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

Duration: 1 Day **Course Code: 0A039G**

Overview:

This course presents advanced models available in IBM SPSS Modeler. The participant is first introduced to a technique named PCA/Factor, to reduce the number of fields to a number of core factors, referred to as components or factors. The next topics focus on supervised models, including Support Vector Machines, Random Trees, and XGBoost. Methods are reviewed on how to analyze text data, combine individual models into a single model, and how to enhance the power of IBM SPSS Modeler by adding external models, developed in Python or R, to the Modeling palette.

Target Audience:

Data scientists Business analysts Experienced users of IBM SPSS Modeler who want to learn about advanced techniques in the software

Objectives:

- Please refer to course overview.
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Prerequisites:

- Knowledge of your business requirements
 - Required: IBM SPSS Modeler Foundations (V18.2) course (0A069G/0E069G) or equivalent knowledge of how to import, explore, and prepare data with IBM SPSS Modeler v18.2, and know the basics of modeling.
 - Recommended: Introduction to Machine Learning Models Using IBM SPSS Modeler (V18.2) course (0A079G/0E079G), or equivalent knowledge or experience with the product about supervised machine learning models (CHAID, C&R Tree, Regression, Random Trees, Neural Net, XGBoost), unsupervised machine learning models (TwoStep Cluster), and association machine learning models such as APriori.
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Content:

Taxonomy of models	Key issues in Nearest Neighbor Analysis	Identify ensemble methods for categorical targets
Overview of supervised models	Assess model fit	Identify ensemble methods for flag targets
Overview of models to create natural groupings	Explore advanced supervised models	Identify ensemble methods for continuous targets
Group fields: Factor Analysis and Principal Component Analysis	Support Vector Machines basics	Meta-level modeling
Factor Analysis basics	Random Trees basics	Use external machine learning models
Principal Components basics	XGBoost basics	IBM SPSS Modeler Extension nodes
Assumptions of Factor Analysis	Introduction to Generalized Linear Models	Use external machine learning programs in IBM SPSS Modeler
Key issues in Factor Analysis	Generalized Linear Models	Analyze text data
Improve the interpretability	Available distributions	Text Mining and Data Science
Factor and component scores	Available link functions	Text Mining applications
Predict targets with Nearest Neighbor Analysis	Combine supervised models	Modeling with text data
Nearest Neighbor Analysis basics	Combine models with the Ensemble node	

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

training@globalknowledge.com.eg

www.globalknowledge.com/en-eg/

Global Knowledge, 16 Moustafa Refaat St. Block 1137, Sheraton Buildings, Heliopolis, Cairo