5 Days

Data Mining and Big Data Analytics Using SPSS

SPSS Essentials Course

▶ Upcoming Sessions

14-18 Oct 2024	Dubai - UAE	$5,950
09-13 Dec 2024	London - UK	$5,950
17-21 Feb 2025	Dubai - UAE	$5,950
21-25 Apr 2025	London - UK	$5,950
23-27 Jun 2025	Dubai - UAE	$5,950
07-11 Jul 2025	London - UK	$5,950
13-17 Oct 2025	Dubai - UAE	$5,950
08-12 Dec 2025	London - UK	$5,950

▶ Training Details

Training Course Overview

Data Mining and Big Data Analytics have become ubiquitous tools enabling data-driven decision-making, enhancing productivity, and fostering innovative advancements. Despite their benefits, controversies have arisen not from flaws in these technologies but from misuse by individuals.

The Anderson training course aims to highlight the positive impacts of Data Mining and Big Data Analytics while helping participants avoid pitfalls and maximize benefits. It provides insights into leveraging these technologies effectively without requiring deep IT or programming expertise.

Specifically, the course demonstrates practical methods for harnessing the advantages of Data Mining and Big Data Analytics using user-friendly software like SPSS. This tool is ideal for individuals keen on utilizing the power of Big Data through graphical interfaces rather than extensive coding.

Training Course Objectives

By attending this Anderson training course, delegates will be able to:

- Understand the power of Big Data and Big Data Analytics
- Harness the benefits of graphical interface of SPSS for Big Data Analytics
- Learn the concepts of data analysis and visualization
- Apply the drag and drop functionality for data visualization
- Acquire the knowledge of advanced analysis of big data, like sentiment analysis in SPSS
- Get aquatinted with the theory of data analytics and the methods used in machine learning

- Learn advanced concepts of data analytics like clustering, association and sentiment analysis

Designed For

This Anderson training course is suitable to a wide range of professionals but will greatly benefit:

- CTOs, CIOs and Engineers
- Data Scientists, Data Analysts
- Statisticians and technology personnel
- Marketing and research specialists
- Consultants
- HSE managers
- Anyone related or interested in Data Analysis who needs the drag and drop interface

▶ Training Details

Day One: Introduction to SPSS

- Getting to know SPSS
- Starting SPSS and Working with data files
- Descriptive Statistics
- Frequencies (categorical variables)
- Central tendency, standard deviations, and range (continuous variables)
- Getting help and running tutorials

Day Two: Manipulating the Data and Initial Data Visualization

- Using graphs to describe and explore the data
  - Histograms
  - Bar graphs
  - Boxplots
  - Line graphs
- Calculating total scale scores
- Transforming variables
  - Recode procedure
  - Compute procedure
  - Select cases procedure
  - Split file procedure
- Reliability analysis using coefficient alpha (also known as Cronbach's alpha)

Day Three: Inferential Statistics

- T-test, one sample t-test, independent and dependent sample t-test
- Analysis of variance (ANOVA)
- Correlation and Pearson r correlation coefficient
- Linear regression-simple and multiple linear regression
- The chi-square goodness of fit and test of independence procedures
- Autocorrelation and time series analysis

Day Four: Advanced Statistics with SPSS Modeller

- SPSS Modeler and its main elements
- Clustering analysis, using k-means
- Association rules and apriori algorithm
- Logistics regression
- Forecasting using the Autoregressive Integrated Moving Average (ARIMA) model
- Building a decision tree model
- Sensitivity analysis of texts in SPSS

Day Five: The Integration of SPSS with Python and R

- Big Data Analytics programs
- Brief introduction to R

- ► SPSS Modeler-R integration
- ► Introduction to Python
- ► SPSS Modeler Python Integration
- ► Putting it all together

► The Certificate

Anderson Certificate of Completion will be provided to delegates who attend and complete the course

► INFO & IN-HOUSE SOLUTION

For more information about this course, call or email us at:

Call us: +971 4 365 8363

Email: info@anderson.ae

Request for a Tailor-made training and educational experience for your organization now:

Email: inhouse@anderson.ae