

# MASTERING DATA ANALYTICS

Harnessing Python and Power BI for Insightful Decision Making

### Curriculum

- Introduction to Data Analytics
- Introduction to PowerBI
- Data Preparation
- Data Visualization in PowerBI
- Introduction to DBMS and SQL
- Python Basics for Data Analysis
- Exploratory Data Analysis(EDA)
- Data Manipulation with Pandas
- Building a Data Analytics Project
- Case Study Real World Application











## **MASTERING DATA ANALYTICS**

#### **Detailed course topics**

#### **Introduction to Data Analytics:**

- Define data analytics and its significance.
- Explore applications.

#### Introduction to Power BI:

- Overview of Power BI and components.
- · Connecting it with Datasets.

#### **Data Preparation:**

- Power Query Editor.
- Data cleaning methods.

#### **Data Visualization in Power BI:**

- Charts
- Visualizations and Dashboard
- DAX

#### Introduction of Database System and SQL:

- SQL Queries.
- CURD Operations
- Window Operations

#### **Python Basics for Data Analytics:**

Overview of Python and its significance

#### **Exploratory Data Analysis (EDA):**

- Data Visualization with Matplotlib and Seaborn.
- Statistics and correlation analysis.

#### **Data Manipulation with Pandas:**

- DataFrames and Series.
- Filtering, grouping, and aggregating
- Combining datasets.

#### **Building a Data Analytics Project:**

- Integrate Python and Power BI.
- Best practices for presenting findings to stakeholders.

#### **Case Studies and Real-World Applications:**

• Analyze industry datasets and organize group projects for practical application.

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This outline ensures participants gain theoretical knowledge and practical skills in data analytics.



