Microsoft Power BI Syllabus

What is Power BI Desktop

Power BI Desktop is an application that you download and install for free on your local computer. Desktop is a complete data analysis and report creation tool that is used to connect to, transform, visualize, and analyze your data. It includes the Query Editor, in which you can connect to many different sources of data, and combine them (often called modeling) into a data model. Then you design a report based on that data model. Reports can be shared with others directly or by publishing to the Power BI service.

What is Power Bi Service

The **Power BI service** is a cloud-based service, or *software as a service* (SaaS). It supports report editing and collaboration for teams and organizations. You can connect to data sources in the Power BI service, too, but modeling is limited. The Power BI service is used to do things such as creating dashboards, creating and sharing apps, analyzing and exploring your data to uncover business insights, and much more

Most Power BI report designers who work on business intelligence projects use **Power BI Desktop** to create Power BI reports, and then use the **Power BI service** to collaborate and distribute their reports.

About Power BI Course

CSDT Centre Microsoft Power BI course introduces you to Power BI Desktop and how it is used with Power Pivot for Data Modelling. This course enables you to learn about Data Analysis Expressions (DAX) and Data Visualization with Power BI Desktop, Power View and Power Map. This Power Bi Certification course will also introduce you to Power BI Q&A, which enables you to discover, explore and visualize enterprise data using Natural Language. Enrol now to learn the best Power BI course offline or online.

Why Learn Power BI?

Power BI is a business analytics service provided by Microsoft. It provides interactive visualizations with self-service business intelligence capabilities, where end users can create reports and dashboards by themselves, without having to depend on any information technology staff or database administrator. Power BI certification course shares knowledge on how it provides cloud-based BI services - known as Power BI Services, along with a desktop-based interface called Power BI Desktop. It offers Data modelling capabilities including data preparation, data discovery, and interactive dashboards.

What is the syllabus of Power BI Course?

Power BI Syllabus is curated by industry experts. It covers all the basic and advanced concepts like:

• Power BI Desktop

• Architecture

- Data Transformation

- DAX

- Power BI Service

- Data Visualization

- Power BI Report Servers

- Using R & Python

- Advanced Analytics

- Mobile Apps

- Power BI Reports

- Connectivity Modes

- Quick Insights

- Q&A

- Industry use cases

What are the skills that you will be learning with our Microsoft Power BI Training?

Microsoft Power BI training course will help you to become a Power BI expert. It will enhance your skills by offering you comprehensive knowledge on Power BI, and the required hands-on experience for solving real-time industry-based Power BI projects. Additionally, you need the advice of an expert who is currently working in the industry and tackling real-life challenges. These are the skills you will get to learn after enrolling with CSDT Centre best Power BI course.

During Power BI course you will be trained by our expert instructors to:

- Master concepts like Data Visualization and Integration

- Learn about Power Pivot, Power View, Power Map etc

- Understand DAX and SSBI

- Use and implement Custom Visuals

- Explore Power BI Q&A

- Perform Data Binding and Formatting

- Master Power BI Embedded and Workspace Collection

- Understand and use Data Gateways, Content packs, Power BI Report Server

Who should go for this Microsoft Power BI Training?

The Microsoft Power BI Training at CSDT Centre is for all the professionals who are passionate about business intelligence, data visualization, and data analytics. It is best suited for:

- Entry-level Professionals

- Business Analysts

- Business Intelligence Manager

- Statisticians and Analysts

- Data Scientists

- Project Managers

CSDT Centre Power BI course is relevant for people who want to learn how to create customized visual reports and use the Power BI tools. You will get hands-on experience on real-time projects and assignments that have high relevance in the corporate world, and industry experts design the Power BI course curriculum.

Power BI Syllabus:

1. Introduction to Power BI

Hands-on:

- Installation of Power BI

Skills You will Learn:

- Concepts of Business Intelligence
- Power BI installation

13 Topics

Topics:

- Introduction to Business Intelligence

- Self-Service Business Intelligence (SSBI)

- Introduction to Power BI

- Traditional BI vs. Power BI

- Power BI vs. Tableau vs. QlikView

- Uses of Power BI

- The Flow of Work in Power BI

- Working with Power BI

- Basic Components of Power BI

- Comparison of Power BI Version

- Introduction to Building Blocks of Power BI

- Data model and importance of Data Modelling

2. Power BI Desktop and Data Transformation

Hands-on:

- Data Cleaning using Power BI query editor
- Creating Measures
- Transform, Clean, Shape, and Model Data for further analysis

Skills You will Learn:

