

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

Cursusduur: 2 Dagen    Cursuscode: 0A079G    Trainingsmethode: Virtual Learning

### Beschrijving:

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.

Virtueel en Klassikaal™

Virtueel en Klassikaal™ is een eenvoudig leerconcept en biedt een flexibele oplossing voor het volgen van een klassikale training. Met Virtueel en Klassikaal™ kunt u zelf beslissen of u een klassikale training virtueel (vanuit huis of kantoor) of fysiek op locatie wilt volgen. De keuze is aan u! Cursisten die virtueel deelnemen aan de training ontvangen voor aanvang van de training alle benodigde informatie om de training te kunnen volgen.

### Doelgroep:

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

### Doelstelling:

- At the end of the course, participants will be able to :
  - Prepare data for modeling
- Use machine learning models

### Vereiste kennis en vaardigheden:

- Knowledge of your business requirements
- Basic understanding of Data Science

## Cursusinhoud:

### 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

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## Extra informatie:

Official course book provided to participants

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## Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

[info@globalknowledge.nl](mailto:info@globalknowledge.nl)

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Iepenhoeve 5, 3438 MR Nieuwegein