

STUDY PLAN

DA Batch 25 (9 Hrs)	Soft Skills	Aptitude	Gen AI
Live Class - Saturday (7:00 PM to 10:00 PM)			
Live Class - Sunday (7:00 PM to 10:00 PM)			
Doubt Discussion Session + Focus - Tue (7:-00 PM to 10:00 PM)			

Week	Date	Date		Session Type	Session	Duration(hrs)	Session Title	Session Topics	
Week 0		8-August-2026	Sat	Founder's Session					
		9-August-2026	Sun	Orientation Session			LMS Walkthrough		
		15-August-2026	Sat	Live Session	Session 1	3	Introduction to Data Analysis with Excel Functions (Basic to Intermediate)	Text: LEFT, RIGHT, MID, LEN, TRIM, UPPER, LOWER, CONCAT, TEXTJOIN Sorting & Filtering data Logical: IF, IFS, AND, OR, NOT Date: TODAY, NOW, DATE, EDATE, DATEDIF, NETWORKDAYS Math/Stat: SUM, AVERAGE, COUNT, COUNTA, ROUND, INT, MOD	Module 1 : Excel : Session 1
		16-August-2026	Sun	Live Session	Session 2	3	Lookups and Pivot Tables	VLOOKUP, HLOOKUP, Xlookup - their comparisons Creating Pivot Tables from structured data Row, Column, Filter, Values fields Summarization techniques (Sum, Count, Average) Grouping (dates, numbers) Sorting and filtering in Pivots Drill-down features	Module 1 : Excel : Session 2
		19-August-2026	Wed	DC + Focus	Practice Set/assignment for supporting Mini Project	3			Module 1 : Excel : Session 3 (Doubts Session + FOCUS)
Module 2 : SQL (33 Hr)									
Week				Session Type	Session	Duration(hrs)	Session Title	Session Topics	
		22-August-2026	Sat	Live Session	Session 3	3	Corss Sheet Lookups - Data Cleaning Techniques	Combining XLOOKUP with Pivot Table summaries Building cross-sheet dynamic reports	Module 1 : Excel : Session 4

							Using XLOOKUP inside calculated fields Identifying and removing duplicates Detecting and handling blanks, nulls TRIM, CLEAN, SUBSTITUTE for cleanup Data validation for drop-downs and checks Text to Columns, Flash Fill	
		23-August-2026	Sun	Live Session	Session 4	3	End To End Excel Project - Dashboard Building End to End Excel Project - End-to-end project: Clean raw data Apply transformations Use lookups Summarize using Pivots Linking Pivot Charts to Pivot Tables Using Slicers and Timelines, KPI Cards Present with dashboard	Module 1 : Excel : Session 5
		26-August-2026	Wed	DC + Focus	Practice Set/assignment for supporting Mini Project	3		Module 1 : Excel : Session 6 (Doubts Session + FOCUS)
		29-August-2026	Sat	Live Session	Mini Project Discussion	3	Mini Project Discussion	Module 1 : Excel : Session 7
Week 4		30-August-2026	Sun	Live Session	Session 1	3	DBMS Concepts Introduction to SQL for Data Analytics SQL Language Categories: DDL, DML, DCL, TCL Common SQL syntax and structure Creating a database Creating tables with CREATE TABLE Altering tables using ALTER TABLE Dropping and renaming columns	Module 2 : SQL : Session 8
		2-September-2026	Wed	DC + Focus	Doubt Clarification about Prompt Exercises, One small project Hands on with trainer on Gen AI + Excel (Ideally GPT/Copilot)" + Mini Project Submission	3		Module 2 : SQL : Session 9 (Doubts Session + FOCUS)
		5-September-2026	Sat	Live Session	Session 2	3	Constraints in SQL Dropping, Truncating & Modifying Tables NOT NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY, CHECK Default values and AUTO_INCREMENT Column-level vs table-level constraint declaration Modifying constraints Difference between DROP, TRUNCATE, DELETE Impact on storage, rollback, and auto-increment counters Modifying column names, data types Adding/removing columns using ALTER TABLE Renaming tables INSERT single and multiple records	Module 2 : SQL : Session 10
		6-September-2026	Sun	Live Session	Session 3	3	Aggregation and Group by SELECT basics with column filtering WHERE clause and logical operators	Module 2 : SQL : Session 11

