

Two-day DATA ANALYTICS USING EXCEL & SPSS

Programme Coverage

Day I: Topics to be Covered	Software
<ul style="list-style-type: none"> • Introduction to data, Data preparation and management in Spreadsheet Environment • Use of Basic charts: Line, Bar & Pie, Use of Filters, Sorting & Conditional Formatting • Use of text function, FIND(), LEN(), LEFT(), RIGHT() • Use of count functions: FREQUENCY, COUNTA(), COUNTIF(), COUNTIFS() & SUMIF() 	EXCEL
<ul style="list-style-type: none"> • Basic Statistical Functions, AVERAGE, MIN, MAX, PERCENTILE, STDEV, VAR, CORREL 	EXCEL
<ul style="list-style-type: none"> • Use of VLOOKUP() and HLOOKUP() • Date functions, YEAR(), MONTH(), DAY(), YEARFRAC() • Selecting appropriate charts, Introduction to Pivot tables 	EXCEL
Day II: Topics to be Covered	Software
<ul style="list-style-type: none"> • Introduction of SPSS, Case and Variables, Input of Data, Import of Data from Excel 	SPSS
<ul style="list-style-type: none"> • Produce and interpret frequency counts, Cross tabs and descriptive statistics 	SPSS
<ul style="list-style-type: none"> • Correlation and Regression Analysis 	SPSS

Two-day Statistical Tools Using Excel

Programme Coverage

Day I: Topics to be Covered	Software
<ul style="list-style-type: none"> • Introduction to data, Data preparation and management in Spreadsheet Environment • Use of Basic charts: Line, Bar & Pie, Use of Filters, Sorting & Conditional Formatting • Use of text function, FIND(), LEN(), LEFT(), RIGHT() • Use of count functions: FREQUENCY, COUNTA(), COUNTIF(), COUNTIFS() & SUMIF() 	EXCEL
<ul style="list-style-type: none"> • Basic Statistical Functions, AVERAGE, MIN, MAX, PERCENTILE, STDEV, VAR, CORREL 	EXCEL
<ul style="list-style-type: none"> • Use of VLOOKUP() and HLOOKUP() • Date functions, YEAR(), MONTH(), DAY(), YEARFRAC() • Selecting appropriate charts, Introduction to Pivot tables 	EXCEL
Day II: Topics to be Covered	Software
<ul style="list-style-type: none"> • Measures of Central Tendency, Dispersion, Position & Shape: AVERAGE, MEDIAN, HARMEAN, TRIMMEAN, MODE, PERCENTILE, DECILE, QUARTILE, VAR, STDEV, SKEW, KURT... 	Excel
<ul style="list-style-type: none"> • Probability & Probability Distributions (Binomial, Poisson & Normal): BINOMDIST, POISSON, NORMDIST, NORMSDIST, NORMINV....Testing of Hypothesis 	Excel
<ul style="list-style-type: none"> • Correlation & Regression: CORREL, SLOPE, INTERCEPT 	Excel

Two-day Structural Equation Modeling Using AMOS

Programme Coverage

Day I: Topics to be Covered	Software
<ul style="list-style-type: none"> • Introduction, Identification of research problem, formulating objectives, Research design, Measuring and scaling Techniques 	AMOS
<ul style="list-style-type: none"> • Testing of Hypothesis: Univariate, Bivariate and Multivariate analysis, Theoretical Background of SEM, SEM vs. Multiple regression and Factor analysis 	AMOS
Day II: Topics to be Covered	Software
<ul style="list-style-type: none"> • Defining a construct, Type of Constructs, Content analysis and Content • Validity, Reflective and Formative measurement theory, Measurement Model and Structural Model, Difference between EFA and CFA 	AMOS
<ul style="list-style-type: none"> • Construct analysis and Confirmatory Factor Analysis, Construct, Convergent and Discriminant Validity, 	AMOS
<ul style="list-style-type: none"> • IBM AMOS: Case Study 	AMOS

Two-day **Financial Analytics Using EXCEL VBA**

Programme Coverage

Day I: Topics to be Covered	Software
Editing and basic formatting, Basic data Manipulation, Basic excel features: filtering, sorting	Excel
Cell Naming, Range Naming and Create dynamic ranges, DATA VALIDATION, Absolute and relative cells, using locked cell values, Protecting worksheets/workbooks in Excel	Excel
Goal seek and its practical applications, Working with Multiple linked Ms-Excel workbooks, Excel Functions: logical, lookup, Financial	Excel
Day II: Topics to be Covered	Software
Excel functions: Date, Text, Statistical functions	Excel
Converting text to table, data filtering and data sorting, Pivot tables, and Pivot charts	Excel
Formula Auditing tools including tracing arrows for precedents/dependents, Revealing formulae, GOTO, Calculation modes, Tracing common errors, Recording macros	Excel

