

**Advanced Data Analytics with Excel**

**Course Number:** OFC-123  
**Duration:** 1 day

**Overview**

This Advanced Data Analytics with Excel training course teaches participants how to quickly and accurately gain insights and understand their data in a meaningful way using Excel. Attendees learn how to use Excel's tools for data analysis, including PivotTables, Power Pivot, and Power Query, to import, transform, clean, shape, and analyze data, model relationships, create data visualizations, and more.

**Prerequisites**

All students must be familiar with Excel and its basic functions.

**Materials**

All Advanced Excel training attendees receive comprehensive courseware.

**Software Needed on Each Student PC**

* Excel 2016, 2019, 365, or later
* Related lab files that Accelebrate will provide

**Objectives**

* Import data from different data sources, such as Excel, CSV, Web, and SQL Server
* Transform and clean data using Power Query Editor
* Perform data modeling, including creating relationships and hierarchies
* Add calculations, measures, and KPIs using DAX
* Perform data visualization using sparklines, data bars, table, and PivotTables
* Use filters and slicers to limit the data displayed on the report
* Forecast data and use what-if scenarios
* Use Natural Language Processing (NLP) to ask questions based on your data

**Outline**

* Introduction
* Working with Tables and PivotTables in Excel
  + Configuring filters
  + Adding slicers
  + Configuring time-intelligence slicer
  + Adding conditional formatting to tables
  + Adding sparklines
  + Adding data bars
  + Adding indicators/KPIs
* Using the Map Visual
  + Categorizing geo-spatial data
  + Add the basic map visual
  + Add the 3-D map visual
* Working with Q&A/NLP (Natural Language Processing) in Excel 365
  + Querying data using Q&A / NLP
* Import Data using Power Query in Excel
  + Importing Excel using Power Query
  + Importing CSV using Power Query
  + Importing Web data using Power Query
  + Importing SQL Server data using Power Query
* Transforming and Cleaning Data using Power Query
  + Remove rows
  + Remove columns
  + Replace values
  + Merge columns
  + Append tables
  + Merge tables
* Data Profiling using Power Query in Excel
  + Column quality
  + Column distribution
  + Column profile
* Working with Power Pivot in Excel
  + Connecting to data sources
  + Using DAX to add calculated columns
  + Using DAX to create measures
  + Using DAX to create KPIs (Key Performance Indicators)
  + Using DAX to implement time-intelligence
  + Configure relationship between tables
  + Create hierarchies
* What-if Analysis using Excel
  + Scenarios and variables
  + Using Goal Seek to get a desired result
  + Working with Data Tables
  + Preparing forecasts
* Conclusion