							UPDATE and DELETE commands Using DISTINCT, ORDER BY, LIMIT, Group by Aggregate functions: COUNT, SUM, AVG, MIN, MAX GROUP BY and HAVING	
		9-September-2026	Wed	DC + Focus		3	SQL Lab/Excel Lab	Module 2 : SQL : Session 12 (Doubts Session + FOCUS)
Week 5		12-September-2026	Sat	Live Session	Session 4	3	SQL Joins	INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL OUTER JOIN Self JOIN, CROSS JOIN Understanding primary-foreign key relationships Joining more than two tables NULL handling in joins Windows Functions - row_number(), rank(), dense_rank(), lag(), lead()
		16-September-2026	Wed	DC + Focus		3		
Week 6		19-September-2026	Sat	Live Session	Session 5	3	Windows Functions, Views and Import/Export of Data	Windows Functions - row_number(), rank(), dense_rank(), lag(), lead() Views: creation, use cases, and limitations Connecting SQL databases to Excel / Python / Power BI Running SQL queries from external tools Exporting and importing data via CSV
		20-September-2026	Sun	Live Session	Session 6	3	Subqueries,CTEs and EDA	Nested queries and subqueries CASE statements Common Table Expressions(CTEs) Using simple dashboards to display query results Use case: exploratory data analysis with SQL
		23-September-2026	Wed	DC + Focus	DC + SQL Scriptwriting Practice	3	SQL Script Writing Practice Session	
Week 7		26-September-2026	Sat	Gen AI Masterclass	MC 2	3	MC-2: NL-to-SQL + Query Optimization with AI	Industry context and SQL interview expectations Natural language to structured SQL translation Identifying joins, filters, aggregations from business questions Query optimization fundamentals and performance improvement

								AI-assisted SQL drafting, refactoring, and validation	
		27-September-2026	Sun	Live Session	Mini Project Discussion	3		MINI PROJECT DISCUSSION	
		30-September-2026	Wed	DC + Focus	Gen AI Practice + Doubt + Project submission	3			
Week				Session Type	Session	Duration(hrs)	Session Title	Session Topics	
Week 8		3-October-2026	Sat	Recorded Sessions	Rec- Session 5	1.5	Prerequisite	Video 1: Intro to Statistics Topics: What is statistics: Descriptive vs Inferential Video 2: Types of Data Topics: Types of data: Qualitative vs Quantitative Video 3: Scales of measurement Topics: Scales of measurement: Nominal, Ordinal, Interval, Ratio Population vs Sample Video 4: Sampling methods Topics: Sampling methods: Random, Stratified, Cluster, Systematic Video 5: Data sources Topics: Surveys, Experiments, Observational studies Video 6: Biases in data collection	
Week 8		4-October-2026	Sun	Live Session	Session 1	3	Measures of Central Tendency and Measures of Dispersion (using Excel ideally with business problems)	Mean (Arithmetic, Weighted) Median Mode When to use which measure Impact of outliers on central tendency Practice with real datasets (e.g., salary, sales) Range Variance & Standard Deviation (sample vs population) Mean Absolute Deviation Coefficient of Variation Use of dispersion in comparing datasets	
		10-October-2026	Sat	Live Session	Session 2	3	Descriptive Statistics & Forecasting in Excel (Analysis ToolPak Applications)	Using Analysis ToolPak for summary statistics & regression output	

								Data distribution analysis (Histogram & normality check) Time series forecasting using Excel Forecast tools Business interpretation of statistical outputs	
		14-October-2026	Wed	DC + Focus		3			
Week				Session Type	Session	Duration(hrs)	Session Title	Session Topics	
Week 10		17-October-2026	Sat	Recorded Sessions	Rec- Session 6	1.5	Prerequisite	Video 1: Definition of Business Intelligence Topics: Definition of Business Intelligence and its industry applications Video 2: Types of BI tools Topics: Types of BI tools and landscape overview Video 3: Installing Power BI Desktop Video 4: Overview of Power BI interface Topics: Overview of Power BI interface: ribbons, panes, canvas Video 5: Workflow overview Topics: Workflow overview: data, model, report views Video 6: PowerBI with Excel Connecting to Excel, CSV, Web, and SQL sources Import vs Direct Query vs Live connection	
		18-October-2026	Sun	Live Session	Session 1	3	Power Query Editor	Navigating the Power Query Editor Transforming data types, trimming, replacing, splitting Steps applied, query folding and refresh Understanding measures vs dimensions Discrete vs continuous fields Data shaping: renaming, removing, pivoting, unpivoting columns Transforming data types, trimming, replacing, splitting	

