

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 Cronbach's alpha

		<ul style="list-style-type: none"> • 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

