Course Title: PL-300T00-A Design and Manage Analytics Solutions Using Power BI [Cloud Slice Provided]	**Course Duration**: 3.0 Days
Exam: Not Included	**Exam Type**: Proctored Exam
Qualification: Microsoft Certified: Data Analyst Associate	

Course Syllabus

1 - Discover data analysis

- Overview of data analysis
- Roles in data
- Tasks of a data analyst

2 - Get started building with Power BI

- Use Power BI
- Building blocks of Power BI
- Tour and use the Power BI service

3 - Get data in Power BI

- Get data from files
- Get data from relational data sources
- Create dynamic reports with parameters
- Get data from a NoSQL database
- Get data from online services
- Select a storage mode
- Get data from Azure Analysis Services
- Fix performance issues
- Resolve data import errors

4 - Clean, transform, and load data in Power BI

- Shape the initial data
- Simplify the data structure
- Evaluate and change column data types
- Combine multiple tables into a single table
- Profile data in Power BI
- Use Advanced Editor to modify M code

5 - Design a semantic model in Power BI

- Work with tables
- Create a date table
- Work with dimensions

- Define data granularity
- Work with relationships and cardinality
- Resolve modeling challenges

6 - Add measures to Power BI Desktop models

- Create simple measures
- Create compound measures
- Create quick measures
- Compare calculated columns with measures

7 - Add calculated tables and columns to Power BI Desktop models

- Create calculated columns
- Learn about row context
- Choose a technique to add a column

8 - Use DAX time intelligence functions in Power BI Desktop models

- Use DAX time intelligence functions
- Additional time intelligence calculations

9 - Optimize a model for performance in Power BI

- Review performance of measures, relationships, and visuals
- Use variables to improve performance and troubleshooting
- Reduce cardinality
- Optimize DirectQuery models with table level storage
- Create and manage aggregations

10 - Design Power BI reports

- Design the analytical report layout
- Design visually appealing reports
- Report objects
- Select report visuals
- Select report visuals to suit the report layout
- Format and configure visualizations
- Work with key performance indicators

11 - Configure Power BI report filters

- Apply filters to the report structure
- Apply filters with slicers
- Design reports with advanced filtering techniques
- Consumption-time filtering
- Select report filter techniques
- Case study - Configure report filters based on feedback

12 - Enhance Power BI report designs for the user experience

- Design reports to show details
- Design reports to highlight values
- Design reports that behave like apps

- Work with bookmarks
- Design reports for navigation
- Work with visual headers
- Design reports with built-in assistance
- Tune report performance
- Optimize reports for mobile use

13 - Perform analytics in Power BI

- Explore statistical summary
- Identify outliers with Power BI visuals
- Group and bin data for analysis
- Apply clustering techniques
- Conduct time series analysis
- Use the Analyze feature
- Create what-if parameters
- Use specialized visuals

14 - Create and manage workspaces in Power BI

- Distribute a report or dashboard
- Monitor usage and performance
- Recommend a development life cycle strategy
- Troubleshoot data by viewing its lineage
- Configure data protection

15 - Manage semantic models in Power BI

- Use a Power BI gateway to connect to on-premises data sources
- Configure a semantic model scheduled refresh
- Configure incremental refresh settings
- Manage and promote semantic models
- Troubleshoot service connectivity
- Boost performance with query caching (Premium)

16 - Create dashboards in Power BI

- Configure data alerts
- Explore data by asking questions
- Review Quick insights
- Add a dashboard theme
- Pin a live report page to a dashboard
- Configure a real-time dashboard
- Set mobile view

17 - Implement row-level security

- Configure row-level security with the static method
- Configure row-level security with the dynamic method

Course Overview

This course teaches learners how to design and implement analytics solutions using Power BI. Participants will gain practical experience in building data models, creating interactive reports and dashboards, applying DAX calculations, and managing deployment and security for Power BI solutions in cloud environments.

Course Learning Outcomes

By the end of this course, learners will be able to connect to and transform data from multiple sources, design and optimize data models, create calculated columns, measures, and tables using DAX, build interactive and visually compelling reports and dashboards, implement row-level security, manage Power BI workspace access, and deploy and monitor analytics solutions. These skills enable learners to deliver enterprise-ready business intelligence solutions that provide actionable insights for informed decision-making.

Audience

Data analysts, business intelligence professionals, report developers, Power BI users, and IT professionals responsible for designing and managing analytics solutions

Entry-Level Requirements

Basic understanding of data concepts, familiarity with Excel, and experience with business processes and reporting

Recommended Reading

Microsoft Docs: Power BI Documentation

What's Included

Instructor-led training, course materials

Exam Information

This course prepares learners for the **Microsoft PL-300: Power BI Data Analyst Associate Certification Exam**. The exam assesses skills in connecting, transforming, and modeling data; creating visualizations and reports; configuring dashboards; and implementing security and deployment best practices. It includes scenario-based and multiple-choice questions to evaluate applied Power BI skills.

What's Next

After completing this course, learners can advance to **Power BI Advanced Features**, **DAX Mastery**, **Power Platform integration**, or other analytics and data-focused certifications.

Additional Information

Prerequisites

- 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.