This course covers the skills required to assemble analysis flow diagrams using the rich tool set within SAS® Enterprise Miner™ for both pattern discovery (segmentation, association and sequence analyses) and predictive modeling (decision tree, regression and neural network models).

Learn how to:
- define a SAS Enterprise Miner project and explore data graphically
- modify data for better analysis results
- build and understand predictive models such as decision trees and regression models
- compare and explain complex models
- generate and use score code
- apply association and sequence discovery to transaction data
- use other modeling tools such as rule induction, gradient boosting, and support vector machines.

Who should attend:
Data analysts, qualitative experts and others who want an introduction to SAS Enterprise Miner.

Prerequisites:
Before attending this course, you should be acquainted with Microsoft Windows and Windows-based software. In addition, you should have at least an introductory-level familiarity with basic statistics and regression modeling. Previous SAS software experience is helpful but not required.
### Model Assessment
- model fit statistics
- statistical graphics
- adjusting for separate sampling
- profit matrices.

### Model Implementation
- internally scored data set
- score code modules.

### Introduction to Pattern Discovery
- cluster analysis
- market basket analysis (self-study).

### Special Topics
- ensemble models
- variable selection
- categorical input consolidation
- surrogate models.

### Case Studies
- segmenting bank customer transaction histories
- association analysis of Web services data
- creating a simple credit risk model from consumer loan data
- predicting university enrollment management.

## Training Path for Data Miners

### For SAS Programmers

1. **SAS® Programming 1: Essentials**
2. **Statistics 1: Introduction to ANOVA, Regression, and Logistic Regression**
3. **Predictive Modeling Using Logistic Regression**

### For SAS Enterprise Miner Users

1. **Data Mining Techniques: Theory and Practice**
2. **Applied Analytics Using SAS® Enterprise Miner™**
3. **Advanced Predictive Modeling Using SAS® Enterprise Miner™**

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**Software addressed:**
This course addresses the following software:
- SAS Enterprise Miner 6.1.