



The Modern Excel Power BI Advanced



Q32

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Table of Contents

Power BI Advanced – The Transformational Skills 3

- Duration3
- Objectives3
- Pre-requisite3

Outline of Power BI Advanced course: 4

1. Power BI Fundamentals Recap 4
 - 1.1 Overview of Power BI.....4
 - 1.2 Power BI Data Loading Basics4
 - 1.3 Basic Data Modeling and Visualization4
2. Advanced Data Modeling 4
 - 2.1 Advanced Relationships4
 - 2.2 DAX Calculations in Data Modeling.....4
 - 2.3 Advanced Hierarchies4
3. Advanced Data Visualization Techniques 5
 - 3.1 Custom Visualizations5
 - 3.2 Advanced Formatting and Theming.....5
 - 3.3 Drillthrough and Drilldown5
4. Power Query Advanced Techniques 5
 - 4.1 M Functions in Power Query.....5
 - 4.2 Advanced Data Transformation5
 - 4.3 Parameterized Queries5
5. Power BI Service and Power BI Desktop Integration 5
 - 5.1 Power BI Service Features.....5
 - 5.2 Power BI Desktop and Power BI Service Integration6
 - 5.3 Managing and Monitoring Reports.....6
6. Advanced Analytics in Power BI 6
 - 6.1 Time Intelligence in DAX6
 - 6.2 Advanced Statistical Analysis6
 - 6.3 AI and Machine Learning Integration.....6
7. Power BI Governance, Security, and Data Refresh 6
 - 7.1 Row-level Security (RLS).....6
 - 7.2 Power BI Governance Best Practices6
 - 7.3 Data Refresh Strategies.....6
8. Real-world Applications and Case Studies 7
 - 8.1 Building Advanced Dashboards.....7
 - 8.2 Industry-specific Case Studies.....7
 - 8.3 Q&A and Expert Panel Discussion7



Power BI Advanced – The Transformational Skills

A customizable course according to your company's requirements.

Duration

16 hours

Objectives

The course aims to transform your experience and engagement with Excel.

- 1) Power BI Fundamentals Recap
- 2) Advanced Data Modeling
- 3) Advanced Data Visualization Techniques
- 4) Power Query Advanced Techniques
- 5) Power BI Service and Power BI Desktop Integration
- 6) Advanced Analytics in Power BI
- 7) Power BI Governance, Security, and Data Refresh
- 8) Real-world Applications and Case Studies

The course is totally hands-on. No theory! No PowerPoint presentation. Throughout the course you practice the skills on a file. The exercises are based on real life data scenarios.

Pre-requisite

You must have worked on Excel for at least 12 months.



Outline of Power BI Advanced course:

1. Power BI Fundamentals Recap

1.1 Overview of Power BI

- Understanding the purpose and capabilities of Power BI
- Significance of Power BI in data analysis and visualization

1.2 Power BI Data Loading Basics

- Quick review of connecting to data sources
- Basic data transformation using Power Query

1.3 Basic Data Modeling and Visualization

- Understanding relationships in Power BI
- Creating simple visualizations using standard charts

2. Advanced Data Modeling

2.1 Advanced Relationships

- Many-to-many relationships
- Implementing bidirectional filtering
- Handling complex relationship scenarios

2.2 DAX Calculations in Data Modeling

- Utilizing DAX for calculated columns and tables
- Implementing advanced measures for dynamic insights

2.3 Advanced Hierarchies

- Building custom hierarchies
- Handling parent-child hierarchies



3. Advanced Data Visualization Techniques

3.1 Custom Visualizations

- Importing and using custom visuals
- Creating custom visualizations using Power BI developer tools

3.2 Advanced Formatting and Theming

- Customizing visuals with advanced formatting options
- Applying themes for consistent design

3.3 Drillthrough and Drilldown

- Implementing drillthrough actions
- Enabling drilldown functionality in visuals

4. Power Query Advanced Techniques

4.1 M Functions in Power Query

- Introduction to M language
- Creating custom functions in Power Query

4.2 Advanced Data Transformation

- Implementing complex transformations using M language
- Enhancing performance with query folding

4.3 Parameterized Queries

- Building parameterized queries for dynamic data loading
- Creating user-driven data exploration

5. Power BI Service and Power BI Desktop Integration

5.1 Power BI Service Features

- Collaborative features in Power BI Service
- Sharing and distributing reports in the Power BI Service



5.2 Power BI Desktop and Power BI Service Integration

- Utilizing Power BI Desktop for advanced report creation
- Integrating with Power BI Service for cloud-based analytics

5.3 Managing and Monitoring Reports

- Usage analytics and report performance monitoring
- Version control and updates in Power BI Service

6. Advanced Analytics in Power BI

6.1 Time Intelligence in DAX

- Advanced time-based calculations
- Handling complex date scenarios

6.2 Advanced Statistical Analysis

- Implementing statistical functions in DAX
- Integrating R and Python scripts for advanced analytics

6.3 AI and Machine Learning Integration

- Incorporating AI and machine learning models into Power BI
- Exploring Power BI's AI features

7. Power BI Governance, Security, and Data Refresh

7.1 Row-level Security (RLS)

- Introduction to RLS in Power BI
- Configuring and implementing row-level security

7.2 Power BI Governance Best Practices

- Optimizing Power BI performance and scalability
- Implementing best practices for report design and maintenance

7.3 Data Refresh Strategies

- Configuring and optimizing data refresh in Power BI
- Handling data refresh challenges and troubleshooting



8. Real-world Applications and Case Studies

8.1 Building Advanced Dashboards

- Designing sophisticated dashboards with advanced features
- Integrating narratives and storytelling into reports

8.2 Industry-specific Case Studies

- Analyzing real-world scenarios from various industries
- Applying advanced Power BI techniques to solve complex problems

8.3 Q&A and Expert Panel Discussion

- Addressing participant questions and engaging in in-depth discussions
- Leveraging the expertise of the instructor