Advanced Excel Power Query, Power Pivots and Macros

Why Attend

- Though many professionals use Excel on a daily basis, Excel has many undiscovered functions that can increase productivity even further. In this course, we will explore one of the relatively new tools brought by Excel to help professionals in cleaning up and preparing data for further analysis and reporting: Power Query. This tool is available as an "Add In" on Excel 2013 but comes readily available on Excel 2016 and newer versions. In addition, we will cover many features of pivot tables which is the main reporting tool in Excel. We will also take a look at PowerPivots, another powerful tool in Excel which will put your pivot tables on turbo. While pivot tables have some limitations, PowerPivots can be used when you have significantly big data. The last part of the course is dedicated to automating your Excel reports and reconciliation through the use of macros.
- This is the second course after the "Next Generation Excel: Advanced Business and Financial Reporting" course.

Course Methodology

- This is a hands-on course with practical applications and use of Microsoft Excel 2016 throughout the five days. All examples, exercises and cases are practiced in Excel.

Course Objectives

By the end of the course, participants will be able to:

- Apply key Excel functions to prepare data for analysis using pivot tables
- Create and customize pivot tables to reconcile and analyze accounts efficiently
- Utilize Power Query to clean up and prepare data for reporting
- Utilize pivot tables functions and calculations to generate a set of management and business analysis reports
- Run macros to speed up work and utilize other advanced techniques in data analysis and reporting
- Report and analyze big data using PowerPivots

Target Audience

- Accountants, senior and junior accountants, business analysts, accounting and finance professionals, business analysts, research professionals and staff from any function who need to

master and upgrade their skills in Excel pivot tables, Power Query and Power Pivots and work with big data analysis.

Target Competencies

- Power Query
- Practicing pivot tables
- Working with PowerPivot
- Reporting
- Analyzing business data
- Designing basic macros

Key functions to prepare data for pivot table reporting

- Table format
- Lookup functions
- Text functions
- Naming cells

Advanced techniques in creating and customizing pivot tables

- Number and cell format
- Report layout
- Calculation in value field
- Grouping and un-grouping fields
- Default and customized sorting and filtering
- Sorting using custom list
- Creating calculated field
- Filtering using slicers and timelines
- Connecting multiple pivot tables to one set of slicers
- Customizing reports using the GetPivotData option

Power Query: A must-have skill

- Introduction to this new feature
- Where does Power Query fit in the Power family!
- Get and transform: Link your Excel to external other data sources
- Excel files
- Text files
- Web
- SQL
- Creating and editing the Query
- Get data from: Tables, files and folders
- Power Query to clean up data
- Practical examples:
- UnPivotting data
- Working with nested column headers and merged cells

- Naming, merging, splitting and removing columns
- Filtering rows in different ways
- Transforming and formatting data
- Combining queries: Merge and Append
- The different types of joining data

Analyzing disparate data sources with pivot tables

- Utilizing pivot table wizard
- Using internal data model
- Building pivot tables using external data sources

The new world of PowerPivot

- Benefits and drawbacks of PowerPivot
- Merging data from multiple tables without using Vlookup
- Creating better calculations using the DAX Formulas
- Using DAX to create calculated fields
- Calculate and Related functions

Introduction to Macros: Let Excel do the work for you

- Where you cannot use Power Query, use macros
- Planning your macro
- Creating and recording macros
- Editing macros
- Introduction to Visual Basic for Application (VBA)