

Duration: 2 days

Overview: This two-day course goes beyond just the basics and includes a comprehensive look at using Power BI Desktop, as well as Microsoft's Power BI Pro online service. With Power BI, you get a report authoring tool that enables you to connect to and transform data from a wide variety of sources. This allows you to then produce detailed reports through a comprehensive range of visualizations. The reward is to then be able to share those reports with your team inside or outside of your organisation, simply by publishing them to Power BI online service. This course allows you to gain a thorough understanding of the complete Power BI cycle by working with real-world examples and will equip you with the necessary skills to start applying your knowledge straight away.

Prerequisites: There are no specific technical pre-requisites for this course, but a familiarity with Excel specifically Pivot Tables, IF Statements, NESTED IF, VLOOKUPs, SUMIF, SUMIFS. Also an understanding of Relational Database Technologies may be beneficial. The main pre-requisite is to have a basic understanding of your business's need to collect, cleanse, analyse and deliver insights and visualisations of your business data.

Objectives:

- Power BI Desktop Concepts and Main Features
- Data Sources compatible with Power BI Desktop
- Connecting to Data with Power BI Desktop
- Explore Data Visualizations
- Apply Common Query Tasks to Shape Data in Power BI Desktop
- Create and publish Reports

Day 1

Getting Started

- The Power BI Process
- Launch Power BI Desktop
- The Four Views of Power BI
- Create Report Visuals

Getting Data

- Connect to Data Sources
- Connect to an Excel File
- Connect to a CSV File
- Connect to a Database
- Connect to a Web Source
- Connect to a Folder of Files
- Create a Data Table

Transform and Append Data

- Clean Data in the Query Editor
- Remove Rows by Filter
- Replace Values, Query Data Types
- Data Type Detection, Add a Custom Column
- Append Data to a Query, Add an Index Column
- Resolve Error Issues
- Perform Basic Math Operations

The Power Query Editor

- Fill Data Up and Down
- Split Column by Delimiter
- Add Conditional and Custom Columns
- A Simple Column Merge

Continued

Pivot and Unpivot Data

- Pivot Data in Power Query
- Pivot and Append Data
- Pivot but Don't Summarise
- Unpivot Data
- Append Mismatched Headers

Manage Table Relationships Merge Queries

- Table Join Kinds
- The Merge Process

Group Data in Power Query

- Group Rows in a Table

Build a Data Model

- Relate Tables in a Data Model
- Cardinality
- Data modelling schema
- Filter Flow
- Table joins
- Hide in Report View

Dax Calculated Columns

- Create Calculated Columns
- Calculated columns best practice
- Dax Syntax
- Common function categories

Day 2

Introduction to DAX Measures

- DAX Rules
- Turn off Field Summarisation
- The SUM, AVERAGE and COUNT Functions
- The COUNTROWS Function
- The DISINCTCOUNT Function
- The IF Function
- The RELATE Function
- The SUMX Function
- When to Use SUMX vs. SUM
- How to work out percentage Measures
- Creating a Measure Table

Create Report Visualizations

- Create and Format Visuals
- Create Column Charts, Line Charts and Donuts
- Create a Map Visual, Create a Chart Visual
- Format Map and Chart Visuals
- Create Table, Matrix and Card Visuals
- KPI, Gauge, Waterfall visuals
- Format Matrix and Table visuals
- Control a Visual's Number Format

- Use Slicers to Filter Data
- Sync Slicers Across Pages
- Visuals from the Marketplace
- Export Report Data to Excel

Hierarchy, Groups and Conditional Formats

- Create a Hierarchy to "Drill" Data
- Compare Data in Groups
- Add Conditional Formatting

Publish and Share Your Report Online

- Publish to the Online Power BI Service
- Get Reports from Power BI Service
- Get Quick Insights
- What is Q&A?
- Share your Report