								Creating relationships, understanding cardinality and cross-filter direction	
		24-October-2026	Sat	Live Session	Session 2	3	DAX Fundamentals, DAX modelling and DAX Operations	Star vs Snowflake schema Role of fact and dimension tables Introduction to DAX: syntax and use cases Calculated columns vs measures Basic DAX functions: SUM, AVERAGE, COUNT, DISTINCTCOUNT Working with filters in DAX: CALCULATE, FILTER, ALL Logical and text functions in DAX Conditional expressions using IF and SWITCH	
		28-October-2026	Wed	DC + Focus		3			
Week 11		31-October-2026	Sat	Live Session	Session 3	3	DAX Operations Visualizations & Interactions	Row context vs filter context explained Error handling and debugging DAX expressions Using core visuals: bar, line, pie, scatter, table, matrix Customizing visuals: formatting, themes, tooltips Setting up slicers and filters Drill-through and drill-down navigation Cross-highlighting and interactivity between visuals	
		1-November-2026	Sun	Live Session	Session 4	3	Advanced Measures & Time Intelligence Reports, Bookmarks, Tooltips & Navigation,	Cumulative totals and running totals YOY, MOM comparisons DATEADD, DATESYTD, SAMEPERIODLASTYEAR Using CALCULATE with time intelligence Date table creation and relationships Creating multi-page reports Adding bookmarks for storytelling and dynamic views Using buttons and images for navigation. Custom tooltips and drill-through pages Setting up page navigation and back buttons	
		4-November-2026	Wed	DC + Focus		3			
Week 12		7-November-2026	Sat	Live Session	Mini Project Discussion	3	Mini Project Discussion Publishing, Sharing & Deployment	Publishing reports to Power BI Service Creating and managing workspaces Setting refresh schedules and gateway setup Sharing reports with stakeholders Row-level security and access control basics	Mini Project Lab

		8-November-2026	Sun	Gen AI Masterclass	MC 3	3	MC-3: AI-Enhanced Dashboarding + Automated Insights	Using AI to design KPI-driven dashboards Generating DAX measures with AI support Automating insight summaries from visuals Identifying trends and anomalies using AI Improving dashboard storytelling and clarity	
		11-November-2026	Wed	DC + Focus	Genai + Doubts	3			
			Sat	Rec- Session 6	1		Introduction to Tableau, Installation & Interface Navigation Connecting to Data Sources Building Basic Charts		
			Sun	Rec- Session 7	1		Basic & Advanced Charts & Highlighting Building Basic Charts Advanced Chart Types and Highlighting Techniques		
			Sat	Rec - Session 8	1		Maps, Time Series, Dashboards Geospatial Charts and Time-Series Visuals Dashboards, Filters and User Interactivity		
			Wed	Rec - Session 9	1		Filters, Joins, Blends, Calculations Filtering Logic, Joins, Blends and Calculations	Need to give small dashboard as Assignment	Two Dashboards in Class + One as Assignmnet (Non Graded)
Module 5 : Python (42 hours)									
Week				Session Type	Session	Duration(hrs)	Session Title	Session Topics	
		14-November-2026	Sat	Recorded Sessions	Rec- Session 6	1.5	Prerequisite	Video 1: Intro to Programming Languages and Python Topics: Definition of Programming Languages Why we need Programming Languages Introduction to Python Python Syntax Data Types Variables Video 2: Type Casting, Conversion and I/O Functions	Video 1 - Intro to Python, Datatypes, Variables, Typecasting, input function Video 2 - FString, Inbuilt Python Functions, List Functions

