



# **Microsoft Power BI Training Course**

**CURRICULUM**

# Module I – Power BI Fundamentals

- Introduction to Business Intelligence (BI)
- Power BI Overview and Architecture
- Power BI Components (Desktop, Service, Mobile, Gateway)
- Installation and Setup of Power BI Desktop
- Understanding Data Sources
- Import vs. Direct Query Mode
- Connecting to Excel, CSV, SQL, Web, and Cloud Sources
- Data Refresh Concepts
- Introduction to Power Query Editor

## Module II – Data Transformation with Power Query (ETL)

- Power Query Interface and Options
- Data Cleaning (Remove Duplicates, Errors, Blanks)
- Data Transformation Techniques (Split, Merge, Pivot, Unpivot)
- Data Profiling Tools
- Creating Calculated Columns in Query Editor
- Using Parameters in Power Query
- Handling Dates and Time in Power Query
- Combining Multiple Queries (Append vs. Merge)
- Best Practices in Query Editor

## Module III – Data Modeling

- Importance of Data Models
- Star Schema vs. Snowflake Schema
- Relationships in Power BI
- Cardinality (One-to-Many, Many-to-Many)
- Active and Inactive Relationships
- Hierarchies (Date, Geography, etc.)
- Role-Playing Dimensions
- Model Optimization Techniques
- Managing Model Size and Performance

## Module IV – DAX (Data Analysis Expressions)

- Introduction to DAX Syntax
- Calculated Columns vs. Measures
- Row Context vs. Filter Context
- Aggregation Functions (SUM, COUNT, AVERAGE, DISTINCTCOUNT)
- Time Intelligence Functions (YTD, MTD, QTD, SAMEPERIODLASTYEAR)
- CALCULATE, FILTER, ALL, ALLEXCEPT, VALUES
- Advanced DAX Functions (RANKX, SWITCH, IF, SUMX, MAXX, MINX)
- Variables in DAX
- Performance Optimization in DAX

## Module V – Data Visualization & Reporting

- Power BI Report View Interface
- Default Visualizations (Tables, Charts, KPIs, Cards)
- Advanced Visualizations (Maps, Slicers, Decomposition Tree)
- Custom Visuals (Marketplace)
- Drill-through, Drill-down, and Hierarchical Visuals
- Bookmarks, Selections, and Buttons
- Conditional Formatting
- Themes and Templates
- Designing Interactive Dashboards
- Storytelling with Data

## Module VI – Power BI Service (Cloud)

- Introduction to Power BI Service
- Workspaces, Apps, and Dashboards
- Publishing Reports from Desktop to Service
- Data Refresh and Scheduling
- Sharing Reports and Dashboards
- Row Level Security (RLS) in Service
- Collaboration and Commenting Features
- Usage Metrics and Monitoring Reports

## Module VII – Advanced Power BI Features

- Power BI and Excel Integration
- Power BI with R and Python Scripts
- Power BI and AI Capabilities (Q&A, Cognitive Services, Quick Insights)
- Paginated Reports (Report Builder)
- Deployment Pipelines (Dev, Test, Prod)
- Dataflows in Power BI Service
- Incremental Data Refresh
- Performance Analyzer Tool



## **Module VIII – Power BI Administration & Real-Time BI**

- Power BI Licensing and Pricing Models
- Power BI Gateway Setup (Personal vs. Enterprise)
- Admin Portal and Governance Policies
- Security Best Practices (RLS, OLS, Sensitivity Labels)
- Audit Logs and Compliance
- Integrating Power BI with Teams and SharePoint
- Embedding Power BI into Applications
- Real-Time Dashboards using Streaming Datasets
- Best Practices in Enterprise BI Deployment

# Thank You!

Thank you for downloading our curriculum!

We're excited to be part of your learning journey. Feel free to reach out if you need more information.

## Contact Us



[enquiries@proleed.academy](mailto:enquiries@proleed.academy)



+91-9988475050



[www.proleed.academy](http://www.proleed.academy)