

# Introduction to Machine Learning Models Using IBM SPSS Modeler (V18.2) (0A079G)

ID 0A079G Prix CHF 1 890,- (Hors Taxe) Durée 2 jours

## A qui s'adresse cette formation

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

## Pré-requis

- Knowledge of your business requirements

## Contenu

### 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

### 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

## Association models: Sequence detection

- • Sequence detection basics
- • Treatment of missing values

## Preparing data for modeling

- • Examine the quality of the data
- • Select important predictors
- • Balance the data

## Centres de formation dans le monde entier



## Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3  
CH-8304 Wallisellen  
Tel. +41 44 832 50 80

info@flane.ch, <https://www.flane.ch>