

Applied Data Analysis with SPSS: A Hands-On Training Program

Course Outline

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Content		
Day 1	10 Oct, 2025 4:00 pm - 6:30 pm	Introduction <ul style="list-style-type: none"> • Basic introduction and definitions • Download and install SPSS • SPSS related terms • Rules of variable names • Data type • Data file creation Data Transformation and Manipulation <ul style="list-style-type: none"> • Import files from several file formats • Missing value analysis • Data re-computing and re-coding • Data manipulation
Day 2	11 Oct, 2025 4:00 pm - 6:30 pm	Descriptive Statistics and Visualization <ul style="list-style-type: none"> • Introduce to our data • Frequency analysis <ul style="list-style-type: none"> • Central tendency: mean, median, mode. • Variability analysis or Dispersion: range, variance, standard deviation, minimum, maximum. • Percentile Score • Chart Builder and Legacy Dialogs • Normality test & Outlier detection Correlation <ul style="list-style-type: none"> • Definition of correlation • Pearson correlation • Average correlation
Day 3	17 Oct, 2025 4:00 pm - 6:30 pm	Regression <ul style="list-style-type: none"> • Definitions of regression • Types of regression • Simple linear regression • Multiple linear regression • Non-linear regression • Logistic & multinomial logistic regression Statistical Inference & Tests <ul style="list-style-type: none"> • Some definitions of related terms. • Distinguish between parametric and non-parametric tests. • Crosstabs analysis

		<ul style="list-style-type: none"> • Cronbach's alpha • Levene's test, Welch's test Parametric Test <ul style="list-style-type: none"> • One-sample t-test and z-test • Independent sample t-test • Paired samples t-test • ANOVA Non-Parametric Test <ul style="list-style-type: none"> • Chi-square • Mann-Whitney U Test, K-S test • Kruskal-Wallis Test
Day 4	18 Oct, 2025 4:00 pm - 6:30 pm	Project solve & discussion

