

# Microsoft 365 Excel 2019 Power Query Introduction 1 Day Course

#### Overview

Excel Power Query gets data from almost anywhere (web, databases, Excel files, SharePoint, Salesforce etc.) and enables you to tidy it up it in many ways (clean, transform, merge and append). Non-technical Excel users can analyse data and produce reports quickly using it's GUI interface that's easier to learn than formulas or VBA.

### **Audience**

Anyone using Excel to clean and reformat data to produce reports.

### **Course Objectives**

At the end of this course, delegates will be able to:

- Create effective and professional reports
- Gather and transform data from multiple sources
- Discover and combine data in mashups
- Learn about data model creation
- Explore, analyze, and visualize data

# PQ

## **Prerequisites**

Delegates must have advanced knowledge, experience and understanding of PivotTables.

# Course Contents (1 day)

- Introduction
  - o What is it?
  - Installing Power Query
  - o The interface
- Data Import Sources
  - Working with CSV; Text; Excel Files
  - o Importing multiple files
  - Working with web data
  - o Scraping Data from web pages
  - o Call to a Web Service
- Folders and Files
  - o Get data from Windows File manager
  - o Combining Data from Multiple Files
- Columns
  - o Name; Move; Split; Merge
  - o Add/Remove; Format; reorder
- Filter and Sort
  - o Using Auto-Filter
  - o Using Number, Text and Date Filters
  - o Filtering Rows by Range
  - o Removing Duplicate Values

- o Filtering out Rows with Errors
- o Sorting
- o Grouping rows
- Changing Values in a Table
  - o Replacing Values
  - Transformations: Text; Number; Date/Time
  - o Replacing Missing Values
  - Removing spaces, special characters
- Table Transformations
  - Unpivoting Columns to Rows
  - Transposing a Table
  - Creating calculating columns/fields
- Loading Data
  - o Into a Worksheet
  - o Into the Excel Data Model
  - o Table Relationships
  - o Refreshing Queries Manual & Auto
- Query Editor
  - o Edit Query Steps and Settings
  - Refresh a Query





- Queries
  - Understanding Power Query's M language syntax
  - o Merging tables and queries
  - o Using functions in columns
  - Using IF statements

- o Creating custom functions
- o Implementing dynamic parameter tables
- o Creating calendar tables
- Sharing queries
- Best practice

### **Course Materials**

Enliten IT will provide each delegate with a workbook and other useful reference materials where applicable. These may be either paper based or in Adobe pdf format or a combination thereof.

Enliten IT reserves the right to modify course content and materials as required in the interests of continuous course improvement, at any time, without notification.

The suggested course duration is a guideline. Course topics and duration may be modified by the instructor based upon the knowledge and skill level of the course participants.