

COURSE DURATION

16 hours

COURSE SYNOPSIS

Organisations now have access to many sources of digital data. Organisations must cultivate staff with the necessary skills to be able to analyse these data and apply contemporary techniques to create dynamic and interactive visual displays in order to better illustrate and articulate to business stakeholders.

This course sets out the skills and abilities for learners to master the features and functions of Microsoft Power BI. Learners will be able to understand key concepts and techniques on creating data visualization, create visuals, understand data relationships and generate data for forecasting and trends.

COURSE OBJECTIVES

By the end of this course, learners will be able to:

- Select the appropriate visualization techniques to convey findings with usage of interactive visual display
- Present different data types to reflect business trends using visualization techniques to show correlations between data sets
- Incorporate suitable chart elements to create informative and interactive data displays
- Develop basic dashboards KPI scorecards to display benchmark and results achieved
- Incorporate interactive graphical visuals dashboard presentations
- Communicate the limitations of data in dashboard with visualization to show business insights

TARGET AUDIENCE

This training is relevant to Executives, Senior Executives and Data Analyst, Managers who are keen to learn how to fully utilise Power BI Desktop as a BI tool. This training is relevant to learners who are keen to explore data analytics as a job role.

ASSUMED SKILLS

- Learners must be able to read, write, speak and listen to English at secondary school level
- Learners to have minimum GCE 'O' level or ITE certificate education
- Learners should have at least 1 year's working experience in any industry
- Learners must be able to operate a personal computer
- Learners must be able to use Excel functions at intermediate level

TRAINING METHODOLOGIES

Lectures, demonstration and hands-on activities designed to provide practical experiences with skills being taught.

COURSE CONTENT**Learning Unit 1: Importing Data into Power BI Desktop**

- Using Get Data feature
- Get Data from text files
- Get Data from spreadsheet files
- Get Data from database files
- Get Data from websites

Learning Unit 2: Shape and Clean Data using Power Query

- Navigating Power Query Editor
- Removing rows and columns within Power Query
- Changing Data Types
- Entering data via Power Query
- Creating headers in Power Query
- Find and replacing values in columns
- Splitting and merging columns
- Using Unpivot feature
- Understanding Applied Steps in Query Editor

Learning Unit 3: Building Data Models

- What is a Data Model?
- Types of Relationships
- Creating Relationships between Tables
- Creating a Link Table
- Creating a New Calculated Columns

Learning Unit 4: Creating Basic Data Visualization

- Conditional Formatting using background colours and data bars
- Using Bar, Column, Pie and other standard visualization
- Using KPI visualization and other visualization types

Learning Unit 5: Introduction to Measures

- What is a measure?
- Creating measures
- Using measures for Gauge chart and KPI visualization
- Creating measures table

Learning Unit 6: Introduction to DAX

- What is DAX?
- Basic DAX functions and formulas like SUM, AVERAGE, CALCULATE
- Difference between Iterator and Aggregator functions i.e. SUM vs SUMX
- Creating DAX with multiple tables
- Other DAX functions like COUNT, COUNTROWS, MAX, MIN, DIVIDE functions

Learning Unit 7: Additional Data Visualization

- Creating Drillthroughs
- Creating Tooltips

Learning Unit 8: Using Predictive Analytics and other Reference Lines

- Using Constant Line
- Using Min and MAX Line
- Using Average Line
- Using Median Line
- Using Percentile Line
- Creating Forecasting values