

#### Power BI

# PBIBC16: Power BI for Excel 2016 – Report Builders, Power BI Tools, Data Model Designers and DAX Functions

Power BI for Report Builders, Power BI Tools, Data Model Designers and DAX Functions 5-day training course.

\$2,775.00

• 5 Days

# **Upcoming Dates**

# **Course Description**

First day topics covered include an overview of PowerPivot, creating effective and professional reports, creating hierarchies, effectively applying different chart styles, and creating report templates. Second day topics include creating Power Views with Excel, Power Map, and Power Query. Third day topics include database design concepts, how to build both general purpose and customized data models, and how to use basic DAX language and functionality to extend the capabilities of data models for in-depth and customized analysis of information. Fourth and fifth day topics covered in this class include Relational functions, Date functions, Banding, Ranking, advanced Slicer techniques, plus using DAX as a query language for customized analysis.

## Course Outline

#### Lesson 1: Introducing PowerPivot

- What Is PowerPivot?
- PowerPivot Key Features
- The Self-Service BI Model
- PowerPivot Components

## Lesson 2: Defining a Report

- What is a PowerPivot Report?
- Defining a Report
- Data-Driven Storytelling

# Lesson 3: Understanding PowerPivot Data

- Data Terminology
- Understanding Tables
- Understanding Relationships
- Diagnosing Data Models
- Data Model Schemas

#### Lesson 4: Create Reports using PowerPivot Data

- Making Changes to PowerPivot Data
- Creating PowerPivot PivotTables

- Creating PowerPivot PivotCharts
- Creating Slicers
- Graphing Data

## Lesson 5: Understanding PowerPivot Functions

- Calculated Columns
- What is DAX?
- Understanding DAX Functions
- Common DAX Functions
- Dates and Date Functions

#### Lesson 6: Introducing Power BI Tools

- Microsoft's Self-Service Power Bi Model
- What Is Power BI for Excel

#### Lesson 7: Power View for Excel 2016

- What Is Power View?
- Planning Power View Reports
- Creating Power View Reports
- Power View Interface Components

## Lesson 8: Understanding Chart

- Understanding Table Visualizations
- Chart Visualizations
- Additional Power View Features
- Power View Tiles
- Power View Slicers
- Multiples

#### Lesson 9:3D Maps for Excel 2016

- What are 3D Maps?
- Preparing a 3D Map Tour
- 3D Maps Designer
- Creating a 3D Maps Tour
- 3D Maps Formatting Tools
- Finalizing a 3D Maps Tour

## Lesson 10: BI Data Queries in Excel 2016

- What are BI Data Queries?
- Planning BI Data Query
- Creating a BI Data Query

## Lesson 11: Understanding BI Data

- Business Intelligence Data Sources
- Data Source Types
- PowerPivot Data Sources

#### Lesson 12: Creating Data Models

- Creating a Data Model Excel
- Creating a Data Model Database
- Creating a Data Model Hybrid

#### Lesson 13: Use DAX Functions

- Review of Syntax and Calculated Columns
- Best Practices
- DAX Measures
- Creating Measures (Calculated Fields)

## Lesson 14: Using Dates Correctly

- Why Dates are Different
- Building Data Tables
- Building Data Hierarchies

#### Lesson 15: Shaping Reports

- Building Communication Worksheets
- Controlling Item Ordering
- PowerPivot Metadata

#### Lesson 16: Basic DAX Functionality

- Review Of Calculated Column
- PivotTable Function
- Review Of Measure
- Rules Of DAX Measure
- Evaluation Context
- Formatting DAX Code

## Lesson 17: Controlling Content & Values

- Controlling Values
- Switch Function
- Error Handling

## **Lesson 18: Context Control Functions**

- Filter Function
- All Function
- Iterative Functions
- Earlier Function
- Calculate Function

Additional Uses Of The All Function

## Lesson 19: Contexts In Relationships

- Working With Many Tables
- Row Context & Relationships
- Filter Context & Relationships
- Values Function

# Lesson 20: Advanced Concepts

- Circular Dependencies
- Controlling Totals
- Advanced Hierarchy Concepts

## Lesson 21: Time Intelligence Calculations

- Working With Date Tables
- Calculating Operating Periods

- Working With Missing Periods
- DAX Date Functions
- Advanced Date Functions
- Prior Year Functions
- Moving Averages

#### Lesson 22: DAX Dashboard Techniques

- Parameter Tables
- Banding
- Ranking
- Advanced Slicer Techniques

#### **Audience**

This course is designed for students who want to learn report builder in PowerPivot.

# **Prerequisites**

This course is designed for students who want to learn report builder in PowerPivot.

#### What You Will Learn

After completing this course, students will be able to:

- Introducing PowerPivot
- Defining a Report
- Understanding PowerPivot Data
- Create Reports using PowerPivot Data
- Understanding PowerPivot Functions
- Introducing Power BI Tools
- Power View for Excel 2016
- Understanding Chart
- 3D Maps for Excel 2016
- BI Data Queries in Excel 2016
- Understanding BI Data
- Creating Data Models
- Use DAX Functions
- Using Dates Correctly
- Shaping Reports
- Basic DAX Functionality
- Controlling Content & Values
- Context Control Functions
- Contexts In Relationships
- Advanced Concepts
- Time Intelligence Calculations
- DAX Dashboard Techniques