



# Excel 2013 - 2016 Power Query, Power View and Power Map

Course ISI-1484      2 Days      Instructor-led, Hands on

## Introduction

Power Query, Power View and Power Map are popular tools for Excel. They are easy to learn. This two-day, instructor-led course will get you up and running quickly, by teaching you the basics and then progressing to advanced features.

This course is primarily for new users of Power Query, Power View or Power Map for Excel 2013 or 2016. These free, business intelligence tools provide dashboard reporting and data analysis capabilities, as well as functionality that Excel does not have.

If you are looking for step-by-step instructions for one or all of these software packages, this is the course that you have been looking for. There are time saving tips and advice to help you learn the advanced concepts. In a user-friendly way you will learn the following topics: How to import data into Power Query, use the Query Editor to create formulas and filter data for visualizations, user Power View to create reports and charts and much, much more.

## Course Objectives

After completing this course, students will be able to:

- Load data from a variety of sources into the data model or to worksheets, using Power Query
- Learn how to discover data needed for analysis and visualizations
- Use the Query Editor in Power Query to transform data
- Create reports that display data that is filtered
- Use Power View to create a variety of chart styles, including bar, pie and scatter
- Add drill down and interactive functionality to charts
- Create maps in Power View and 3D Maps

## Prerequisites

To ensure your success, we recommend you first take the following courses or have equivalent knowledge:

- Microsoft Excel 2013-2016 Power Pivot, Course ISI-1483

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## Course Outline

### Module 1: Getting Started With Power BI Tools For Excel

- Power BI Tools for Excel
- What is the difference between the 32 and 64-bit versions of Excel?
- What's New In Power BI Tools for Excel
- Power BI Tools For Excel
- What Is Power Query Designed To Do?
- What is ETL?

#### Exercises

- Create A Folder For Your Files
- Enable The Power View And Power Map Add-Ins
- Add a Button For Power View To The Workspace

### Module 2: Getting Started With Power Query

- What Can I User Power Query For?
- Understanding The “Query” in Power Query
- Get & Transform Options
- What Is A Data Model?
- Getting Data

#### Exercises

- Use The From Web Data Source Option
- Use The From Workbook Data Source Option
- Import Data From Multiple Sources Into One Workbook
- Import Data From Different Text File Types
- Use An Access Database As The Data Source
- Get Data From The Azure Marketplace
- Import Data From An OData Data Feed
- Use An Excel Table As The Data Source
- Use A Named Range As The Data Source

### Module 3: The Query Editor

- Query Editor Overview
- What Is A Query?
- Query Settings Panel
- Home Tab
- Sorting On Multiple Columns
- Group By Options

#### Exercises



- Use The Reduce Columns And Rows Options
- Remove Duplicate Records
- Loading A List Of Tables

## **Module 4: Filters, Custom Columns And Formulas**

- Filter Options
- Filtering Data In Power Query
- Text Filter Functions
- Numeric Filter Functions
- Date And Time Filter Functions
- Shaping The Data

### Exercises

- Using Filters in Power Query
- Create Date And Text Filters
- Create A Custom Filter
- Custom Columns
- Add Columns To A Table
- Add Index Column Options
- Create A Custom Index

## **Module 5: Using The Query Editor To Mash Up Data**

- Transform Tab
- Data Types
- Structured Data Types

### Exercises

- Use The Transform Tab Options
- Use The Transform And Add Column Tabs Merge Columns Options
- Pivot Column Options
- Using Data In Non Tabular Format
- Import More Data
- Create Calculations Using Options On The Add Column Tab
- Use Options On The Add Column Tab To Clean The Data

## **Module 6: Filter And Sort Data**

- Filters Panel
- Filter Options
- Advanced Filter Mode Options

### Exercises

- Create A Date Filter

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- Create A Date Range Filter
- What Is A Date Table?
- Understanding Hierarchies
- Create A Year Filter
- Sorting The Data Displayed IN A Table Visualization
- Create A Report With Data From Multiple Tables
- Use Hierarchy Fields To Filter Data On A Report
- Filtering Numeric Data
- Create Table Level Filters
- Filters For Text Fields
- Use The List Filter Mode Options With a Text Field
- User The Advanced Filter Search Option
- Use A Wildcard Character to Filter Records
- Use The OR Operator To Filter Records

## **Module 7: Visualization Styles**

- Using Tiles

### Exercise

- Use Tiles to Filter A Numeric Field
- Use Tiles To Filter A Text Field
- Create A Filter For The Country Tiles
- Add Tiles To Each Visualization On The Report
- Table Types
- Create A Row Matrix Table
- Adding A Count Field
- Add A Filter To A Row Matrix Table
- Create A Column Matrix Table
- Creating Totals by Year
- Add Drill Down Functionality To A Row Matrix Table
- Create A Row And Column Matrix Table With Drill Down Functionality
- Card Table
- Use The Card Style Layout

## **Module 8: Introduction To Charts**

- Creating Charts In Power View

### Exercises

- Create A Bar Chart
- Sort The Data On A Chart
- Creating Text Box Callouts
- Add Text To A Chart
- Too Much Data For A Chart

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- Change The Data Displayed On A Chart
- Layout Tab
- Change The Colors On Bar And Column Charts
- Create Chart Level Filters
- Add Drill Down Functionality To A chart
- Add Three Levels Of Drill Down Functionality To A Chart
- Create A Column Chart That Uses A Hierarch Field
- Create A Chart With More Than One Field In The Values Section

## **Module 9: Advanced Charts And Options**

- Create A Pie Chart
- How Pie Charts Are Sorted
- Displaying Multiple Charts

## **Module 10: Add Interactive Features To Reports**

- Slicers
- Highlighting Data

## **Module 11: Creating Maps In Power View**

- How Mapping Works In Power View
- Using The Locations Value Twice

## **Module 12: Getting Started With 3D Maps**

- What is 3D Maps?
- 3D Maps Workspace
- File Tab
- Home Tab
- Layer Panel
- Opening An Existing Or New Tour
- Using Annotations
- Scene Options
- Layer Chart Options
- Using The Capture Screen Option
- Create A Video