



**COURSE OUTLINE FOR BEGINNERS LEVEL: EXCEL, POWER BI. AND SQL OF OUR
DATA ANALYTICS JOURNEY**

S/N	COURSE TITLE	COURSE CONTENT
1	Introduction to Data Analytics	<p>The Scope of Data Analytics</p> <p>Data Analytics Tools: Microsoft Excel, Google Spreadsheet, Power BI, Tableau, SPSS, SQL, R-Language, Python, and Others.</p>
2	Introduction to Microsoft Excel	<p>The Excel environment: The Menu Bars, Tabs and Ribbons, Formula Bar, Cells.</p> <p>Excel Formulas</p> <p>Excel Functions</p> <p>Formats</p>
3	Get Data	<p>Create Data: Primary and Secondary Data</p> <p>Create Google Forms</p> <p>Questionnaires</p> <p>Other Data Sources</p> <p>Data Formats: Excel, CSV, Web, Databanks etc.</p> <p>Data Types: Number, INT, Floats, Currency, Percentage, Text, Char, VarChar, Time, Date, Custom</p>
4	Data Cleaning	<p>Data Quality Dimension, DQD</p> <p>Power Query</p> <p>Text, Numbers, Dates, General</p> <p>Advance Sorting and Filtering</p> <p>Data Separation</p> <p>Data Joining: Flash Fill, Ampersand "&", Concatenate</p> <p>Other Data Cleaning Procedures: Trim, Clean, Blanks, Text Cases, etc</p> <p>Cell Referecing</p> <p>Excel Function II: SUMIF, SUMIFS, COUNT IF, COUNTIFS, etc.</p> <p>Performance Reporting with Excel.</p>

5	Data Transformation 1	Multiple Data Set (Worksheet, Workbook)
		Merge
		Append
		Relate (Power Pivot)
6	Model, Analyze, Visualize	Pivot Table
		Slicers
		Power Pivot
7	Dashboard and Visualizations	Dashboard Design
		Bar Chart, Line Charts, Pie Charts, Maps, etc.
		Visualization Usage.
8	The Business of Data Analytics	
9	Statistics	Exploratory Data Analysis
		Business Insight
POWER BI		
10	Get Data	Data Import
11	Data Cleaning	Power Query Editor: Perform all data cleaning exercises
12	Data Transformation 2	Entity Relationship Diagram
		Unpivoting
		Fill
		Transpose
		Group
		Duplicate and Reference Table
13	Data Analysis Expression (DAX)	The Formula bar
		Columns and Measures
		Different DAX
14	Advance Chart	KPI
		Guage Chart
15	Dashboard and Visualization	
16	Project Defence	
17	Graduation	

STRUCTURED QUERY LANGUAGE

18	Intro. To SQL	Data Definition Language, DDL
		Data Manipulation Language, DML

19	Intro. To SQL Server	Create a new Database
		Queries
		Database Modelling
		SQL Constraints: Primary Keys, Unique Keys, Foreign Keys, Not Null,
		Alter Table
20	Insert Into	
21	Update Table	
22	Delete	
23	Select	The ORDER BY Keyword
		Select Distinct
		The WHERE Clause
		Operator - Like, Between, In, And, Or
		Wildcards
		Alias
24	Joins	Inner, Left, Right Joins
25	Other Functions	