

# Power BI & AI for Data Analytics

**Duration – 32 hours**

## Overview

This course covers the various methods and best practices that are in line with business requirements for modelling, visualizing, and analysing data with Power BI. The course will show how to access and process data from a range of data sources including both relational and non-relational sources. This course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution. In addition to this, this course will also talk about how to leverage AI for enriching data analytics.

## Audience Profile

This course is designed for individuals who are starting off with or are seeking to build on their existing knowledge for Power BI. An understanding of data concepts and familiarity with Power BI DAX and Data modelling techniques would be beneficial however is not required. If you are interested in learning how to build effective and impactful reports and dashboard with Power BI, this course is ideal for you.

## Course Syllabus,

- **Module 1 – Basics of Power BI**
  - Concept of business Intelligence
  - Introduction to Power BI
  - Components of Power BI
  - Features and Capabilities of Power BI
  - Introduction to Data lifecycle
  - Performing ETL with Power BI
  
- **Module 2 – Transforming Data with Power Query Editor**
  - Using Power Query Editor to Ingest data
  - Brining Data from multiple sources
  - Merging and Appending Queries
  - Advance Data Transformations
  - Using Advance Query Editor

- **Module 3 – Model Data & DAX**

- Common data modelling techniques
- Establishing relationships in data
- Creating hierarchy
- Introduction to DAX
- Creating Calculated Tables and Calculated Columns
- Creating Measures
- Using Time Intelligence DAX
- Using Variables for Complex calculations

- **Module 4 – Visualize Data**

- Report creation
- Selecting and using appropriate visuals
- Components of the visualization pane
- Importing visuals through Power BI Visualization Store
- Using UI elements like buttons and bookmarks
- Using AI Based Visuals
- Creating Mobile view for the reports

- **Module 5 – Analyse Data**

- Using filters and slicers
- Conditional Formatting to enhance visuals
- Drill through & drill down for deeper data insights
- Using Themes to standardize reports

- **Module 6 – Manage Data**

- Publishing Report to Power BI Workspace
- Workspaces v/s apps
- Roles within a workspace
- Create Dashboard using multiple reports
- Formatting dashboard and setting up mobile view for dashboard
- Creating Report and Dashboard subscriptions
- Setting up data refresh using cloud and on prem connections

- **Module 7 – Leveraging AI in Power BI & Data Analysis**
  - How copilot can help with analytics in Power BI
  - Using Copilot for Power BI Desktop
  - Using Copilot for Power BI Service
  - Copilot and Fabric Licensing Requirements
  - Introduction and Set up for Chat GPT for Data Analysis
  - How to load data in ChatGPT for Data Analysis
  - Aggregate and Summarise data using ChatGPT
  
- **Module 8 – Leveraging PowerPoint for Data Representation**
  - Creating Effective and Attractive Presentations
  - Creating clickable links and action buttons
  - Embedding interactive charts and dashboards from Power BI
  - Incorporating videos, images, and audio for engagement