

## > Survival Analysis using SPSS

Duration: 2 days

### ■ Introduction

Survival data is generated by observing a population (or group) over time and recording the time to some particular event occurring. Usually the survival data also has associated covariates or risk factors. The course focuses on the analysis of survival data from initial estimation to modelling the survival response on associated risk factors.

You will have gained a sound understanding of the theory of Survival Analysis and with particular emphasis placed on understanding the output generated from SPSS analysis. You will understand special features of survival data, such as censoring and the Kaplan-Meier estimate. You will also be able to build regression models for survival data.

### ■ Course Content

Areas covered will include:

- introduction to survival data
- Hazard functions
- Censoring
- Non-parametric methods
  - Life Tables
  - Kaplan-Meier estimates
- Comparison of two groups of survival data
- Parametric models for survival data
- Regression methods for survival data

### ■ Target Audience

Survival analysis, also known as reliability analysis, is used in estimating “time to event”; the event most usually being death or occurrence of some adverse medical condition in the medicalsciences, or till a part fails in the engineering sciences.

The target audience is anyone interested in the analysis of “time to event” data, from both a theoretical and practical perspective.

### ■ Prerequisites

PC literacy. Familiarity with SPSS including: variable definition, entering and editing data, opening and saving data files, generating basic exploratory statistics (including frequency tables and cross-tabulations) and the compute and recode procedures.

Other essential prerequisites include an understanding of measures of central tendency and dispersion, hypothesis testing, using charts and editing and saving output.