

PL-300T00: Power BI Data Analyst

Course Duration: 24 Hours (3 Days)

Overview

This course covers 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 show how to access and process data from a range of data sources including both relational and non-relational sources. Finally, this course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution.

Audience Profile

Candidates for this exam deliver actionable insights by working with available data and applying domain expertise. They provide meaningful business value through easy-to-comprehend data visualizations, enable others to perform self-service analytics, and deploy and configure solutions for consumption.

Candidates for this exam should be proficient at using Power Query and writing expressions by using Data Analysis Expressions (DAX). These professionals know how to assess data quality. Plus, they understand data security, including row-level security and data sensitivity.

Course Syllabus

Learning Path 1: Get started with Microsoft data analytics

Module 1: Discover data analysis

- Different types of Analysis
- Data analyst tasks

Module 2: Get started building with Power BI

- Power BI services and applications work
- The Flow of Power BI
- Building Blocks of Power BI

Learning Path 2: Prepare data in Power BI Desktop

Module 1: Get data in Power BI

- Identify and connect to a data source
- Select storage mode
- Fix performance issues
- Resolve import errors
- Lab: Get data in Power BI Desktop

Module 2: Clean, transform, and load data in Power BI

- Resolve inconsistencies and data quality issues
- Apply user friendly naming conventions
- Apply data shape transformations
- Lab: Load data in Power BI Desktop

Learning Path 3: Model data with Power BI Desktop

Module 1: Design a data model in Power BI

- Data table types
- Star schema
- Create relationships
- Edit relationships
- Create hierarchies
- Lab: Design a data model in Power BI Desktop

Module 2: Add measures to semantic models

- DAX concept and syntax
- Calculated measures, columns, and tables
- Lab: Create DAX calculations in Power BI Desktop

Module 3: Use DAX functions

- Filter context
- Understand and manipulate filter context
- Use DAX functions to extend semantic models
- Semi-additive measures
- Create custom date table for Time intelligence functions
- Lab: Advanced DAX calculations in Power BI Desktop

Module 4: Optimize model performance

- Variables in DAX expressions
- Performance analyzer

Module 5: Create Visual Calculations

- Understand visual calculations and how they differ from measures
- Create visual calculations in Power BI Desktop
- Use parameters in visual calculations
- Lab: Create visual calculations in Power BI Desktop

Learning Path 4: Build Power BI visuals and reports

Module 1: Design Power BI reports

- Understand Power BI report structure and report objects
- Choose effective visuals
- Format and configure visuals
- Explore interactive features of visuals
- Lab: Design a report in Power BI Desktop

Module 2: Enhance reports for user experience

- Design report navigation and filtering
- Add report elements and bookmarks
- Drill through to other visuals
- Choose when to use paginated reports
- Lab: Enhance a report in Power BI Desktop

Module 5: Perform Advanced Analytics with Power BI Desktop

Module 1: Perform Advanced Analytics

- Use the Analyze feature
- Group, Bin and Cluster data
- Identify patterns and trends

Learning Path 6: Manage workspaces and datasets in Power BI

Module 1: Create and manage workspaces

- Create workspaces and manage permissions
- Explore different workspace items
- Share and distribute reports

Module 2: Manage semantic models

- Use a Power BI gateway to connect to on-premises data sources.
- Configure a scheduled refresh for a semantic model
- Configure incremental refresh settings
- Manage and promote semantic models

Module 3: Create Dashboards

- Create a Power BI dashboard
- Pin a live report page to a dashboard
- Add a theme to the visuals in your dashboard
- Set a mobile view
- Lab: Create a Power BI Dashboard

Module 4: Implement row-level security

- Configure row-level security by using a static method
- Configure row-level security by using a dynamic method row-level security
- Lab: Enforce row-level security in Power BI

Module 5: Explore Copilot for Power BI

- Understand semantic model requirements
- Create visuals and reports using Copilot for Power BI
- Create summaries using Copilot for Power BI

Module 6: Explore end-to-end analytics with Microsoft Fabric

- Describe end-to-end analytics in Microsoft Fabric
- Understand data teams and roles that use Fabric
- Describe how to enable and use Fabric