								Topics: How Python is different from other languages (Dynamically Typed) Type Casting and Type Conversion Implicit and Explicit Type Conversion Input and Output Functions Overview of Concatenation Video 3: F-Strings Method (Part 1 & Part 2) Topics: Introduction to F-Strings F-Strings Syntax and Examples String Formatting using F-Strings Video 4: Deep Dive into F-Strings and Code Structure Topics: Advanced F-String Usage Creating a Calculator using Python Indentation in Python Block of Code Concept Video 5: Inbuilt Functions, Lists and List Functions Topics: Common Inbuilt Functions (len, max, min, sum, sorted, round, abs) Introduction to Lists List Functions (append, extend, insert, remove, pop)	
Week 13		15-November-2026	Sun	Live Session	Session 1	3	Python Intro & Control Structures	Intro to Python Coding Environment with Jupyter Notebooks How to write effective code in Python if, elif, else statements Nested conditions	
		21-November-2026	Sat	Live Session	Session 2	3	Python Intro & Control Structures Part 2	for loops with range() while loops and loop control: break, continue, pass else clause with loops	
		25-November-2026	Wed	DC + Focus		3			
		28-November-2026	Sat	Recorded Sessions	Rec- Session 6	1.5	Prerequisite	Video 1: File Handling & Types of Files in Python Topics: Introduction to File Handling in Python Types of Files (.txt, .csv, .json) File Modes Read Method Write Method Video 3 - File Handling Video 4 - Exception Handling Video 5 - Inbuilt Modules in Python	

								Append Method Video 2: CSV & JSON File Handling Topics: Working with CSV Files CSV Functions (writer, writerow, reader) Working with JSON Files JSON Functions (dump, load, append) Video 3: Exception & Error Handling in Python Topics: What is Exception Handling Importance of Exception Handling Try Block Except Block Else Block Finally Block Types of Errors and Exceptions ValueError FileNotFoundError Other Common Exceptions Video 4: Python Inbuilt Modules & Module Functions Topics: Introduction to Python Modules Math Module (sqrt, pow, pi, factorial) Random Module (random, randint, uniform, sample, randrange) Datetime Module (now, today, now().date, now().time) Timezone Module Overview Using dir() Function to Explore Module Functions	
Week 14		29-November-2026	Sun	Live Session	Session 3	3	Data Structures in Python	Creating, accessing, slicing lists List comprehension Tuples: declaration, immutability, use cases Tuple unpacking and zip() basics string methods and tuple methods Creating sets, uniqueness in keyword and set membership add(), remove(), discard() Use cases in de-duplication	
		5-December-2026	Sat	Live Session	Session 4	3	Data Structures in Python Part 2	Set operations: union(), intersection(), difference(), symmetric_difference() Creating and accessing key-value pairs get(), items(), keys(), values() Updating and deleting entries in operator, nested dictionaries Dictionary comprehension (basic intro)	

		9-December-2026	Wed	DC + Focus		3			
Week 15		12-December-2026	Sat	Live Session	Session 5	3	Data Manipulation with Numpy Arrays	What is NumPy & why use it Creating arrays: <code>array()</code> , <code>zeros()</code> , <code>ones()</code> , <code>arange()</code> , <code>linspace()</code> Array properties: <code>shape</code> , <code>ndim</code> , <code>dtype</code> Basic element-wise operations: <code>+</code> , <code>-</code> , <code>*</code> , <code>/</code> Aggregation: <code>sum()</code> , <code>mean()</code> , <code>std()</code> Creating Series from lists, dictionaries Indexing, slicing, vector-style operations	
		13-December-2026	Sun	Live Session	Session 6	3	Creating and Accessing DataFrame using Pandas	Creating DataFrames from dict, list of dicts, CSV <code>head()</code> , <code>tail()</code> , <code>info()</code> , <code>describe()</code> Selecting data: <code>loc[]</code> , <code>iloc[]</code> Adding/removing columns Filtering rows with conditions Renaming columns, updating values Sorting by column(s) Handling missing data: <code>isnull()</code> , <code>dropna()</code> , <code>fillna()</code>	
		16-December-2026	Wed	DC + Focus		3			
Week 16		19-December-2026	Sat	Live Session	Session 7	3	Pandas Groupby and Sorting	<code>groupby()</code> with <code>mean()</code> , <code>sum()</code> , <code>count()</code> Using <code>agg()</code> for multi-aggregation Multi-index results Pivot tables with <code>pivot_table()</code> Merging/joining DataFrames Load & explore dataset Clean missing and inconsistent data Derive new columns Use <code>groupby()</code> , filtering, sorting Visualize insights using <code>Pandas.plot()</code> Save cleaned & visualized outputs	
		20-December-2026	Sun	Live Session	Session 8	3	Plotting with Matplotlib	Line plot, bar chart, histogram, pie chart using <code>Pandas.plot()</code> Customizing plots: labels, titles, colors Plotting directly from groupby results Intro to <code>matplotlib.pyplot</code> : <code>plot()</code> , <code>bar()</code> , <code>scatter()</code> Styling and subplot basics	
		23-December-2026	Wed	DC + Focus		3			
Week 17		26-December-2026	Sat	Live Session	Mini Project Discussion	3	EDA with Pandas + Numpy + Seaborn	Visualization using Seaborn library, variety of charts. Lambda Functions User Defined Functions	

