Course Outline

Microsoft Power BI Interactive Data Visualizations (2016)

Days: 2

Prerequisites:

To ensure your success in this course, you should have experience working with Excel and working with tables/lists of organized data. You should already understand spreadsheet concepts. Prior experience creating and analyzing basic PivotTables will be helpful.

Overview:

Microsoft Power BI transforms your company data into rich visuals that facilitate innovative ways of thinking about and organizing your data, so that you can focus on what is important to achieving your goals. This course covers both Power BI Online and Power BI desktop.

Course Objectives:

Upon completing this course, students will have a basic understanding of the topics below, as well as an ability to utilize and implement the concepts learned.

- Power BI
- Power BI Desktop
- Working with CSV, TXT, and Excel Worksheets
- Connecting to Databases
- Merging, Grouping, Summarizing, and Calculating Data
- Reporting
- Power BI Online

MODULE 1: COURSE OVERVIEW

This module explains how the class will be structured and introduces course materials and additional administrative information.

- Introduction
- Course Materials
- Facilities
- Prerequisites
- What We'll Be Discussing

MODULE 2: POWER BI

In this module, we will explain what Power BI provides, examine the products available and what they bring to the table, and cover how Power BI updates are provided.

- Understand Power BI.
- Understand the differences between products.
- Understand Power BI updates.

MODULE 3: POWER BI DESKTOP

In this module, we will examine the steps necessary to install Power BI Desktop, explore the interface, discuss the available file types, and data sources, and discuss how to configure data refresh settings. We will also cover the available data types and discuss best practices in utilizing them.

- Introduction to Power BI

MODULE 4: WORKING WITH CSV, TXT AND EXCEL WORKSHEETS

In this module, we will examine importing data, transforming data, loading data, and manipulating data using CSV, TXT, and Excel Worksheets. Power BI handles these files types with ease.

- Importing, Transforming, and Loading Data
- Appending Operations
- Working with Folders and Files
- Using Pivot Tables

MODULE 5: CONNECTING TO DATABASES

In this module, we will explore the process of connecting to databases and also examine relationships.

- Importing From SQL Server and Examining Relationships
- Importing From SSAS Multidimensional

MODULE 6: MERGING, GROUPING, SUMMARIZING, AND CALCULATING DATA

In this module, we will discuss why merges have been difficult in the past, examine how much easier they are to utilize today, and explore grouping, summarizing and calculating options.

- Performing Merges
- Grouping and Summarizing
- Calculating

MODULE 7: REPORTING

In this module, we will create a report and examine the visualization options.

- Creating Reports
- Utilizing the Matrix Visualization
- Utilizing the Map Visualization
- Utilizing the Card Visualization
- Utilizing the Chart Visualization
- Utilizing Slicers
- Publishing to Power BI Online

MODULE 8: POWER BI ONLINE

In this module, we will explore what Power BI Online is and examine the features available, then discuss mobile options.

- Exploring the Power BI Online Interface
- Importing Excel (.xlsx or .xlsm), Comma Separated Value (.csv), and Power BI Desktop (.pbix) Files
- Creating a Report
- Adding Filters to a Report
- Adding KPIs to a Report
- Creating a Dashboard
- Pinning Tiles