



## Power BI Advanced

### Power BI

#### About The Course

This most up-to-date course covers the latest functionalities and updates in Power BI while diving deep into practical solutions of the common challenges faced by a business user while performing analytics. During this 2-day course, you will learn how to perform more sophisticated data manipulations, best practices and do's and don'ts of data modelling, AI-enhanced features and visuals and managing the security to build an enterprise-level solution.

#### Duration: 2 days

**Class size:** 10 students max

**Times:** 9:00am - 5:00pm

**Price:** Refer to our website for current course and package pricing

#### After the course?

Each student will receive:

- Certificate of completion
- Training manual
- 12 months FREE email support
- FREE class re-sit (if necessary)

#### Who Should Do This Course?

This course is suitable for business users who want to implement BI to create reports and dashboard or SQL Server report creators who are interested in alternative methods of presenting data.

#### Prerequisites

This Power BI course is suitable for people who have completed the Power BI Essentials course or have equivalent skills. To benefit most from this course, participants must have some expertise in using Excel functions such as VLOOKUP and Pivot Tables and are familiar with interface and navigation of the Microsoft Power BI tool.

## Content

### Unit 1: Introduction

- Overview of BI Process
- Overview of Different Power BI Products
- Latest Features and Top Enhancements in Power BI

### Unit 2: Power Query - Advanced Data Transformation

- Data Transformation Principle
- Pivot and Unpivot
- Merging Queries
- Appending Queries

- Using Basic Group By functionality
- Using Advanced Group by Functionality
- Choosing Columns
- Duplicating a Query
- Referencing a Query
- Difference between Duplicate and Reference
- Extracting Columns
- Formatting Columns
- Copying Queries across reports

### Unit 3: Power Query - Creating Columns

- Creating Date Columns
- Creating Standard Columns
- Creating Scientific Columns

- Creating Statistical Columns
- Creating Information Columns
- Creating Index Columns
- Creating Conditional Columns
- Creating Custom Columns
- Creating Columns by Examples

## Unit 4: Fuzzy Match

- Using Fuzzy Match to Merge Queries
- Changing Similarity Threshold
- Working with Fuzzy Merge Options
- Creating and Using Transformation Table

## Unit 5: Data Profiling

- What is Data Profiling and its use case?
- Column Distribution
- Column Quality
- Column Profile

## Unit 6: Converting Flat File into a Data Model

- Duplicate Queries
- Removing Columns
- Removing Duplicates
- Building Relationships

## Unit 7: Data Modelling - Fundamental Concepts

- Understanding a Data Model
- Understanding a Fact Table
- Understanding a Data Table
- What Is a Dimension?
- Working with Look-Up Table
- Understanding Star Schema
- Understanding Snow Flake Schema
- How Filter Propagation Work?
- Understanding Double Vs Single Cross Filtering Direction
- Understanding Active Vs Inactive Relationships

## Unit 8: Data Modelling - Common Issues and Solutions

- What Questions To Ask Before Starting?
- Good Practices of Data Modelling
- Having No Unique Identifier
- Relation between Two Different Dimensions
- Understanding Loops
- Creation of Surrogate Key
- Creation of Bridge/Fact-Less Fact Table
- Creation of Calculated Tables
- Building Calendar Table

## Unit 9: Latest Features in Data Modelling

- Many to Many Relationship
- Applying Security Filter in Both Direction
- Working with Views and Perspectives
- Composite Model
- Writing Properties for Tool Tip
- Creating Hierarchies

## Unit 10: DAX Introduction and Core Concepts

- Understanding DAX Rules and Concepts
- Filter Context
- Row Context
- Calculated Columns
- Calculated Measures
- Calculated Tables

## Unit 11: Common DAX Functions

- Related/Related Table Function
- Sum Function
- Count Function
- SumX Function
- Calculate Function
- Filter Function
- Userrelationship Function
- Using Variables for DAX

## Unit 12: Quick Measures

- Introduction to Quick Measures
- Quick Measure - Year to Date
- Quick Measure - Filter
- Quick Measure - Rolling Average
- Quick Measure - Percentage Difference

## Unit 13: Data Visualization

- Drilling through Filters across Reports
- Creating KPI Score Card
- Working With Uni Char Symbols
- Slicer Synchronization across Multiple Pages
- Working With Selection and Book Marks Pane
- Q&A Improvements
- Creating Infographics

## Unit 14: Conditional Formatting in Power BI

- By Back Ground Colour
- By Font Colour
- Data Bar
- By Rule
- By Another Column
- Dynamic Chart Titles

- Switch DAX Function
- For Chart Visuals using Measures

## Unit 15: AI Enhanced Visualization

- What are AI Visuals?
- Key Influencer Visual
- Clustering using Scatter Chart

## Unit 16: Performance Analyzer

- What is Performance Analyzer?
- Start Recording
- Understanding the Results
- Drilling Down into the Visual
- Renaming the Visual using Selection Pane
- Analyze Results to Modify Slicer
- Analyze Results to Refresh a Particular Visual

## Unit 17: Working with Row Level Security

- Creating Roles
- Writing Table Filter Expressions for a Single Field
- Writing Table Filter Expressions for Multiple Fields
- Viewing as Roles
- Creating Dynamic Row Level Security
- Creating Dynamic Row Level Security According to Reporting Line
- Assigning Members to Roles
- URL Filtering
- Dynamic URL Filtering

## Unit 18: Work Space App

- Testing Scenarios in Power BI Service
- Creating Work Space Apps
- Assigning Permissions in Work Space Apps
- Collaborating on Shared Reports
- Sharing Reports Using Apps

## Unit 19: Working with Parameters and Functions

- Create New Parameter
- Importing Web Query using Parameter
- Creating Functions
- Invoking Functions
- Defining a List
- Converting List to Table
- Adding Column by Invoking Custom Functions

## Looking for course dates?

To view a full list of course dates, please visit our website at [www.dynamicwebtraining.com.au](http://www.dynamicwebtraining.com.au)

Alternatively please contact our office on **1300 888 724**