- Data transformation using the query editor
- Shaping data with measures
- Managing Data Relationships

10 Topics
Topics:

- Data Sources in Power BI Desktop

- Loading Data in Power BI Desktop

- Views in Power BI Desktop

- Query Editor In Power BI

- Transform, Clean, Shape, and Model Data

- Manage Data Relationship

- Editing a Relationship

- Cross Filter Direction

- Saving Work file

- Measures

3. Data Analysis Expression (DAX)

Hands-on:

- Creating Calculated Columns and Measures
- Performing Data Analysis using DAX

Skills You will Learn:

- Data Analysis using DAX
- Creating Calculated Measures and Columns

10 Topics
Topics:

- Introduction to DAX

- Importance of DAX

- Data Types in DAX

- DAX Calculation Types

- Steps to Create Calculated Columns

- Measures in DAX

- DAX Syntax

- DAX Functions

- DAX Operators

- DAX Tables and Filtering

4. Data Visualization

Hands-on:

- Creating different visuals
- Creating cards, measures, KPI, reference line, and slicers

Skills You will Learn:

- Visuals in Power BI
- Report creation
- Visuals modification
- Z-order and KPI in visuals

13 Topics
Topics:

- Introduction to Visuals In Power BI

- Visualization Charts in Power BI

- Matrixes and Tables

- Slicers and Map Visualizations

- Gauges and Single Number Cards

- Modifying Colors in Charts And Visuals

- Shapes, Text Boxes, and Images

- Custom Visuals

- Page Layout and Formatting

- Bookmarks and Selection Pane

- KPI Visuals

- Z-order

- Grouping and Binning

5. Power BI Service

Hands-on:

- Creating reports and dashboard
- Publishing reports on Power BI Service
- Using Power BI Service for operations on reports

Skills You will Learn:

- Report and dashboard creation
- Designing stories with dashboards

8 Topics
Topics:

- Introduction to Power BI Service

- Creating a Dashboard

- Quick Insights in Power BI

- Configuring a Dashboard

- Power BI Q&A

- Ask Questions about your Data

- Power BI Embedded

- Bookmarks and buttons

6. Connectivity Modes

Hands-on:

- Setting Up On-Premise Data Gateway
- Connecting Power BI with SQL Server Database
- Connecting Reports on Power BI Service with Local Data Files

Skills You will Learn:

- On-Premise Data Gateway
- Connecting Power BI with Databases
- Connecting Power BI Service with Local Data Sources

8 Topics
Topics:

- Data Sources Supported in Power BI

- Exploring Live Connections to Data Sources

- Connecting Directly to SQL Azure

- Connecting Directly to SQL Server Analysis Services/My SQL

- Import Power View and Power Pivot

- Data Gateways

- Direct Query vs. Import Connectivity modes

- Connecting Power BI in Excel

7. Power BI Report Server

Hands-on:

- Setting Up Power BI Report Server
- Using Power BI Report Server for Publishing Reports
- Implementing Row Level Security

Skills You will Learn:

- Power BI Report Server
- Publishing reports on Report Server

9 Topics

Topics:

- What is Power BI Report Server?

- Key Features of Report Server

- The architecture of the Report Server

- Limitations of Report Server

- Power BI Report Server vs. Power BI Service

- Acquiring and Installing Power BI Report Server

- What is a Web Portal?

- Paginated Reports

- Row Level Security

8. R & Python in Power BI

Hands-on:

- Demonstrate connecting R and Python in Power BI
- Using R and Python for data analysis

Skills You will Learn:

- Data cleaning and transformation
- Python and R scripts
- Power BI integration

6 Topics

Topics:

- Brief concepts about R

- R Programming Concepts

- Create R Scripts for BI

- Python Programming

- Python Scripts in BI

- Python integration with Power BI

9. Advanced Analytics in Power BI

Hands-on:

- Connecting with Power BI service
- Creating dataflow
- Creating scorecard

Skills You will Learn:

- Data flow creation
- Anomalies detection
- Smart Narrative implementation

6 Topics

Topics:

- Use Parameters

- Create a data flow

- Introduction to Anomaly Detection

- Introduction to Smart Narrative

- Introduction to Sensitivity labels in Power BI

- Deployment Pipeline

10.   In-Class Project

Hands On:

- Analyze store data
- Draw conclusions from visuals created

Skills You will Learn

- Sales Reports creation
- Interactive Dashboards creation

5 Topics

Topics:

- Power BI Service

- Row Level Security

- Visuals and Charts

- Power BI Desktop

- Handling Workspaces