



Course Name: Microsoft Power BI Developer Professional Certification Program

Course Overview:

This Power BI Program covers 14 comprehensive modules, starting with an introduction to Business Intelligence and Power BI essentials. You will learn about Power BI Desktop, Power Query Editor, advanced DAX, and data modeling. The course also delves into visualization techniques, dashboard creation, Power BI services, and SQL database management. Additionally, it includes data warehousing, practical interview preparation for Power BI roles, freelancing guidance, and a professional internship program with live projects to apply your skills in real-world scenarios.

What You'll Learn?

In this Power BI Program, you will learn how to use Power BI Desktop, Power Query, and DAX to model and analyze data. You'll master creating advanced visualizations, designing dashboards, and utilizing Power BI services. The Program also covers SQL basics, data warehousing techniques, and provides insights into securing freelance work and acing job interviews in the BI field.

Internship Program:

In addition to the Program, 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. Introduction to Data Warehousing

1. What is Data Warehousing?
2. Data Warehousing Architecture
3. Star Schema and Snowflake Schema
4. ETL (Extract, Transform, Load) Process
5. OLTP vs OLAP

Module 12. Designing a Data Warehouse

1. Identifying Data Sources
2. Data Modeling: Fact Tables and Dimension Tables
3. Design Best Practices
4. Data Warehouse Tools and Platforms
5. Performance Tuning and Optimization
6. Reporting and Dashboards

Module 13. Interview, Jobs & Freelance work in Power BI

1. Interview questions with PL-300 Questions
2. Interview tips
3. How to crack job interview
4. How to register for freelancing work
5. How to get freelance work

Module 14. Microsoft Power BI Professional Internship Program

6 Live Professional Projects