



**Course Name:** Microsoft Power BI Developer Professional Certification Course

**Course Overview:**

This Power BI course offers a thorough introduction to business intelligence, focusing on Power BI's capabilities across 11 detailed modules. You'll learn from the basics of data modeling and Power BI components to advanced data manipulation using DAX and SQL. The curriculum covers practical visualization techniques, dashboard creation, and Power BI services management. It concludes with a specialized focus on preparing for job interviews and CV crafting, equipping you with the essential skills and knowledge to excel in the field of data analytics.

**What You'll Learn?**

In this Power BI course, you'll learn the fundamentals of business intelligence, master data modeling and SQL, and gain proficiency in using Power BI's desktop and service platforms. You'll explore advanced DAX functions, create dynamic visualizations and dashboards, and understand how to secure and share your reports effectively. The course also includes preparation for Power BI job interviews and CV writing.

**Internship Program:**

In addition to the course, you will participate in a 3-month internship involving six live projects. Upon successful completion, you will receive an Internship Certificate.

**Letter of Recommendation:**

Upon successfully completing the program and internship, you will also receive a Letter of Recommendation (LOR).

**Duration:**

48 Hours (8 Weeks) + 3 Months (Internship Program)

**Requirements:**

Microsoft Power BI, Microsoft SQL Management Studio

**Pre-requisite:**

Basic Excel Knowledge

## Curriculum

### Module 1. Introduction to Power BI

1. Introduction to Business Intelligence
2. Self-Service Business Intelligence (SSBI)
3. Introduction to Power BI
4. The Flow of Work in Power BI
5. Basic Components of Power BI
6. Introduction to Building Blocks of Power BI
7. Data model and importance of Data Modelling

### Module 2. Power BI Desktop and Power Query Editor

1. Power BI desktop overview
2. Data Sources in Power BI Desktop
3. Data connectivity modes
4. Power query editor overview
5. Data transformation in power query editor
6. Data types in Power BI
7. Model optimization in query editor

### Module 3. Modelling in Power BI

1. Overview of modelling and schemas
2. Star Schema, Snowflake Schemas
3. Data Cardinality (Relationships) types & Directions of Cardinality
4. Cross filtering and connection type (Active/Inactive)
5. Managing & Editing Data Relationships

### Module 4. DAX (Data Analysis Expressions)

1. Introduction to DAX
2. Data Types in DAX
3. Filter Context vs Row Context
4. Calculated columns, measures and quick measures
5. Aggregation, Date & Time, Filter, Logical and Information Functions
6. DAX Syntax, Functions & Operators

### Module 5. Visualization in Power BI

1. Introduction to Visuals in Power BI
2. Visualization Charts in Power BI

3. Visual formatting and analytical features
4. Grouping, selection pane, bookmarks, buttons
5. Tooltip, drill down and drill through functionality
6. Matrixes and Tables
7. Slicers and Map Visualizations
8. Gauges Chart, KPI and Single Number Cards
9. Shapes, Text Boxes, and Images
10. Usage of visuals in different Scenarios

#### **Module 6. Power BI Dashboards**

1. Introduction to Dashboards
2. Dashboard vs Reports
3. Creating Dashboards
4. Parameters in Power BI
5. Row Level security (RLS) Implementation
6. Power BI Gateway Connection

#### **Module 7. Power BI Services**

1. Introduction to workspaces
2. Publishing datasets or reports in Power BI Service
3. Sharing workspace access with Users
4. Scheduling refresh of datasets
5. Exporting data from dashboards in PPT or PDF or Excel

#### **Module 8: Introduction to Databases and SQL**

1. Introduction to Databases
2. Understanding SQL and Its Importance
3. Basic SQL Syntax
4. SELECT Statement: Retrieving Data
5. WHERE Clause: Filtering Data

#### **Module 9. Advanced SQL Queries**

1. Sorting Data: ORDER BY Clause
2. Filtering Data: WHERE Clause (continued)
3. Aggregating Data: GROUP BY Clause
4. Joining Tables: INNER JOIN, LEFT JOIN, RIGHT JOIN
5. Subqueries and Derived Tables



### **Module 10. SQL Functions and Data Manipulation**

1. SQL Functions: COUNT, SUM, AVG, MAX, MIN
2. Modifying Data: INSERT, UPDATE, DELETE
3. Data Integrity: Constraints
4. Windows functions (rank, dense rank, etc.)

### **Module 11. Interview, Jobs in Power BI**

1. Interview questions with PL-300 Questions
2. Interview tips
3. How to crack job interview
4. CV preparation

### **Module 12. Microsoft Power BI Professional Internship Program**

6 Live Professional Projects