

## Data Analytics with Excel, SQL, & Power BI Curriculum

### Scenario Academy

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### **Course Details**

#### **Description**

It's no surprise that businesses need to compete to gain share of thier market and stay relevant. However, it may be surprising to learn that data and business analysts, play an increasingly important role in this competition.

- How are market trends shifting?
- What are the new innovations for investment?
- How are customers reacting to our products?
- How do we make product improvements?
- or what are our forecasted sales into the next quarter?

These are handful of questions that data analysts aim to answer by using data. With Excel, SQL and visualization tools like Power BI, analysts can help to make the decisions that are most impactful at improving business metrics.

We have setup a unique mentored learning model that combines a live interactive physical or online classroom experience, program support and career coaching to ensure successful learning outcomes. This program provides an unmatched opportunity for individuals to begin or shift their career into the eye-popping field of business analytics.

#### **Benefits**

- A workshop certificate issued after the training
- Post-training internship and employability support and
- A Mentored Learning Approach



# Module 1. Introduction to Microsoft Excel

- Getting Started
  - Formatting of text & numbers
  - Conditional Formatting and Data Validation
  - Auto Sum/ Save as Pdf / Freeze Pane
  - Named Ranges
  - Cell Locking and Referencing

#### • Data Analysis with

- Logical functions
- Arithmetic functions
- VLOOKUP, HLOOKUP, INDEX-MATCH
- Conditional Aggregation: COUNT, COUNTA, COUNTBLANK, COUNTIF, SUMIF, NESTEDIF, COUNTIFS, SUMIFS, SUMPRODUCT, AVERAGEIF
- Aggregations
- Data Manipulation with
  - Power Query
- Data Modelling with
  - Power Pivot
  - $\circ$  Dashboarding
- Capstone

## Module 2. Introduction to Structured Query Language (SQL)

- Installing and Setting up your environment
- Introduction to SQL
- Introduction to Relational Database Management System (RDBMS)
- Creating Databases, Tables and Columns
- Retrieving, Updating, Inserting and Deleting Data
- Sorting and Filtering Data, Advanced Filtering
- Summarizing and Grouping Data
- Joining and Managing Tables
- Using Subqueries and Views



# Module 3. Introduction to Microsoft Power BI

- Getting Started with Power BI Workspace and Environment
- Connect Power BI, to multiple sources of data:
  - Excel, CSV, Folder
  - o Web
  - SQL Server
  - Others Data Sources
- Visualizing Data
  - Using Column, line & Pie Charts to understand business trends
  - Sizing business segments with Treemap
  - Using Funnel Charts to understand leads conversion
  - o Business Sensitivity Analysis with Scattered Chart
  - o Tracking Organization KPI variables with Card, and KPI Card
  - Using Tables, and Matrix
  - o Importing Custom Visuals from Marketplace
  - Maps, and other visuals
- Data Transformation (Cleaning) with Power Query
- Using Data Analysis Expression (DAX) Language
  - Creating Dynamic Date Table
  - Calculated Columns and Measures
- Creating Reports and Dashboards in a day
- Using Text Boxes, Shapes, Images.

## Module 4. CAPSTONE PROJECT

Scenario-based case study with real life data.