# **Diploma in Power BI: Course Overview( Duration: 6 months)**

A **Diploma in Power BI** provides specialized training in Droit Academy for professionals who want to develop skills in data analysis and visualization using Microsoft Power BI. This course focuses on turning raw data into meaningful insights through interactive dashboards and reports. It's ideal for those aiming to work in data analysis, business intelligence, or any field that requires data-driven decision-making.

## **Key Learning Outcomes:**

By the end of the course, you will:

- Understand the basics of business intelligence and the role of Power BI.
- Transform and clean data using Power Query.
- Create advanced data models and relationships.
- Develop complex calculations using DAX (Data Analysis Expressions).
- Design and publish interactive dashboards and reports.
- Collaborate and share reports through Power BI Service.

## **Curriculum Breakdown**

Here's an updated look at what the course typically includes:

#### 1. Introduction to Power BI

- Overview of Business Intelligence
- Getting started with Power BI Desktop
- Understanding Power BI components (Desktop, Service, Mobile App)

## 2. Data Preparation and Transformation

- Importing data from multiple sources (Excel, SQL, APIs)
- Using Power Query Editor for data cleaning
- Applying data transformation techniques (filtering, merging, and appending)

#### 3. Data Modeling

- Building data models and creating relationships
- Understanding star and snowflake schemas
- Introduction to calculated columns and measures

#### 4. Advanced DAX for Analytics

- Introduction to DAX language
- Creating calculated measures and custom functions
- Using time intelligence functions for date-based analysis

#### 5. Data Visualization and Dashboard Creation

Best practices for effective data visualization

- Building interactive reports with visuals (charts, graphs, maps)
- Creating custom visuals and themes
- Using slicers, drill-through, and filters for interactivity

#### 6. Power BI Service and Report Sharing

- Publishing reports to Power BI Service
- Collaborating and sharing reports securely
- Introduction to Power BI Mobile App
- Embedding Power BI reports into other applications (e.g., Microsoft Teams)

#### 7. Advanced Topics and Real-World Projects

- Introduction to Power BI Paginated Reports
- Working with large datasets using DirectQuery and Composite Models
- Integrating Power BI with Python or R for advanced analytics
- Capstone project: Developing a complete Power BI solution for a real-world business problem

## Software and Tools Used

- Power BI Desktop
- Power Query Editor
- DAX Editor
- Power BI Service (cloud platform)
- Optional: Python/R integration for advanced analytics

## Who Should Enrol?

- Business analysts looking to enhance their data visualization skills.
- Professionals from finance, marketing, and operations who work with data.
- IT specialists and database professionals interested in business intelligence.
- New graduates aiming to start a career in data analytics or business intelligence.

## **Prerequisites**

- Basic knowledge of **Microsoft Excel** and familiarity with **data analysis**.
- No prior experience in programming is required, but knowledge of **SQL** is helpful.

## **Certification and Career Prospects**

## **Microsoft certifications: (optional for students in anyone of them)**

- Microsoft Certified: Power BI Data Analyst Associate
- Microsoft Certified: Azure Data Fundamentals (optional, for cloud integration)

Upon completion, students can pursue roles such as:

- Power BI Analyst
- Business Intelligence Developer

- Data Visualization Specialist
- Data Analyst