



# Power BI

Practical Training Course





## Program Highlights

Experience 100% practical learning with live data sources and real-world projects with InfosecTrain's Power BI Practical training course. Participants will work directly with live data sources and engage in live projects that simulate actual business environments. Key topics of learning include understanding Power BI architecture, mastering DAX functions for creating calculated columns and measures, and developing skills in advanced forecasting techniques. The training also covers crucial aspects of data management, such as setting up data relationships, creating interactive reports, and managing user access and permissions in Power BI.

## Course Highlights



32-Hour of  
Instructor-led  
Training



100% Hands-on  
Training



Working with  
Live Data Sources



Live Project  
Exposure



Comprehensive  
Exam Preparation



Access to  
Recorded  
Sessions



Become an Expert in  
Data Analysis,  
Forecasting Techniques



Extended Post  
Training Support



Career Guidance  
and Mentorship



## About Course

The Power BI Practical Training Course from InfosecTrain is designed to transform participants into a Power BI expert through a hands-on, immersive learning experience. Covering everything from data connectivity to advanced data modeling, this course equips participants with the skills to analyze and visualize data effectively. Participants will learn to connect with various data sources like SQL Server, Excel, and JSON, perform data transformations, and create compelling visualizations using tools like stacked bar charts, scatter plots, and custom visuals. Whether you're coming from HR, Finance, Sales, or IT, this course provides the knowledge and skills necessary to excel in data analysis and make informed, data-driven decisions. This customized course is also a stepping stone for becoming a certified Power BI Data Analyst.



## Target Audience

- ✓ HR Managers
- ✓ Financial Analysts
- ✓ Sales Executives
- ✓ IT Specialists



## Pre-Requisites

- ✓ Mid level knowledge of Excel and Database concepts will be beneficial



**Our Expert Instructor**

**DILLIP**

**20+ Years of Experience**

POWER BI | AZURE | SQL DBA | SQL SERVER MYSQL  
MSBI(SSIS,SSRS,SSAS) | ASP.NET Docker | WEB API

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Dillip is a highly experienced IT professional with over 20 years of experience, 500+ training in the field, skilled in SQL Server, MySQL, Power BI, and .NET technologies. He excels as an IT Consultant, Corporate Trainer, and Technical Architect, with expertise in both backend and frontend development

# Course Content

## Introduction

- ✓ Introduction to Power BI
- ✓ Power BI Architecture
- ✓ Components of Power BI
- ✓ Relationship Between Excel & Power BI
- ✓ Why Power BI?
- ✓ Downloading and Installing Power BI
- ✓ Power BI Desktop & Power BI Services
- ✓ Building Blocks of Power BI
- ✓ Power BI Editor



## Power BI Data Sources & Data Sets

- ✓ Power BI File Sources
- ✓ Connecting to Different File Systems Like Flat File, Excel, etc.
- ✓ Relationships in Power BI
- ✓ Power BI Data Sources

## Power BI Visualizations

- ✓ Working with Different Visualizations
- ✓ Stacked Bar Chart and Stacked Column Chart
- ✓ Clustered Bar Chart and Clustered Column Chart
- ✓ 100% Stacked Bar Chart and 100% Stacked Column Chart
- ✓ Line Charts, Area Charts and Stacked Area Charts
- ✓ Line and Stacked Row Charts
- ✓ Line and Stacked Column Charts
- ✓ Waterfall Chart, Scatter Chart and Pie Chart
- ✓ Working with Table and Matrix Visuals
- ✓ Working with Different Levels of Filters
- ✓ Data Visualizations with Power BI
- ✓ Gauge and Cards

## Chart Report Properties

- ✓ Chart Report Types and Properties
- ✓ Field Properties: Axis, Legend, Value, Tooltip
- ✓ Field Properties: Color Saturation, Filter Types
- ✓ Formats: Legend, Axis, Data Labels, Plot Area
- ✓ Data Labels: Visibility, Color and Display Units
- ✓ Data Labels: Precision, Position, Text Options
- ✓ Analytics: Constant Line, Position, Labels
- ✓ Modifying Legends and Visual Filters - Options
- ✓ Hierarchies: Grouping Multiple Report Fields



## Data Manipulation

- ✓ Removing Rows
- ✓ Removing Columns
- ✓ Remove Columns and Split Columns
- ✓ Merge Columns
- ✓ Choosing Required Columns in the Data
- ✓ Working with Different Transformations
- ✓ Applied Steps in Query Editor
- ✓ Adding New Calculated Columns
- ✓ Applying Date Functions
- ✓ Applying Arithmetic Functions
- ✓ Cleaning Data
- ✓ Transform Data Types
- ✓ Creating Index and Custom Columns
- ✓ Group by Functionality in Query Editor
- ✓ Merging Data from Different Data Sources
- ✓ Merge Queries and Append Queries
- ✓ Merging Data from Different Sources