Two-day **DATA ANALYTICS USING Environment**

Programme Coverage

Day I: Topics to be Covered	Software
Introduction to the R Environment, Importing data from other formats	R
Basics of working with R, Descriptive Statistics, Correlation & Regression analysis	R
Day II: Topics to be Covered	Software
Exploratory data analysis and Graphics	R
Testing of Hypothesis “t”, “Z”, “F” and Chi-square Test	R
Analysis of Variance, Regression Analysis	R

Two-day **Time Series Analysis Using EViews**

Programme Coverage

Day I: Topics to be Covered	Software
Creating a Workfile in EViews, Importing and Exporting data with different file formats	EViews
Edit and save data, View and Plot Data, Summary statistics, Correlation Matrix	EViews
Day II: Topics to be Covered	Software
Regression Analysis and estimating the equation, Interpretation of the regression output	EViews
Model specification and Hypothesis tests (Coefficient of Diagnostics)	EViews
Test of autocorrelation, Heteroscedasticity, Multi-co linearity, Normality	EViews
Model specification with ARMA models, Forecasting	EViews

Three-day DATA ANALYTICS USING SPSS & R Environment

Programme Coverage

Day I: Topics to be Covered	Software
Introduction of SPSS, Case and Variables, Input of Data	SPSS
Produce and interpret frequency counts, tables, and descriptive statistics	SPSS
Using Explore and Cross tabs, Produce and Interpret Graphs, Case Study with Primary data	SPSS
Day II: Topics to be Covered	Software
Correlation and Regression Analysis	SPSS
Testing of Hypothesis “t”, “Z”, “F” and Chi-square Test, ANOVA, ANCOVA models	SPSS
Day III: Topics to be Covered	Software
Introduction to the R Environment, Importing data from other formats	R
Basics of working with R, Descriptive Statistics, Correlation & Regression analysis	R

Three-day DATA ANALYTICS USING EXCEL & SPSS

Programme Coverage

Day I: Topics to be Covered	Software
Introduction to data, Data preparation and management in Spreadsheet Environment Use of Basic charts: Line, Bar & Pie, Use of Filters, Sorting & Conditional Formatting Use of text function, FIND(), LEN(), LEFT(), RIGHT() Use of count functions: FREQUENCY, COUNTA(), COUNTIF(), COUNTIFS() & SUMIF()	EXCEL
Basic Statistical Functions, AVERAGE, MIN, MAX, PERCENTILE, STDEV, VAR, CORREL	EXCEL
Use of VLOOKUP() and HLOOKUP(), Date YEAR(), MONTH(), DAY(), YEARFRAC() Selecting appropriate charts, Introduction to Pivot tables	EXCEL
Day II: Topics to be Covered	Software
Introduction of SPSS, Case and Variables, Input of Data	SPSS
Produce and interpret frequency counts, tables, and descriptive statistics	SPSS
Using Explore and Cross tabs, Produce and Interpret Graphs, Case Study with Primary data	SPSS
Day III: Topics to be Covered	Software
Correlation and Regression Analysis	SPSS
Testing of Hypothesis “t”, “Z”, “F” and Chi-square Test, ANOVA, ANCOVA models	SPSS

Three-day Time Series Analysis Using EViews

Programme Coverage

Day I: Topics to be Covered	Software
Estimating Regression and diagnostics Heteroskedasticity, Multicollinearity using EViews	EViews
Stationarity and Testing Autocorrelation	EViews
Time Series analysis: Structural Breaks, Bai Perron structural Break test	EViews
Day II: Topics to be Covered	Software
Basics of (G)ARCH modeling	EViews
ARCH, GARCH, EGARCH models using EViews	EViews
EViews: Practice Session	EViews
Day III: Topics to be Covered	Software
Basics of VAR, SVAR modeling	EViews
VAR & VECM Models	EViews

Six-days Data Analytics Using SPSS & EViews
Programme Coverage

Time	9:30 – 1:00 PM <i>Pre-lunch Sessions</i>		1:45 – 5:00 PM <i>Post-lunch Sessions</i>				
Day & Date	9:30 – 11:00 AM		11:30 – 01:00 PM		1:45 – 3:15 PM		3:30 – 5:00 PM
Day I	Inaugural & Introduction to Research	<i>Tea Break</i>	Research Design	<i>Lunch Break</i>	Data Collection and Sampling Techniques	<i>Tea Break</i>	Writing Research Proposals
Day II	Introduction to SPSS : Defining variables, cases, handling missing		Basic operation of SPSS ; Descriptive Analysis;		SPSS : Plotting charts		SPSS : Practice Session
Day III	SPSS : Correlation & Regression-I		SPSS : Correlation & Regression-II		SPSS : Case Analysis		SPSS : Practice Session
Day IV	SPSS : Testing of Hypothesis (t, F, Z & Chi-square)		SPSS : ANOVA, ANCOVA, MANOVA, MANCOVA		SPSS : Case Analysis		SPSS : Practice Session
Day V	Introduction to Time Series analysis		Time Series Analysis using EViews		EViews : Case Analysis		EViews : Practice Session
Day VI	Group presentations by participants		Group presentations by participants		Group presentations by participants		Valedictory Function