



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

# Duration: 2 Days Course Code: 0A079G

#### Overview:

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.

## Target Audience:

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

### **Objectives:**

Please refer to course overview

#### Prerequisites:

Knowledge of your business requirements

# Content:

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

# Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987 <u>training@globalknowledge.ae</u> <u>www.globalknowledge.com/en-ae/</u> Global Knowledge, Dubai Knowledge Village, Block 2A,First Floor, Office F68, Dubai, UAE