1
- Microsoft Excel Level 2
- Microsoft Excel Power Pivot
- Data Analysis and Visualization with Microsoft Excel

Course Objectives

In this course, you will analyze and visualize data using Excel and associated tools. You will:

- Analyze data and create reports with Power BI.
- Connect to data.
- Perform data cleaning, profiling, and shaping.
- Visualize data with Power BI.
- Enhance data analysis by adding and customizing visual elements.
- Model data with calculations.
- Customize and filter visualizations.
- Use advanced analysis techniques.
- Share reports and create dashboards in the Power BI Service.
- Manage and collaborate in the Power BI Service.
- Enhance reports and dashboards.

Course Content

Module 1: Analyzing Data and Reporting with Power BI

- Data Analysis and Visualization for Business Intelligence
- Interact with Reports in Power BI

Module 2: Connecting to Data

- Create Data Source Connections
- Configure and Manage Relationships
- Save Files in Power BI
- Secure and Troubleshoot Connections

Module 3: Cleaning, Transforming, and Loading Data

- Load, Clean, and Shape Data with the Query Editor
- Profile Data with the Query Editor
- Shape Data with the Query Editor
- Transform Data with the Query Editor

Module 4: Visualizing Data with Power BI

- Create Visualizations with Power BI
- Select Visualization Types with Power BI

Module 5: Enhancing Visuals for Data Analysis

- Customize Visuals and Pages
- Incorporate Tooltips in Visualizations

Module 6: Modeling Data with Calculations

- Create Calculated Columns with DAX
- Create Calculated Measures and Conditional Columns

Module 7: Customizing and Filtering Reports

- Create Data Hierarchies
- Filter Reports
- Discover Time-Intelligence Insights
- Configure Slicers for Interactive Filtering

Module 8: Performing Advanced Analysis

- Create Calculated Tables, Variables, and Parameters
- Perform Statistical Analysis
- Analyze Data with Advanced Power BI Features

Module 9: Sharing Reports and Creating Dashboards in the Power BI Service

- Publish and Explore Reports in the Power BI Service
- Create Dashboards
- Add Q&A to Dashboards

Module 10: Managing and Collaborating in the Power BI Service

- Manage Workspaces and Share Content
- Collaborate with the Power BI Service

Module 11: Enhancing Reports and Dashboards

- Optimize Usability and Performance
- Create Mobile Reports for Power BI