Power Bi Course Details

1. Introduction to Power BI

- **Overview of Power BI**
  - Definition and Importance of Power BI
  - Components of Power BI (Power BI Desktop, Power BI Service, Power BI Mobile)
- **Getting Started with Power BI**
  - Installing Power BI Desktop
  - Navigating the Power BI Interface

2. Data Sources and Data Connections

- **Connecting to Data Sources**
  - Importing Data from Various Sources (Excel, SQL Server, Web, etc.)
  - Understanding Data Connectivity Modes (Import, DirectQuery, Live Connection)
- **Data Transformation with Power Query**
  - Introduction to Power Query Editor
  - Basic Data Transformation (Filtering, Sorting, Grouping, Pivoting, and Unpivoting)
  - Advanced Data Transformation (Merging Queries, Appending Queries, Conditional Columns)

3. Data Modeling

- **Creating a Data Model**
  - Understanding Data Modeling Concepts
  - Creating Relationships between Tables
  - Managing and Editing Relationships
- **Enhancing the Data Model**
  - Creating Calculated Columns and Measures
  - Using DAX (Data Analysis Expressions) Basics
  - Implementing Time Intelligence Functions

4. Data Visualization

- **Introduction to Data Visualization**
  - Principles of Effective Data Visualization
  - Choosing the Right Visuals for Your Data
- **Creating Basic Visuals**
  - Bar and Column Charts

- ○ Line and Area Charts
    - ○ Pie and Donut Charts
    - ○ Tables and Matrices
- **Advanced Visuals and Custom Visuals**
    - ○ Scatter and Bubble Charts
    - ○ Maps and Geospatial Visuals
    - ○ TreeMaps, Waterfall, and Funnel Charts
    - ○ Importing and Using Custom Visuals from the Power BI Marketplace

5. Interactive Dashboards and Reports

- **Designing Interactive Reports**
    - ○ Adding and Customizing Visuals
    - ○ Using Slicers and Filters
    - ○ Creating Drill-Through Reports
- **Enhancing Report Interactivity**
    - ○ Implementing Bookmarks and Selections
    - ○ Using Drilldown and Drill-Up Features
    - ○ Designing Responsive Layouts

6. Publishing and Sharing

- **Publishing Reports**
    - ○ Publishing to Power BI Service
    - ○ Managing and Refreshing Datasets
- **Sharing and Collaboration**
    - ○ Sharing Reports and Dashboards
    - ○ Collaborating in Workspaces
    - ○ Embedding Reports in Websites or Applications

7. Power BI Service Features

- **Overview of Power BI Service**
    - ○ Navigating Power BI Service Interface
    - ○ Understanding Workspaces, Datasets, Reports, and Dashboards
- **Data Refresh and Gateway**
    - ○ Configuring Data Refresh Schedules
    - ○ Setting up and Using On-Premises Data Gateway
- **Power BI Mobile**
    - ○ Overview of Power BI Mobile App
    - ○ Viewing and Interacting with Reports on Mobile Devices

8. Advanced Analytics with Power BI

- **Introduction to Advanced Analytics**
    - ○ Using Built-in Analytics Features
    - ○ Implementing Trend Lines, Clustering, and Forecasting
- **Integration with Other Tools**

- Integrating Power BI with Excel
  - Using Power BI with Azure Machine Learning
  - Introduction to Power BI and R/Python Integration

9. Security and Administration

- **Managing Security**
  - Row-Level Security (RLS)
  - Managing Users and Permissions
- **Power BI Administration**
  - Understanding Power BI Admin Portal
  - Monitoring Usage and Performance
  - Managing Premium Capacity

10. Best Practices and Real-World Scenarios

- **Best Practices in Power BI**
  - Designing Efficient Data Models
  - Optimizing Performance
  - Creating User-Friendly Reports
- **Case Studies and Real-World Projects**
  - Implementing End-to-End Power BI Solutions
  - Industry-Specific Use Cases (Finance, Marketing, Operations, etc.)
  - Presenting and Sharing Final Projects