KNOWLES Advisory & Consulting

SPSS Supercharged

Statistical Analysis Meets AI

Master Statistics. Let AI Explain the Rest.

⏱ 3 Days | 3 Hours Live per Day | 4 Batches/Year | 22nd to 24th May | ₹7,500

◆ COURSE OVERVIEW

SPSS Supercharged takes you from basic SPSS navigation all the way to advanced statistical analysis, with AI as your co-analyst at every step. No more struggling to interpret cryptic SPSS output - Claude decodes your results in plain language. This three-day course is designed for researchers who want to produce publication-quality statistical analyses quickly, accurately, and with confidence.

PREREQUISITE & KNOWLEDGE LEVEL: Is suitable for professionals with basic familiarity with data handling (e.g., working with Excel datasets). Participants who are entirely new to statistics are advised to complete a foundational statistics course before enrolling.

◆ COURSE MODULES - 3 DAYS × 3 HOURS

Module 1: SPSS Foundations: Data Management, Descriptives & Regression with AI ⏱ 3 Hours

LECTURE CONTENT (90 min)

- SPSS interface mastery: data view, variable view, syntax editor, and output viewer
- Data entry, import from Excel, and cleaning in SPSS: coding and labelling
- Descriptive statistics: means, frequencies, crosstabs, and percentiles in SPSS
- Pearson and Spearman correlation: when to use what
- Simple and multiple linear regression in SPSS: step-by-step execution
- Logistic regression for categorical outcomes: SPSS procedure

GROUP WORK & PRACTICALS (90 min)

- SPSS data setup: import an Excel dataset, clean and code with AI quality checks
- Regression workshop: run a multiple regression and interpret with Claude
- Group compares findings and discusses interpretation strategies

Module 2: Factor Analysis, ANOVA, Non-Parametric Tests & Scale Reliability ⏱ 3 Hours

LECTURE CONTENT (90 min)

- Exploratory Factor Analysis (EFA) in SPSS: extraction and rotation methods
- Scale reliability: Cronbach's alpha and inter-item correlation
- Confirmatory factor analysis overview and reporting
- One-way and two-way ANOVA in SPSS: assumptions, execution, and post-hoc tests
- Non-parametric tests in SPSS
- Repeated measures analysis and mixed ANOVA

GROUP WORK & PRACTICALS (90 min)

- Factor analysis exercise: run an EFA on a survey dataset and report results with Claude
- ANOVA workshop: compare group means and interpret post-hoc tests with AI
- Non-parametric challenge: choose the right test and run it with Claude validation
- Group builds a complete scale reliability report with AI-generated narrative

Module 3: Time Series Analysis, Predictive AI & Professional Reporting ⏱ 3 Hours

LECTURE CONTENT (90 min)

- ARIMA models in SPSS: identification, estimation, and AI-assisted configuration
- Communicating time series results to non-statisticians using Claude narratives
- SPSS Output Viewer: extracting and formatting results for publications
- Claude templates for APA-style statistical reporting

GROUP WORK & PRACTICALS (90 min)

- Time series exercise: run an ARIMA model in SPSS
- APA reporting sprint: use Claude to produce a publication-ready results section
- Syntax library build: participants create reusable SPSS syntax with AI assistance

◆ LEARNING OUTCOMES

- Navigate SPSS from beginner to advanced level with confidence
- Run and interpret regression, ANOVA, and non-parametric analyses
- Conduct factor analysis and scale reliability testing
- Apply time series methods with ARIMA in SPSS
- Generate professional APA-style statistical reports using Claude templates

◆ TOOLS & TECHNOLOGIES

SPSS	Claude	Julius AI	Excel

◆ WHO SHOULD ATTEND

Quantitative researchers, Data analysts, Graduate students | Prerequisite: Basic data handling skills (Excel-level); foundational statistics knowledge recommended for Day 3 advanced modules

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