

Predictive Modeling with IBM SPSS Modeler - ILT

0A032G



Delivery Type: Classroom

Duration: 3 days

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 discussed. Expert options for each modeling 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.

Pre-Requisites

You should have:

- ✓ General computer literacy
- ✓ Experience using IBM SPSS Modeler (formerly Clementine) , including familiarity with the IBM SPSS 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 Introduction to IBM SPSS Modeler and Data Mining is required and completion of Advanced Data Preparation with IBM SPSS Modeler is strongly encouraged.
- ✓ An introductory course in statistics, or equivalent experience, would be helpful for the statistics-based modeling techniques.

Content

- ✓ Preparing data for modeling
- ✓ Searching for data anomalies
- ✓ Selecting predictors
- ✓ Data reduction with principal components
- ✓ Neural networks
- ✓ Support vector machines
- ✓ Cox regression
- ✓ Time series analysis
- ✓ Decision trees
- ✓ Linear regression
- ✓ Logistic regression
- ✓ Discriminant analysis
- ✓ Bayesian networks
- ✓ Numeric Predictor node
- ✓ Binary Classifier Node

- ✓ Combining models to improve performance
- ✓ Getting the most from models
- ✓ Appendix A: Decision List

Target Audience

This course follows either 'Introduction to IBM SPSS Modeler and Data Mining' or 'Advanced Data Preparation with IBM SPSS Modeler' and is essential for anyone who wishes to become familiar with the full range of modeling techniques available in IBM SPSS Modeler to create predictive models.