



## 1. Introduction to Power BI

Introduction to Microsoft Power BI, Key features of Power BI workflow, Desktop application, BI service, and file data sources, sourcing data from web (OData, Azure), building dashboard, data visualization, publishing to cloud, DAX data computation, creating tables, binned tables, data modeling and relationships, the Power BI components like Power View, Map, Query, Pivot, Power Q&A, understanding advanced visualization.

## 2. Extracting Data

Power Query for self-service ETL functionalities, introduction to data mashup, working with Excel data, Power BI Personal Gateway, extracting data from files, folders and databases, working with Azure SQL database and database source, connecting to Analysis Services, SaaS functionalities of Power BI.

## 3. Power Query for Data Transformation

Installing Power BI, Various requirements and configuration settings, Power Query, introduction to Query Editor, data transformation, data types, and generators, Filters & Slicers, Index and Conditional Columns, Summary Tables, writing custom functions and error handling, M advanced data transformations.

## 4. Power Pivot for Data Modeling

Introduction to Power Pivot, xVelocity engine, advantages of Power Pivot, various versions and relationships, strongly typed datasets, Data Analysis Expressions, Measures, Calculated Members, Row, Filter & Evaluation Context, Context Interactions, Context over Relations, Schema Relations, learning about Table, Information, Logical, Text, Iterator, Table, and Time Intelligence Functions, Cumulative Charts, Calculated Tables, Cumulative Charts, ranking and rank over groups, Power Pivot advanced functionalities, date and time functions, DAX advanced features, embedding Power Pivot in Power BI Desktop.

## 5. Data Visualization with Analytics

Deep dive into Power BI data visualization, understanding Power View and Power Map, Power BI Desktop visualization, formatting and customizing visuals, visualization interaction, SandDance visualization, deploying Power View on SharePoint and Excel, top down and bottom up analytics, comparing volume and value-based analytics, working with Power View to create Reports, Charts, Scorecards, and other visually rich formats, categorizing, filtering and sorting data using Power View, mastering the best practices.



## 6. Power Q&A

Introduction to Power Q&A, intuitive tool to answer tough queries using natural language, getting answers in the form of charts, graphs and data discovery methodologies, ad hoc analytics building, Power Q&A best practices, integrating with SaaS applications.

## 7. Power BI Desktop & Administration

Power BI Desktop, aggregating data from multiple data sources, how Power Query works in Power BI Desktop environment, learning about data modeling and data relationships, deploying data gateways, scheduling data refresh, managing groups and row level security, datasets, reports and dashboards, working with calculated measures, Power Pivot on Power BI Desktop ecosystem, mastering data visualization, Power View on Power BI Desktop, creating real world solutions using Power BI.

## Power BI Project

