

# Advanced Data Analysing and Visualization with Power BI for Power User

**Course Duration: 2-day; Instructor-led**

Time Schedule: 9am-5pm

Lunch: 1:00pm- 2:00pm

Morning Tea-break: 10:30am-10:45am

Afternoon Tea-break: 3:30pm -3:45pm

**COURSE OBJECTIVES/LEARNING OUTCOMES**

Upon completion of this program, participants should be able to:

- Write simple custom function using M code
- Constructing advanced measures using nested DAX function
- Create interactive and robust reports using tools like slicer, bookmark, drill through and parameters
- Own and administer an app workspace
- Publish and share report, dashboard and app
- Create dataflow to ensure consistent “One True Source” of data source
- Schedule and automate data refresh with Data Gateway

**TARGET AUDIENCE**

This course is intended for people who want to use all the capabilities of the Power BI platform to build self-serviced business intelligence solution with Pro-license.

**PREREQUISITES****REQUIRED PREREQUISITES:**

- Basic knowledge of Microsoft Power BI is essential with the following pre-requisites:
- Have attended basic training of Power BI
- Able to extract information from various sources like local files and share drives
- Perform simple data cleansing in Power Query
- Able to create and form relationships between table to table
- Write simple DAX function to create Calculated Column
- Construct simple measures using DAX function
- Have access to Power BI Pro license
- Downloaded and installed Power BI Gateway Standard mode \*or granted to download and install\*
- PC/Windows users only (not available for Mac user)

## METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentation, discussions and practical exercise.

## COURSE OUTLINE

### Module 1 - Advanced with M

#### Lesson 1.1. More M function

- Data grouping with M function
- Passing data through parameter

#### Lesson 1.2. Create auto rolling calendar

- Calling today's date with `DateTime.LocalNow()`
- Retrieving date only with `Date.From()`
- Roll back years using `Date.AddYears()`
- Generating a list of date with `List.Dates()`
- Extract date component using `Date` function

### Module 2 - In -depth with Data Model

- Understanding all types of relationship between table to table one to one, one to many, many to many, many to one
- Creating active and inactive relationships
- Filter flow in relationship (single and bidirection)

### Module 3 - DAX part II-Advanced

#### Lesson 3.1. Nesting `CALCULATE()` with

- `ALL()`
- `ALLEXCEPT()`
- `ALLSELECTED()`
- `FILTER()`

#### Lesson 3.2. Date Intelligent Year To Date Revenue with `TOTALYTD()`

- Quarter To Date Revenue with `TOTALQTD()`
- Month To Date Revenue with `TOTALMTD()`
- Rolling Average with `DATESINPERIOD()`
- Getting the last Nth Day of Revenue using `DATESBETWEEN()`

### Module 4 - Elevate consumer experience with tools in Report View

#### Lesson 4.1. Color and indicators

- Dynamic Title with text measure
- Data Bar with Table
- Conditional formatting with values

#### Lesson 4.2. Advanced interactive tools

- Filtering visuals, page and reports
- Slicing reports with slicer
- Saving state if interaction using Bookmark
- Display report with Tooltip reports

### **Module 5 - (AI)-Artificial Intelligence Visuals**

#### Lesson 5.1. Getting the AI visual into your report

- Inserting Q&A visual
- Inserting a visual using natural language
- Teaching Q&A your term your way

#### Lesson 5.2. Key Influencers

- Adding fields
- Analysing final results

### **Module 6 - App workspace (PRO)**

#### Lesson 6.1. Administer an app workspace

##### Create and being an app workspace owner

- Adding member, contributor, and viewers

#### Lesson 6.2. Collaborate

- Publish report
- Create dashboards
- Share and subscribe dashboard and report to yourself and others
- Export report as different format

#### Lesson 6.3. App

- Configuring and publishing app
- to share across organization
- Modify and republish app

### **Module 7 - Gateways and Dataflow (PRO)**

#### Lesson 7.1. Configuring Data Gateways

- Sign in and setup
- Enabling schedule refresh

#### Lesson 7.2. Create a ONE TRUE SOURCE of data source

- Create dataflow
- Connecting to dataflow