



Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Introduction to Machine Learning Models Using IBM SPSS Modeler (V18.2)

CODE:	LENGTH:	PRICE:
0E079G	16 Hours	£755.00

Description

Contains PDF course guide, as well as a lab environment where students can work through demonstrations and exercises at their own pace.

This course provides an introduction to supervised models, unsupervised models, and association models. This is an application-oriented course and examples include predicting whether customers cancel their subscription, predicting property values, segment customers based on usage, and market basket analysis.

If you are enrolling in a Self Paced Virtual Classroom or Web Based Training course, before you enroll, please review the Self-Paced Virtual Classes and Web-Based Training Classes on our Terms and Conditions page, as well as the system requirements, to ensure that your system meets the minimum requirements for this course. <http://www.ibm.com/training/terms>

Objectives

Introduction to machine learning models
Taxonomy of machine learning models
Identify measurement levels
Taxonomy of supervised models
Build and apply models in IBM SPSS Modeler
Supervised models: Decision trees - CHAID
CHAID basics for categorical targets
Include categorical and continuous predictors
CHAID basics for continuous targets
Treatment of missing values
Supervised models: Decision trees - C&R Tree
C&R Tree basics for categorical targets
Include categorical and continuous predictors
C&R Tree basics for continuous targets
Treatment of missing values
Evaluation measures for supervised models
Evaluation measures for categorical targets
Evaluation measures for continuous targets
Supervised models: Statistical models for continuous targets - Linear regression
Linear regression basics
Include categorical predictors
Treatment of missing values
Supervised models: Statistical models for categorical targets - Logistic regression
Logistic regression basics
Include categorical predictors
Treatment of missing values
Association models: Sequence detection
Sequence detection basics
Treatment of missing values
Supervised models: Black box models - Neural networks
Neural network basics
Include categorical and continuous predictors
Treatment of missing values
Supervised models: Black box models - Ensemble models
Ensemble models basics
Improve accuracy and generalizability by boosting and bagging
Ensemble the best models
Unsupervised models: K-Means and Kohonen
K-Means basics
Include categorical inputs in K-Means
Treatment of missing values in K-Means
Kohonen networks basics
Treatment of missing values in Kohonen
Unsupervised models: TwoStep and Anomaly detection
TwoStep basics
TwoStep assumptions
Find the best segmentation model automatically
Anomaly detection basics
Treatment of missing values
Association models: Apriori
Apriori basics
Evaluation measures
Treatment of missing values
Preparing data for modeling
Examine the quality of the data
Select important predictors
Balance the data

Audience

- Data scientists
- Business analysts
- Clients who want to learn about machine learning models

Prerequisites

- Knowledge of your business requirements

Programme

Introduction to machine learning modelsTaxonomy of machine learning modelsIdentify measurement levels
Taxonomy of supervised modelsBuild and apply models in IBM SPSS ModelerSupervised models: Decision trees - CHAID
CHAID basics for categorical targetsInclude categorical and continuous predictorsCHAID basics for continuous targets
Treatment of missing valuesSupervised models: Decision trees - C&R TreeC&R Tree basics for categorical targets
Include categorical and continuous predictorsC&R Tree basics for continuous targetsTreatment of missing values
Evaluation measures for supervised modelsEvaluation measures for categorical targetsEvaluation measures for continuous targets
Supervised models: Statistical models for continuous targets - Linear regressionLinear regression basics
Include categorical predictorsTreatment of missing values
Supervised models: Statistical models for categorical targets - Logistic regressionLogistic regression basics
Include categorical predictorsTreatment of missing valuesAssociation models: Sequence detectionSequence detection basics
Treatment of missing valuesSupervised models: Black box models - Neural networksNeural network basics
Include categorical and continuous predictorsTreatment of missing values
Supervised models: Black box models - Ensemble modelsEnsemble models basics
Improve accuracy and generalizability by boosting and baggingEnsemble the best models
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Treatment of missing values in K-MeansKohonen networks basicsTreatment of missing values in Kohonen
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Find the best segmentation model automaticallyAnomaly detection basicsTreatment of missing valuesAssociation models: Apriori
Apriori basicsEvaluation measuresTreatment of missing valuesPreparing data for modelingExamine the quality of the data
Select important predictorsBalance the data

Session Dates

On request. Please [Contact Us](#)

Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)