## Connecting to Different Data Sources

- ✓ Connecting to Different Databases Like SQL Server, etc.
- ✓ Connecting to Data Sources
- ✓ Working with Import and Direct Query
- ✓ Connecting with Views, Stored Procedures, etc.
- ✓ Difference Between Import and Direct Query
- ✓ Connecting with Live Data Sources
- ✓ Connected to Different Web Sources
- ✓ Power BI Web Sources
- ✓ Merging Data From Different Data Sources
- ✓ Connecting to JSON, XML, etc.
- ✓ Connecting to OData
- ✓ Editing Data Sources
- ✓ Editing Data Queries
- ✓ Data Sets
- ✓ Editing Datasets
- ✓ Applying Changes to Datasets
- ✓ Cleaning Datasets in Power BI
- ✓ Reverting Changes to Datasets
- ✓ Relationship in Datasets
- ✓ Editing Relationships in Datasets
- ✓ Defining Relationships Between Tables
- ✓ Creating Custom Tables
- ✓ Connected to Different Web Sources

## Power BI Advanced Features

- ✓ Working with Data Hierarchies
- ✓ Slicers
- ✓ Filters
- ✓ Types of Filters
- ✓ Visualization Filters
- ✓ Page Filters
- ✓ Report Filters
- ✓ Drill Through in Power BI
- ✓ Creating Drill Through Reports in Power BI
- ✓ Developing KPIs
- ✓ Power BI Question & Answers
- ✓ Interactions in Power BI
- ✓ Editing Interactions in Power BI
- ✓ Selection Pane in Power BI
- ✓ Hiding/Unhiding using Selection Pane

## Power BI Custom Visuals

- ✓ Adding Custom Visuals in Power BI
- ✓ Word Cloud
- ✓ Text Filters
- ✓ Tornado
- ✓ Zebra BI Tables

## DAX Functions with Power BI

- ✓ Working with DAX Functions
- ✓ Understanding Calculated Column
- ✓ Creating Calculated Columns
- ✓ Understanding Measures
- ✓ Creating Measures
- ✓ Difference between Columns & Measures
- ✓ Calculated Measures by using DAX
- ✓ Parameters with DAX
- ✓ Variables
- ✓ Date Functions
- ✓ String Functions
- ✓ Arithmetic Functions
- ✓ Working with DAX Functions
- ✓ Dynamic Report Filters, Expressions
- ✓ Logical Functions
- ✓ Relationship Functions
- ✓ Math/Statistics Function
- ✓ Information Functions



## DAX Expressions & DAX Functions

- ✓ YTD, QTD, MTD Calculations with DAX
- ✓ DAX Calculations and Measures
- ✓ Sample Function, CountAll, IsError
- ✓ IsText, Date Format, Time Format
- ✓ Time Intelligence Functions With DAX
- ✓ DatesYTD, DatesQTD, DatesMTD
- ✓ First Date, Last Date, Dates Between
- ✓ YTD, QTD, MTD Calculations with DAX
- ✓ DAX Calculations and Measures
- ✓ Sample Function, Count All, IsError
- ✓ IsText, DateFormat, Time Format
- ✓ Time Intelligence Functions with DAX
- ✓ DatesYTD, DatesQTD, DatesMTD
- ✓ First Date, Last Date, Dates Between

## Advanced Forecasting Analysis in Power BI

- ✓ Creating Automatic Forecasts
- ✓ Time Series Forecasting
- ✓ Pareto Analysis
- ✓ Correlation Analysis
- ✓ Clustering Analysis

## Power BI Deployment & User Management

- ✓ Understanding PowerBI Cloud Architecture
- ✓ Power BI Server Configuration
- ✓ Power BI Cloud Account and Workspace
- ✓ Creating Account in Power BI Services
- ✓ Power BI Users
- ✓ Types Of Users -> Free, Pro, Premium
- ✓ Creating Workspaces
- ✓ User Management
- ✓ Workspaces Management
- ✓ Deploying Power BI Desktop Reports
- ✓ Managing Reports in Power BI Services
- ✓ Editing Reports in Power BI Servers
- ✓ Downloading PBIX Files From Server
- ✓ Sharing Dashboards to Clients/Users
- ✓ Gateways
- ✓ PowerBI Gateway - Download and Installation
- ✓ Data Refresh with Power BI Architecture
- ✓ PowerBI Settings: Dataset - Gateway Integration
- ✓ Configuring Dataset for Manual Refresh of Data
- ✓ Configuring Automatic Refresh and Schedules
- ✓ Dataset Actions and Refresh Settings with Gateway
- ✓ Power BI Mobile Apps
- ✓ Viewing Reports in Power BI Mobile Apps
- ✓ Testing Power BI Reports for Mobile Views

## Course Objectives

- ✓ Learn the basics of Power BI, including its architecture, components, and the relationship between Excel and Power BI.
- ✓ Download, install, and effectively use Power BI Desktop and Power BI Services to create and manage reports.
- ✓ Gain skills in connecting Power BI to different databases, file systems, JSON, XML, OData, and live data sources.
- ✓ Learn how to clean, transform, and merge datasets using Power BI's Query Editor.
- ✓ Build data models and visualizations, including bar charts, line charts, scatter plots, and more, to effectively communicate data insights.
- ✓ Develop proficiency in DAX (Data Analysis Expressions) to create calculated columns, measures and perform complex calculations.
- ✓ Work with different types of filters, slicers, and hierarchies to dynamically interact with data and reports.
- ✓ Perform advanced forecasting, clustering, correlation analysis, and time series analysis to predict and analyze data trends.



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