Microsoft Excel
Power Tools

Course Overview

MS Excel is one of the most widely used tools for data analysis, but traditional MS Excel has some real limitations: it can be very time-consuming importing and cleaning data; MS Excel can only fit a million rows; and while pivot tables are a great analysis tool, they can only get data from a single flattened table and the calculations they perform are very limited. With the new power tools that has all changed!

In this advanced course, we will introduce Power Query for automating data retrieval and transformation, Power Pivot for creating related data models that can handle millions of rows, and DAX functions for performing advanced analyses in our pivot tables.

Program Format

This is a one-day program that can be delivered face-to-face or as 2 x 3-hour virtual programs.

Course Objectives

- Automate data import and transformation from MS Excel and other sources, including folders.
- Append and merge queries to integrate multiple data sets for comprehensive analysis.
- Clean and reshape data by removing duplicates, unwanted columns, and pivoting or unpivoting data.
- Build data models with Power Pivot, create calculated columns and measures using DAX, and enhance analyses with pivot tables.
- Apply conditional formatting, create pivot charts, and design dashboards by linking visualisations to pivot tables and OLAP cubes.

Course Outline

Power Query for Getting Data
Get data from Excel
Get data from other sources
Get data from a folder

Power Query for Combining Data Sets
Append queries
Understand merge query options
Perform a range of merge queries

Power Query and M for Transforming Data
Fill in the blanks
Remove unwanted columns and rows
Remove duplicates
Merge, Split and add columns
Pivot and Unpivot data

Data Visualisation
Add Conditional Formatting to Pivot tables
Create Pivot Charts
Add slicers and link to multiple pivot charts
Convert Pivot Tables to OLAP cubes for more visualisation options
Use visualisations to create a dashboard

DAX
Introduction to DAX (Data Analysis Expressions)
Create calculated columns using DAX
Create simple measures using DAX
Create Pivot tables using the data model and DAX measures

Power Pivot
What is Power Pivot and how to enable it
Add data to the Data Model
Create a Calendar table
Add Relationships

A Better Way To Work