

Analyzing Data with Power BI

DA100 - Version: 1

 4 days Course

Description:

This 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. Finally, this course will show how to build paginated reports within the Power BI service and publish them to a workspace for inclusion within Power BI.

Intended audience:

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.

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.

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
Create paginated reports in Power BI

Topics:

Module 1: Get Started with Microsoft Data Analytics

- Data Analytics and Microsoft
- Getting Started with Power BI

Module 2: Prepare Data in Power BI

- Get data from various data sources
- Optimize performance
- Resolve data errors

Module 3: Clean, Transform, and Load Data in Power BI

- Data shaping
- Enhance the data structure
- Data Profiling

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
- DAX context
- Advanced DAX

Module 6: Optimize Model Performance

- Optimize the model for performance
- Optimize DirectQuery Models
- Create and manage Aggregations

Module 7: Create Reports

- Design a report
- Enhance the report

Module 8: Create Dashboards

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

Module 9: Create Paginated Reports in Power BI

- Paginated report overview
- Create Paginated reports

Module 10: Perform Advanced Analytics

- Advanced Analytics
- Data Insights through AI visuals

Module 11: Create and Manage Workspaces

- Creating Workspaces
- Sharing and Managing Assets

Module 12: Manage Datasets in Power BI

- Parameters
- Datasets

Module 13: Row-level security

- Security in Power BI