

# Introduction to Microsoft Excel Power Query, Data Model, Power Pivot & DAX

#### **Course Code:**

ASKPQ8

## **TPGateway Course Code:**

TGS-2020503210

#### **Course Duration:**

2 days (16 hours), 9:00am - 5:00pm

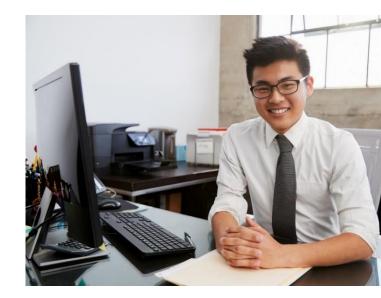
## **Course Fee:**

\$900 (\$981 Inc. 9% GST) per participant. SDF grant entitled, \$2/hr x 14hrs = \$28 Only applicable to Singaporean and PR employees

1 hour lunch is not claimable Skillsfuture Credit Claimable for Individual UTAP Claimable; sign up <a href="https://ntuc.co/ask-edm">https://ntuc.co/ask-edm</a>

## **Course Dates:**

https://asktraining.com.sg/course-schedule/



# **Course Synopsis**

This course introduces Microsoft Excel's powerful data modeling and business intelligence tools: Power Query, Power Pivot, and Data Analysis Expressions (DAX).

Business intelligence (BI) is a collection of tools and processes that are used to gather data and turn it into meaningful information that people can use to make better decisions.

# **Course Objectives**

At the end of the 2 days training, you will be able to

 Use Power Query to import data into Excel through external sources such as Text files, CSV files, Web, or Excel workbooks whereby data can be cleaned and prepared for requirements.

- Understand how a Data Model allows you to integrate data from multiple tables, effectively building a relational data source inside an Excel workbook. Within Excel, Data Models are used transparently, providing tabular data used in PivotTables
- Use Power Pivot to perform powerful data analysis and create sophisticated data models. With Power Pivot, you can mash up large volumes of data from various sources, perform information analysis rapidly, and share insights easily.
- Use Data Analysis Expressions (DAX) to work with data models using formulas and expressions.

# **Course Outline**

# INTRODUCTION TO POWER QUERY

- Installing and Activating a Power Query Add-In
- Power Query Basics
- Understanding Query Steps
- Refreshing Power Query Data
- Managing Existing Queries
- Understanding Column-Level Actions
- Understanding Table Actions
- Importing Data from Different Sources
- Managing Data Source Settings
- Transforming Data
- Other Useful Transformation
- Understanding the Append Feature
- Understanding the Merge Feature

## Data Model

- Understand Database Terminology
  - Databases
  - o Tables
  - o Records, fields, and values
  - Queries
  - o Relationships
  - o Power Pivot Internal Data Model
  - o Activating the Power Pivot Add-In

#### **Power Pivot and Dax**

- Linking Excel tables to Power Pivot
  - Using the Power Pivot data model in reporting
- Loading data from Microsoft Access databases
- Loading data from Text/CSV files
- Getting data from folder
- Understanding Power Pivot calculation
  - Creating your first calculated column
  - Formatting calculated columns
  - Hiding calculated columns from end users
- Utilizing DAX functions
  - Referencing fields from other tables
- Understanding Calculated Measures
  - Creating a calculated measure
  - Editing and deleting calculated measures
- Using data with cube functions
- Key Performance Indicators (KPIs)
  - o Create a KPI
  - o Edit a KPI
  - o Delete a KPI

# **Pre-requisite & Methodology**

You should have basic to intermediate skills on MS Excel, know how to work with Excel functions and Pivot Table. Your laptop should be installed with Power Pivot.

# Things to bring during the course:

- A laptop (preferable your personal laptop)
- Laptop power adaptor & A USB mouse
- A USB thumb drive or hard-disk
- Software requirement: Microsoft Excel version 2016-2019 or Office 365 (must have Power Pivot installed)

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