



Data Analysis syllabus

FOR COURSE

Call or WhatsApp: +91-9503756685

Data Analysis

Data Analysis is process of inspecting, cleaning, transforming, and modelling a data. To work on the data following software or technologies will be used. In this course we will cover following syllabus.

➤ Excel:

- Basic Excel Functions (sum, count, min, max, avg and ...) and Conditional Formatting
- Advance Excel Function (lookup, index, match, VLOOKUP, reverse VLOOKUP and ...)
- Data Cleaning Functions (Trim, Proper, Clean, Left, Right, MID, Search, Find and ...)
- Pivot Table
- Pivot Chars
- Power Query Editor (Connections with Different Sources and Data Transformation)
- Data Validation, Macro Recording.

➤ SQL:

- Installation of MySQL, MySQL server and SSMS
- Introduction to data, data types, databases
- SQL Queries – SELECT, Update, INSERT
- SQL Clauses
- SQL Aggregation functions and Group By
- SQL Operators
- SQL Joins
- SQL Store Procedure
- SQL View
- SQL Functions
- SQL Triggers
- SQL Constraints
- SQL Date
- SQL Index
- SQL NULL Functions
- SQL Window Functions

➤ Python:

- Introduction to python for data analytics
- Data Types in Python
- Conditional Statements
- Loops
- String
- Collections (List, Tuple, Set and Dict) in Python
- Functions
- OOP's Concept
- Exception Handling
- Threading
- JSON
- Pandas
- NumPy
- Matplotlib or Plotly

➤ Power BI:

- Introduction to Power BI and Components of power BI and Architecture of Power BI
- Power Query Editor (Data Transformation)
 - Connections to different sources (Fetch Data from Various Sources)
 - Various types of operations on data
 - Query Parameters
 - Create Function and Invoke Function in Power Query
 - Storage Modes in Power Query
- Visualizations (Charts)
 - Bar Chart
 - Column Chart
 - Line Chart
 - Map
 - Area Chart
 - Funnel Chart

- Table and Matrix and so on.
- Data Modelling
 - What is Data Modelling
 - Why Data Modelling
 - Type of Data Modelling
 - Types of Relationships
 - Active and Inactive Relationship
 - Cardinality and Cross Filter Direction
- DAX (Data Analysis Expressions)
 - Introduction to Dax and Variables
 - Text Functions
 - Date Functions
 - Time Intelligence Functions
 - Logical Functions
 - Information Functions
 - Filter Functions
 - Table Manipulation Functions
 - Relationship Functions
- Power BI Service
 - Create Workspace
 - Publish Report
 - Edit Reports on Service
 - Dashboard and Report
- Row Level Security
- Incremental Refresh Setup
- Report and Dashboards
- Real-life Project Demo and tasks