COURSE OUTLINE

COURSE DURATION

16 hours

COURSE SYNOPSIS

This course will equip learners with data analysis skills using Excel by applying the various formulae and functions available in Excel as well as using Power Pivot to connect to different and multiple data sources for statistical analysis.

COURSE OBJECTIVES

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

- Apply principles of data modelling and visualization to create data models to identify and predict trends and patterns.
- Use data science techniques to perform data analysis on data sets.
- Apply data protection and legal guidelines to support the creation of business insight reports
- Apply DAX language to summarize data to provide business insights from data source.
- Apply statistical techniques and formulas to produce analytical dashboards and insight reports.
- Join multiple tables using unions to extract data analysis aligned to the domain context.
- Create clean required dataset with functions and formulas to visualize data.

TARGET AUDIENCE (OPERATIONAL, SUPERVISORY & MANAGERIAL)

This training is relevant to PMETs who are aspiring to move away from just creating spreadsheets onto a data analytics scale using a tool that they are relatively familiar with.

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
- Learner should have at least 1 year's working experience in any industry.
- Be able to operate a computer.

TRAINING METHODOLOGIES

Lectures, demonstration and hands-on activities.





COURSE CONTENT

Learning Unit 1: Understanding Data Modelling and Visualization to Perform Data Analysis

- Create Data Models using Power Pivot
- Create Pivot Tables and Pivot Charts for Forecasting and Recognizing Patterns and Trends.

Learning Unit 2: Using Excel Functions to Apply Techniques on Data Sets for Data Analysis

• Introduction to Advanced Excel Functions and Features for Data Analysis

Learning Unit 3: Using Power Pivot for Data Modelling and Applying Data Integrity

- Using Power Pivot Models to Create Business Insight Reports
- Applying Data Protection Rules in Excel

Learning Unit 4: Using DAX for Analysis to Provide Business Insights

• Using DAX to summarize data for analysis and business insights

Learning Unit 5: Using Statistical Techniques and Data Analysis Tool Pak for creation of Dashboard reports

- Introduction to Statistical Formulas and Techniques for Dashboard Reports
- Data Analysis Tool Pak for Business Insight Reports

Learning Unit 6: Using Excel Functions and Queries to Extract Data for Data Analysis

• Joining Multiple Tables to Extract Data for Data Analysis and Visualization

Learning Unit 7: Transforming Data for Data Analysis using Excel Functions and Formulae

Data cleaning and validation of Required Dataset for Visuals