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/Session	Topics	Sub-Topics	
1-I	Basics of Excel with historical data on Equity, Commodity etc Editing and basic formatting, Basic data Manipulation, Basic excel features: filtering, sorting		🟩
1-I	Data Filter, Sort, custom sort, Advanced Filter Using Pivot tables & Charts		🟧
1-I	Conditional formatting, Finding duplicates, Inserting/hiding comments Data text to columns using delimiters		🟩
1-I	Using Basic Excel Library Functions: SUM, DIFFERENCE, PRODUCT, SUMPRODUCT, COUNT, COUNTIF, SUMIF, Date Time Functions. DATE, YEAR, DAY, MONTH, WEEKDAY, LOG, LN, SQRT, POWER, EXP etc.		🟩

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	
1-II	Statistical measures: Average, Median, Mode, Std deviation, Range Min Max, Variance, Coefficient of variation, Correlation and Regression, Percentiles, Quartiles, **Frequency Distributions**		🟩
1-II	Lookup functions: HYPERLINK, INDEX, INDIRECT, MATCH, OFFSET, VLOOKUP, HLOOKUP, LEN		🟧
1-II	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	
2-I	Financial Functions: PMT, IPMT, PPMT, FV, PV, NPER, RATE, NPV,		🟧
2-I	Case Analysis: Loan & Lease Statement Schedule		🟥
2-I	What if Analysis: Goal Seek, Scenario & Data Tables		🟧
2-I	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	
2-II	Data Analysis Tools: Correlation, Covariance, Descriptive Statistics, Rank and Percentile		🟥
2-II	Solver: Optimization (Linear, Transportation problems)		🟥

Kindly Note:

🟩 Least Complex	🟧 Moderately Complex	🟥 Most Complex