

Power BI Advance

Module 1: Get data in Power BI

- Lesson 1: Getting Data from Multiple Sources
 - Excel (Locally Stored and Cloud-Based Excel file)
 - Access
 - .CSV files and folders
 - Web
 - Data Verse and Data flow
 - Azure SQL Database
 - **Demo**
- Lesson 2: Resolve data import errors
 - Web Authentication and Loading Tables
 - Resolving Data Load Error
 - Resolving Data Path Error
 - Resolving Refresh Error
 - Exploring Power View Visualization Error

Lab 1: Load data in Power BI

Module 2: Preparing Data in Power BI

- Lesson 1: Introduction to Enhancing Data Structure
 - Enhancing Data Structure – Join Types Merge Queries
 - Profile data in Power BI
 - Shape the initial data
 - Simplify the data structure
 - Evaluate and change column data types
- Lesson 2: Introduction to Designing a Data Model
 - Introduction to Dimensional Modeling
 - Elements of the Dimensional Data Model
 - Fact
 - Dimension
 - Attributes
 - Fact Table
 - Dimension Table
 - Fact Vs Dimension
 - Understanding cardinality
 - Creating Relationships and their effects
 - Define data granularity
 - Configuring Tables
 - Work with relationships and cardinality 5 min
 - Resolve modelling challenges

- Creating Hierarchy
- Explore time-based data

Lab 2: Data Transformation and Create Data Model :

Module 3: Calculation with DAX

- Lesson 1: Introduction to DAX
 - Write DAX formulas
 - Calculated Column
 - Measures
 - Create simple measures
 - Create compound measures
 - Create quick measures
 - Calculate Tables
 - Compare calculated columns with measures
 - Evaluation Context
 - Types of Contexts
- Lesson 2: Basic Math calculation
 - Summarization and Aggregation
 - Modify filter context
 - Use filter modifier functions
 - Examine filter context
 - Perform context transition
- Lesson 3: Working with context in the data model
 - Getting data from other tables using RELATED and RELATEDTABLE
 - Modifying the context using CALCULATE function
 - Use of USERELATIONSHIP function
- Lesson 4 Using DAX to perform Advance calculation
 - Handling errors gracefully
 - Understanding Row Context with Iterator function
 - SUMX
 - AVERAGEX
 - MAXX
 - RANKX)
- Lesson 5: Creating and Manipulating Table in DAX with functions
 - FILTER
 - SUMMARIZE
 - SUMMARIZECOLUMNS
 - GROUP BY
 - ADD COLUMN
 - CALENDAR & CALENDARAUTO
- Lesson 6: Working with Time
 - DatesYTD
 - DatesQTD
 - DatesMTD

- Year on Year growth calculation
- DateAdd
- Parallelperiod
- SameperiodLastYear
- Importance of Variables and Comments
- Introduction to Optimizing Model Performance

Lab 3: Calculation using DAX

Module 4: Visualize your data

- Lesson1: Introduction
 - Creating reports with different visuals
 - Cluster and Stacked column and bar chart
 - Map visualizations
 - Matrices and tables
 - Create scatter, waterfall, and funnel charts
 - Modify colors in charts and visuals
 - Page layout and formatting
 - Formatting different Visuals
- Lesson 2: Enhancing Report
 - Filtering and Sorting Reports
 - Sync Slicers
 - Creating Drill Through Pages
 - Advance Drill Through
 - Applying Conditional Formatting
 - Control visibility of measure in DAX
 - Bookmarks and Selection
 - Display measure for specific users
- Lesson 3: Introduction to advanced data visualization concepts
 - Create and import a custom report theme
 - Enable personalized visuals in a report
 - Design and configure Power BI reports for accessibility
 - Review report performance using Performance Analyzer
 - Explore statistical summary
 - Identify outliers with Power BI visuals
 - Apply clustering techniques
 - Conduct time series analysis
 - Use the Analyze feature
 - Use advanced analytics custom visuals
 - Advanced Analytics – Grouping
 - Advanced Analytics – Binning
 - Advanced Analytics – Bandings
 - Creating Animated Scatter Charts
 - Using Visuals to Forecast Values

Lab 4: Design Report in Power BI Desktop

Module 5: Advance feature of Power BI

- Lesson 1: Downloading Report Builder and creating Paginated Report
 - Introduction to paginated reports
 - Get data
 - Create a paginated report
 - Work with charts on the report
 - Publish the report
- Lesson 2: Introduction to creating Dashboards
 - Creating Dashboards – Editing Published Reports and Pinning to a New Dashboard
 - Introduction to Real-Time Dashboards
 - Creating Forms for Pushing Data
 - Creating Push Datasets
 - Accessing Power Automate
 - Creating Flow to Push Form Data into Dataset
 - Respond to Survey
 - Enhancing Dashboards with Custom Themes
 - Enhancing Dashboard with Videos
 - Enhancing Dashboard Tile Alerts
 - Using Q&A and Quick Insights and Add to Dashboards

Lab 5: Create Power Bi Paginated Report

Lab 6 : Create Power Bi Dashboard

Module 6: Managing Workspace and Datasets

- Lesson 1: Introduction to Workspace
 - Managing Workspace
 - Distribute a report or dashboard
 - Monitor usage and performance
 - Creating and Publishing Apps
 - Loading Sample Data and Making Workspace Premium
 - Recommend a development life cycle strategy
- Lesson 2: Introduction to Managing Datasets
 - Creating Parameters
 - Editing Parameters in the Service and Refreshing Datasets and Visuals
 - Working with What if Parameter
 - Implementing Row Level Security

Lab 7: Creating Workspace and Managing Dataset

Module 7: Revision session and Q&A session