

Course Contents Power BI

Power Query, Power BI & DAX In Power BI

Introduction To Power BI:

- Introduction To Power BI.
- Download, Install and Activate new features in Power BI.

Power Query For Power BI

Working With Power Query To Clean, Transform, and Load Data in Power BI:

- Data shaping.
- Transforming and Loading Data in Power BI Desktop.
- Introduction to Power Query (ETL Tool)
- Power Query M Language Purpose
- Power Query Architecture and ETL
- Data Types, Literals and Values
- Power Query Transformation Types
- Table & Column Transformations
- Text & Number Transformations
- Date, Time and Structured Data
- List, Record and Table Structures
- let, source, in statements @ M Lang
- Power Query Functions, Parameters
- Invoke Functions, Execution Results
- Get Data, Table Creations and Edit
- Merge and Append Transformations
- Join Kinds, Advanced Editor, Apply
- Query Duplicate, Query Reference
- Group By and Advanced Options
- Aggregations with Power Query
- Transpose, Header Row Promotion
- Reverse Rows and Row Count
- Data Type Changes & Detection
- Replace Columns: Text, NonText
- Replace Nulls: Fill Up, Fill Down
- PIVOT, UNPIVOT Transformations
- Move Column and Split Column
- Extract, Format and Numbers
- Date & Time Transformations
- Deriving Year, Quarter, Month, Day
- Add Column : Query Expressions
- Query Step Inserts and Step Edits

Working With Power Query For M Language:

- Text Functions : Left, Mid, Right, Replace, Trim.
- IF..ELSE Conditions, Transform Column () Types
- Remove Columns (), Split Columns (), Replace Value()
- Table. Distinct Options and GROUP BY Options Table.
- Group (), Table. Sort () with Type Conversions PIVOT
- Operation and Table. Pivot(). List Functions Using
- Parameters with M Language

Working With Power Query Data Modeling:

- Data Modeling Introduction
- Relationship, Need of Relationship

- Relationship Types / Cardinality in General
- One-to-One, One-to-Many (or Many-to-One), Many-to-Many
- AutoDetect the relationship, Create a new relationship, Edit existing relationships
- Make Relationship Active or Inactive
- Delete a relationship

Visualization Using Power BI

Start With Charts In Power BI:

- Introduction To the Charts.
- Working with axis.
- Preparation of Column Chart, Stacked Column Chart, Pie Chart, Donut Chart, Funnel Chart, Ribbon Chart, Line Chart, Waterfall Chart, 2 way axis charts, Scatter Chart.
- Advised and not advised in charts.

Working With Maps In Power BI:

- Introduction To Basic Maps In Power BI.
- Working with Maps In Power BI. Format the Maps, Managing the Backgrounds.
- Creating Filled Maps, Map with Charts.
- Creating Different Countries Charts.
- Working On World Map.
- Working On India Map.

Working With Table And Matrix In Power BI:

- Introduction To Tables and Data Set In Power BI.
- Creation Of Table, Formatting a Table.
- Using Conditional Formatting.
- Using Matrix, Managing Hierarchies, Subtotals, Formatting of Matrix.

Working With Filters and Cards In Power BI:

- Introduction To Filters and Cards In Power BI.
- Using Number Card, Text Card, Date Card In Power BI.
- Formatting Of Cards.
- Filter On Pages.

Using Slicers In Power BI:

- Introduction To Slicers In Power BI.
- Using Multiple Slicers In Power BI (Text Slicers, Date Slicers, Number Slicers).
- Formatting of Slicers.

Using Advanced Charts In Power BI, Objects, Bookmarks:

- Using Advanced Charts For Dashboards.
- Preparation Of Animated Bar Chart, Drill Down Chart, Word Cloud Chart, Sunburst Chart, Sankey Charts.
- Infographic in Power BI.
- Insert Images, Text, Shapes, Buttons In Power BI.
- Bookmark Action In Power BI.

Design a Data Model in Power BI:

- Introduction to datamodeling.
- Working with tables.
- Setting UP the Relationships
- Advanced Data Modeling in Power BI.

Power BI Services:

- Reports In Power BI.
- Creation Of Account In Power BI Services.
- Creation Of Dashboard In Power BI Services.
- Publish Reports In Power BI Services.
- Export Reports To PPT or PDF.
- Report Connections For Automatically Refresh.

DAX In Power BI

DAX Functions - Level 1

- DAX : Importance in Real-time
- Real-world usage of Excel, DAX
- DAX Architecture, Entity Sets
- DAX Data Types, Syntax Rules
- DAX Measures and Calculations
- ROW Context and Filter Context
- DAX Operators, Special Characters
- DAX Functions, Types in Real-time
- Vertipaq Engine, DAX Cheat Sheet
- Creating, Using Measures with DAX
- Creating, Using Columns with DAX
- Quick Measures and Summaries
- Validation Errors, Runtime Errors
- SUM, AVERAGEX, KEEPFILTERS
- Dynamic Expressions, IF in DAX

DAX Functions - Level 2

- Data Modeling Options in DAX
- Detecting Relations for DAX
- Using Calculated Columns in DAX
- Using Aggregated Measures in DAX
- Working with Facts & Measures
- Modeling : Missing Relations
- Modeling : Relation Management
- CALCULATE Function Conditions
- CALCULATE & ALL Member Scope
- RELATED & COUNTROWS in DAX
- Entity Sets and Slicing in DAX
- Dynamic Expressions, RETURN
- Date, Time and Text Functions
- Logical, Mathematical Functions
- Running Total & EARLIER Function
- AVERAGEX and AVERAGE in DAX
- KEEPFILTERS and CALCULATE
- COUNTROWS, RELATED, DIVIDE
- PARALLELPERIOD, DATEDADD
- CALCULATE & PREVIOUSMONTH
- USERRELATIONSHIP, DAX Variables
- TOTALYTD , TOTALQTD
- DIVIDE, CALCULATE, Conditions
- IF..ELSE..THEN Statement
- SELECTEDVALUE, FORMAT
- SUM, DATEDIFF Examples in DAX
- TODAY, DATE, DAY with DAX
- Time Intelligence Functions - DAX