## PBI015: Microsoft Power BI – Up & Running with Power BI for Desktop

Duration: 3 Days; Instructor-led

#### **WORKSHOP DESCRIPTION**

This course provides students with the knowledge and skills to analyse data with Power Business Intelligence.

## **LEARNING OBJECTIVES**

- Build Professional-Quality Business Intelligence reports from the ground up
- Blend and transform raw data into beautiful interactive dashboards
- Design and implement the same BI Tools used by professional analysts and data scientists
- Showcase your skills with two full-scale course projects (with step-by-step solutions)
- Understand the business intelligence workflow from end-to-end

#### **SKILLS GAINED**

This course is intended for Information workers who have an understanding of Microsoft Office Excel

### **AUDIENCE PROFILE**

The primary audience for this course is professionals who need to analyse data utilizing Power BI. The secondary audiences for this course are technically proficient business users.

#### **PREREOUISITES**

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- An awareness of key business priorities such as revenue, profitability, and financial accounting is desirable.
- Familiarity with Microsoft Office applications particularly Excel.

## **SYSTEM REQUIREMENTS**

- Microsoft Power Bi for Desktop (Free Download)
- This course is designed for PC/Windows users (Currently not available for MAC)
- Experience with Excel Power Query, Power Pivot & DAX is a plus but not required

## **COURSE OUTLINE**

# Module 1: Introduction to Self-Service BI Solutions

- Introduction to Business Intelligence
- Introduction to Data Analysis
- Introduction to Data Visualization
- · Overview of Self-Service BI
- · Considerations for Self-Service BI
- Microsoft Tools for Self-Service BI

## Module 2: Introducing Power BI

- Power BI
- The Power BI Service

#### Module 3: Power BI Data

- Using Excel as a Data Source for Power BI
- Using PDF as a Data Source for Power BI
- Using Text / CSV file as a Data Source for Power BI
- Using Folder as a Data Source for Power BI
- Using Web as a Data Source for Power BI
- The Power BI Data Model
- Using Databases as a Data Source for Power BI
- The Power BI Service

#### Module 4: Connect & Transform the Raw Data

- Introduction to Power Query Editor
- Types of Power BI Data Connectors
- Basic Table Transformations
- Power BI Desktop Queries
- Raw Data Housekeeping
- Shaping Data
- Combining Data
- Text, Number, Date Tools
- Index and Conditional Columns
- Grouping and Aggregating Data
- Connecting to Folders
- Defining Hierarchies & Categories
- Query Editing and Power BI Best Practices

# Module 5: Build a Relational Data Model

- Introduction to Database Normalization
- Data ("Fact") Tables Vs. Lookup ("Dimension") Tables
- Creating Power BI Table Relationships
- Active vs. Inactive Relationships
- Relationship Cardinality
- Connecting Multiple Data Tables
- Filtering & Cross Filtering
- Data Modelling & Relationships
- Basic Calculations and Measure

# Module 6: Interactive Data Reports & Visualizations

- Intro to the Power BI Report View
- Adding Basic Charts to Power Bi reports
- Formatting and Filtering Options
- Matrix Visuals
- Slicers & Timelines
- Cards & KPIs
- Power BI Map Visuals
- Tree maps, Lines Areas, Gauges
- Editing Report Interactions
- Adding Drill through Filter
- Linking to Report Bookmarks
- Managing & Viewing Roles
- Power BI Data Visualization Best Practises

# **Module 7: Direct Connectivity**

- Cloud Data
- Connecting to Analysis Services

# Module 8: Development with Power BI

- The Power BI API
- Custom Visuals

# Module 9: Publishing Power BI

- Publishing Power BI to PowerBI.Com
- Intro to Power BI Mobile Apps