ADVANCED EXCEL: Analyzing Data

Unit I: **Introduction to Data Analysis Using Excel**

Learn the basics of Excel to help managing, understanding patterns, visualize and gain insights from your data.

Day	Topics	Sub-Topics	
1	Basics of Excel with historical data on Equity, Commodity etc Editing and basic formatting, Basic data Manipulation, Basic excel features: filtering, sorting		🟩
1	Data Filter, Sort, custom sort, Advanced Filter Using Pivot tables & Charts		🟨
2	Conditional formatting, Finding duplicates, Inserting/hiding comments Data text to columns using delimiters		🟩
2	Using Basic Excel Library Functions: SUM, DIFFERENCE, PRODUCT, SUMPRODUCT, COUNT, COUNTIF, SUMIF		🟩

Unit II: **Excel Skills for Business**

Develop your skills with Excel, one of the common tools that help solving business problems

Day	Topics	Sub-Topics	
3	Mathematical, Date time functions: DATE, YEAR, DAY, MONTH, WEEKDAY, LOG, LN, SQRT, POWER, EXP etc.		🟩
3	Lookup functions: HYPERLINK, INDEX, INDIRECT, MATCH, OFFSET, VLOOKUP, HLOOKUP, LEN		🟨
4	Importing External Data: From Access, Web, Text Data & Other sources.		🟩
4	Data Validation: Data Validation, Circle Invalid data, Consolidate and Group Data		🟨

Unit III: **Analyzing and Visualizing Data with Excel**

Develop your skills with Excel, one of the common tools that data scientists depend on to gather, transform, analyze, and visualize data.

Day	Topics	Sub-Topics	
5	Financial Functions: PMT, PPMT, FV, PV, NPER, RATE, NPV		🟨
5	Case Analysis: Loan & Lease Statement Schedule		🟥
6	Statistical measures: Average, Median, Mode, Std deviation, Range Min Max, Variance, Coefficient of variation, Correlation and Regression, Percentiles, Quartiles, Theoretical Distributions: Binomial & Poisson		🟩
6	Data Analysis Tools: Correlation, Covariance, Descriptive Statistics, Rank and Percentile		🟨

Unit IV: **Essential Statistics & Optimization Using Excel**

Gain a solid understanding of statistical measures using Excel, and build on your data analysis and data science foundation.

Day	Topics	Sub-Topics	
7	Solver: Optimization (Linear, Transportation problems)		🟥
8	Creating Basic Macros using VBA		🟥

Kindly Note:

🟩	Least Complex	🟨	Moderately Complex	🟥	Most Complex