PREDICTIVE MODELLING WITH PASW MODELER

■ Duration: 3 days ■ Advanced

Target Audience

This course follows either the Introduction to Modeler and Data Mining course and is essential for anyone who wishes to become familiar with the full range of modelling techniques available in PASW Modeler to create predictive models. For people wishing to successfully build such models using PASW Modeler, this course is an essential part of the learning process.

Prerequisites

General computer literacy. Experience using PASW Modeler, including familiarity with the PASW Modeler environment, creating streams, reading in data files, assessing data quality and handling missing data (including the type and data audit nodes), basic data manipulation (including the derive and select nodes), and creation of models. Prior completion of the Introduction to Modeler and Data Mining course is required. An introductory course in statistics, or equivalent experience, would be helpful for the statistics-based modelling techniques.

Overview

This course demonstrates how to develop models to predict categorical and continuous outcomes, using such techniques as neural networks, decision trees, logistic regression, support vector machines, and Bayesian network models. Use of the binary classifier and numeric predictor nodes to automate model selection is included. Feature selection and detection of outliers are also discussed. Expert options for each modelling node are reviewed in detail and advice is provided on when and how to use each model. You will also learn how to combine two or more models to improve prediction.

Course Content

- Preparing data for modelling
- Data reduction: principal components
- Decision trees/rule induction
- Neural networks
- Support vector machines
- Linear regression
- Cox regression for survival data
- Time series analysis
- Logistic regression
- Discriminant analysis
- Bayesian networks
- Finding the best model for binary outcomes
- Finding the best model for numeric outcomes
- Getting the most from models
- Appendix a: Decision list

Products used: PASW Modeler Professional (including PASW Modeler Base and PASW Classification)

SPSS (UK) Ltd ■ St. Andrew's House ■ West Street ■ Woking ■ Surrey ■ GU21 6EB ■ 01483 719203 ■ Email: spsstrai@uk.ibm.com
■ Website: www.spsstraining.com