COURSE DURATION

16 hours

COURSE SYNOPSIS

This course sets out the foundational skills and knowledge to introduce learners to data analysis using Excel functions and formulae and creation of data visualisation to generate business insights by identifying trends and patterns.

COURSE OBJECTIVES

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

- Apply Excel functions and formulas to create statistical techniques like mean, median and regression analysis.
- Identify various trends and patterns from data sets using techniques for statistical analysis.
- Apply Statistical Functions for Data Analysis
- Identify Data Requirement with Stakeholder for Further Analysis

TARGET AUDIENCE (OPERATIONAL, SUPERVISORY & MANAGERIAL)

This training is relevant to PMETs who are new to data analysis and is keen to expand their knowledge of Excel to include the use of data analysis functions and dashboards as well as apply data visualization tools for interactive data.

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
- Learners must be able to operate a personal computer, use keyboard and mouse

TRAINING METHODOLOGIES

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

COURSE CONTENT

Learning Unit 1: Understand Data Analysis Process and Using Functions for Statistical Analysis

- What is Data Analysis
- Benefits of Data Analytics
- The Data Analysis Cycle
- Data Protection Laws and Data Anonymity
- The 4 Types of Data Analysis
- The Types of Data
- What are Statistics?
- The Statistical Functions in Excel

Learning Unit 2: Importing and Shaping Data Sets for Analysis of Trends and Patterns

- Importing Data from Different Data Sources into Excel
- Using Functions to Prepare Data for Statistical Analysis
- Creating interactive dashboards to illustrate patterns and trends

Learning Unit 3: Using Functions and Features to Create Statistical Data Visualisation in Excel and Power BI

- Introduction to Power BI Desktop
- Navigating around Power BI
- Creating statistical visuals
- Creating conditional formatting to highlight patterns
- Creating trendlines and slicers

Learning Unit 4: Create Interactive Basic Visualisation and Dashboards for Further Insights

- Introduction to basic DAX function and formulas
- Creating KPIs, Scorecards, Gauge visualization
- Publishing Power BI reports to Power BI Analysis Services