

PL-300T00

Microsoft Power BI Data Analyst

Duration: 3 Days

Course Overview:

This 3-day course will discuss the various methods and best practices that are in line with business and technical requirements for modeling, visualizing, and analyzing data with Power BI. The course will also show how to access and process data from a range of data sources including both relational and non-relational data. This course will also explore how to implement proper security standards and policies across the Power BI spectrum including datasets and groups. The course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution.

Prerequisites:

Successful Data Analysts start this role with experience of working with data in the cloud.

Specifically:

- Understanding core data concepts.
- Knowledge of working with relational data in the cloud.
- Knowledge of working with non-relational data in the cloud.
- Knowledge of data analysis and visualization concepts.



Who Should Attend:

The audience for this course are data professionals and business intelligence professionals who want to learn how to accurately perform data analysis using Power BI. This course is also targeted toward those individuals who develop reports that visualize data from the data platform technologies that exist on both in the cloud and on-premises.



Course Outline:

Module 1: Get Started with Microsoft Data Analytics

- Data Analytics and Microsoft
- Getting Started with Power BI

Module 2: Getting Data in Power BI

- Data Analytics and Microsoft
- Optimize Performance
- Resolve Data Errors

Module 3: Cleaning, Transforming, and Loading Data in Power BI

- Shaping the Data
- Profiling the Data
- Enhance the data structure

Module 4: Design a Data Model in Power BI

- Introduction to data modeling
- Working with tables
- Dimensions and Hierarchies

Module 5: Create Model Calculations using DAX in Power BI

- Introduction to DAX
- Real-time dashboards
- Advanced DAX

Module 6: Optimize Model Performance in Power BI

- Optimize the data model for performance
- Optimize DirectQuery Models

Module 7: Create Reports in Power BI

- Design a report
- Enhance the report



Course Objectives:

Upon completing this course, the learner will be able to meet these overall objectives:

- Ingest, clean, and transform data
- Model data for performance and scalability
- Design and create reports for data analysis
- Apply and perform advanced report analytics
- Manage and share report assets

Course Outline (Cont.):

Module 8: Create Dashboards in Power BI

- Create a Dashboard
- Real-time Dashboards
- Enhance a Dashboard

Module 9: Identify Patterns and Trends in Power BI

- Advanced Analytics
- Data Insights through AI visuals

Module 10: Create and Manage Workspaces in Power BI

- Creating Workspaces
- Sharing and Managing Assets

Module 11: Manage Files and Datasets in Power BI

- Parameters
- Datasets

Module 12: Row-level Security in Power BI

- Security in Power BI



Lab Outline:

Labs are designed to assure learners a whole practical experience, through the following practical activities:

- Lab 1: Preparing Data in Power BI Desktop
- Lab 2: Loading Data in Power BI Desktop
- Lab 3: Data Modeling in Power BI Desktop
- Lab 4: Introduction to DAX in Power BI Desktop
- Lab 5: Advanced DAX in Power BI Desktop
- Lab 6: Designing a report in Power BI Desktop
- Lab 7: Enhancing reports with interaction and formatting in Power BI Desktop
- Lab 8: Creating a Dashboard in Power BI Service
- Lab 9: Data Analysis in Power BI Desktop
- Lab 10: Enforce Row-Level Security