								Reshaping Data Date and Time Handling Exporting Data EDA Project	
		27-December-2026	Sun	Gen AI Masterclass	MC 4	3	MC-4 : AI-Assisted Python Code Generation & Debugging	Writing Python scripts using AI assistance Debugging errors with structured AI prompts Optimizing data manipulation logic (Pandas/Numpy) Improving code readability and documentation Validating AI-generated code outputs	Using Google Collab and with Genai integration
		30-December-2026	Wed	DC + Focus		3			
Module 6 :Statistics and EDA - 2 (24 hr)									
Week				Session Type	Session	Duration(hrs)	Session Title	Session Topics	
Week 18		2-January-2027	Sat	Live Session	Session 1	3	Percentiles, Quartiles, and IQR Univariate Analysis	Percentiles and interpretation (e.g., 90th percentile) Quartiles: Q1, Q2 (median), Q3 Interquartile Range (IQR) Box plot interpretation Outlier detection using IQR Histogram, Bar chart, Pie chart Frequency distribution tables KDE (Kernel Density Estimation) plot	
		3-January-2027	Sun	Live Session	Session 2	3	Understanding Patterns and Relationship using Univariate,Bivariate, Multivariate Analysis	Basic Bivariate analysis Bivariate Analysis Implementation Pearson's correlation & covariance Rank Correlation Correlation & Causation	
		6-January-2027	Wed	DC + Focus		3			
Week 19		9-January-2027	Sat	Live Session	Session 3	3	Probability & Distributions	Basics of probability: Classical, Empirical Complementary, Joint, and Conditional probability Discrete distributions: Binomial Continuous distributions: Normal distribution Central Limit Theorem (basic concept)	
		10-January-2027	Sun	Live Session	Session 4	3	Hypothesis Testing – Foundations	Population vs sample recap	

								Concept of hypothesis: Null vs Alternative One-tailed vs Two-tailed test Type I and Type II errors p-value concept Confidence Intervals (basic interpretation) t-test: One-sample, Two-sample Z-test basics Chi-square test (intro) for independence Hands-on: Interpret test results using Python/Excel output Decision-making from statistical tests	
		13-January-2027	Wed	DC + Focus		3			
Week 20		16-January-2027	Sat	Gen AI Masterclass	MC 5	3	AI-Powered EDA & Statistical Storytelling	AI-assisted exploratory data analysis (EDA) Generating summary statistics and visual insights Identifying patterns, correlations, and anomalies Automating statistical interpretation Converting analysis into structured data stories	
		17-January-2027	Sun	Live Session	Mini Project Discussion	3	Mini Project Discussion	EDA Project (EDA Assignment with GEN AI included)	Note : No DC session, rather ask learners to watch pre-recorded Tableau videos during weekdays
		20-January-2027	Wed	DC + Focus		3		EDA Assignment Review	Assignment
	ET 2 (Week 21)								
Module 7: Project Work									
Week				Session Type	Session	Duration(hrs)	Session Title	Session Topics	Self Paced Links
			Sat						
Week 22			Sat	Live Session		3		Capstone Project Building Session	
Week 23			Sat	Live Session		1.5		Capstone Project Doubts	
Week 24			Sat	Live Session		1.5		Capstone Project Doubts	