

Course Outline

Next Level Power BI for Experienced Users/Intermediate Power BI Course TTDPB02: 2 days Instructor Led

About this course

Next Level Power BI for Experienced Users is a two-day course that provides attendees already experienced with Microsoft Power BI basics with a hands-on exploration of intermediate and beyond level features. This course is geared for attendees ready to learn the advanced techniques that you, your business analysts, and your stakeholders need to create complex information from projects, program, and portfolio reporting to utilizing time-phased data and, potentially, data from your enterprise's other line-of-business tools.

Audience profile

This is an Intermediate Power BI course geared for experienced users who wish to leverage the tool's more advanced capabilities.

Take Before: Attending students should have skills equivalent to or should have recently attended one of these courses:

- TTDPB01 QuickStart to Power BI for Analysts & Users

At course completion

After completing this course, students will be able to:

- Identify and retrieve data from data sources and understand the different connection methods.
- Optimize query performance
- Profile and examine the data and apply data shape transformations
- Develop a scalable and performance data model
- Enhance the data model with DAX using measures, calculated columns and tables
- Use variables and aggregations to optimize model performance
- Design and create reports and dashboards
- Select and add appropriate visualizations
- Create paginated reports
- Perform Advanced Analytics
- Create and manage workspaces
- Manage datasets and dataset refresh
- Apply row-level security

Course Outline

1. Get Started with Microsoft Data Analytics

- Overview of Data Analysis
- Roles in Data
- Introduction to Power BI
- Building Blocks of Power BI
- Touring and Using Power BI

2. Prepare Data in Power BI

Course Outline

- Introduction to getting data
- Getting data
- Select a Storage Mode
- Fix Performance Issues
- Identify and Resolve Data Import Errors

3. **Cleaning, Transforming, and Loading Data**

- Profiling Data and Examining Structures
- Identify column headers and names
- Shaping Table Structure
- Unpivot and Pivot columns
- Apply user-friendly value replacements
- Use Advanced Editor to Modify M Code

4. **Designing a Data Model in Power BI**

- Introduction to Data Modeling
- Joins and Relationships
- Star Schemas
- Configure Table and Column Properties
- Modeling Challenges
- Creating new Hierarchies

5. **Create Model Calculations using DAX in Power BI**

- Introduction to DAX
- Calculated Columns
- Understanding Context
- The CALCULATE() Function
- Using Relationships Effectively
- Time-Intelligence

6. **Optimize Model Performance**

- Introduction to Performance Optimization
- Performance Analyzer
- Implement Table Granularity
- Optimize Performance
- Introduction to Aggregations
- Managing Aggregations

7. **Create Reports**

- Design a Report Layout
- Choosing Effective Visualizations

Course Outline

- Adding Visualizations to Reports
- Format and Configure Visualizations
- Basic Interactions
- Configure Conditional Formatting
- Design for Accessibility
- Apply Slicing, Filtering, and Sorting
- Publish and Export Reports

8. Create Dashboards

- Introduction to Dashboards
- Set Mobile View
- Configure Data Alerts
- Explore Data by Asking Questions
- Configure Data Classification

9. Create Paginated Reports

- Introduction to Paginated Reports
- Getting Data
- Create a Paginated Report
- Work with Charts and Tables
- Publish the Report

10. Perform Advanced Analytics

- Introduction to Advanced Analytics
- Explore Statistical Summary
- Identify Outliers
- Advanced Analytics Custom Visuals
- Introduction to AI Visuals

11. Create and Manage Workspaces

- Introduction to Workspaces
- Create a Workspace
- Create Apps
- Monitor Usage and Performance
- Data Protection

12. Manage Datasets in Power BI

- Introduction to Datasets and Parameters
- Dataset Scheduled Refresh
- Incremental Data Refresh Settings
- Manage and Promote Datasets

Course Outline

- Troubleshooting Service Connectivity

Bonus Content / Time Permitting

13. **Row-level Security**

- Security overview in Power BI
- Row-level security
- Static Method
- Dynamic Method
- Connect to OData feeds