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Learn at a time and place, and pace that is of your choice.

Plan your study to suit your convenience and schedule.

# PREDICTIVE MODELING COURSE



EDUCBA

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# Predictive Modeling Course

In this Course you get to learn: It is an amazing collection of practical and hands-on learning of the most updated training programs and projects in the area of predictive modeling using tools such as SAS, Minitab, SPSS.

You will also get verifiable certificates (unique certification number and your unique URL) when you complete each of the 4 courses. This course will help you learn to interpret data for statistical analysis.

# Predictive Modeling Course Skills

We learn the following skills:

- Skill to analyze data and see a complex pattern: data understanding and pattern extraction is a key skill for predictive modeling
- Hands-on coding skill: The predictive modeling course teaches three tools-Minitab, SAS, and SPSS.
- Strong understanding of concepts: Machine learning concepts such as regression, classification, support vector machines, neural network, ROC curve

# Course Features



Course Duration-40+ Hours



Number of Courses



Verifiable Certificates



Lifetime Access



Technical Excellence

# About Predictive Modeling

- Predictive modeling can be understood as the process of creation, test, and validation of a model. It uses concepts from statistics in predicting the outcomes.
- This predictive modeling course targets to provide predictive modeling skills as mentioned above to business sectors/domains.

# Predictive Modeling Course

This is a Bundle Course that includes complete in-depth Predictive Modeling Courses combined into one Complete Course.

This Bundle perfectly meets the requisite of the industry and gives you a better chance of being hired as a Predictive Modeling professional.



#### **Section 1. Introduction**

- What is Predictive Modelling
- Predictive Modelling
- How to Build A Predicitive Model

# Section 2. Variables

- Types of Variables
- Difference Between
   Variables
- Other Types 
   Extraneous
   Variables

### **Section 3. Steps Included**

- How to Build A Predicitive Model Steps
- Algorithims
- Forecasting Methods
- What is Time Series

## Section 4. Smoothing Methods

- Smoothing Methods 
   Moving
   Averages

   Averages
- Smoothing Methods 🗌 Double Exponential Smoothing

# Section 5. Regression Algorithms

Regression Algorithms [] Exponential

Section 6. Clustering Algorithms

Clustering Algorithms 🗌

Definition

Clustering Algorithms 🗌 Fuzzy C Means Clustering

Section 7. Neural Network Algorithm

**Neural Network Algorithm** 

Section 8. Support Vector Machines

**Support Vector Machines** 



# Predictive Modeling with SAS Enterprise Miner

### Section 1. PM SAS EM INTRO

- Practice Files
- Introduction of SAS Enterprise Miner
- Select a SAS Table
- Creating Input Data Node
- Metadata Advisor Options
- Add More Data Sources
- Sample Statistics
- Trial report
- Properties of Cluster Node
- Variable Selection

# **Section 2. PM SAS EM VARIABLE SELECTION**

- Input Variable
- Values of R-Square
- More on Variable Selection
- Binary Target Variable
- Variable and Effect Summary
- Variable Selection Variable ID's
- Variable Frequency Table
- Variable S Updating Model Comparison
- Run Data Partition Node
- Variable Selection Fit Statistics

# Section 3. Machine Learning

- Combination of Different Models
- Properties of Neural Network
- Analyzing the Output Variable
- Combination of Regression Model
- Combination Iteration Plot
- Subseries Plot
- Creating Densemble Diagram
- SAS Code
- Decision Tree Model
- Run and Upadate Decision Tree Model



#### Section 1. PM SAS EM INTRO

- Practice Files
- Introduction of SAS Enterprise Miner
- Select a SAS Table
- Creating Input Data Node
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- Add More Data Sources
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#### **Section 2. PM SAS EM VARIABLE SELECTION**

- Input Variable
- Values of R-Square
- More on Variable Selection
- Binary Target Variable
- Variable and Effect Summary
- Variable Selection Variable ID's
- Variable Frequency Table
- Variable S Updating Model Comparison
- Run Data Partition Node
- Variable Selection Fit Statistics

#### **Section 3. SAS PM EM COMBINATION**

- Combination of Different Models
- Properties of Neural Network
- Analyzing the Output Variable
- Combination Result of Regression Node
- Combination Iteration Plot
- Subseries Plot
- Creating Densemble Diagram
- SAS Code
- Decision Tree Model
- Run and Upadate Decision Tree Model
- Creating Dscore Node
- Leaf Statistics and Tree Map
- Interactively Decision Trees



## Section 4. SAS PM EM NEURAL NETWORK

- Neural Network Model
- Neural Network Model Output
- Model Weight History
- Neural Network Final Weight
- ROC Chart
- Neural Network Iteration Plot
- Neural Network SAS Code
- Neural Network Cumulative Lift
- Decision Processing
- Results of Auto Neural Node
- Run Model Comparison
- DEX Variable ID's
- Average Square Error and more

#### **Section 5. SAS PM EM REGRESSION**

- Regression with Binary Target
- Regression Table Effect Plots
- Result of Regression Model
- Update Regression Node
- Creating Flow Diagram



# Section 1. Minitab and its applications to Predictive Modelling

- Reference
- Introduction of Predictive Modeling
- Non Linear Regression
- Anova and Control Charts
- Understanding, Interpretation and implementation using Minitab
- Observation
- Results for NAV Prices
- NAV Prices Observations
- Descriptive Statistics
- Customer Complaints-Observations
- Resting Heart Rate Observations & others

# Section 2. ANOVA Using Minitab

- Understanding and Implementation of ANOVA
- Pairwise Comparisons
- Features of Chi Test
- Preference and Pulse Rate
- Diffe. btw Growth Plan ad Dividend Plan in MF
- Checking NAV Price and Repurchase Price

# **Section 3. Correlation Techniques**

- Basic Correlation Techniques
- CT Implementation Using Minitab
- Interpretation of Correlation Values
- Results for Return
- Correlation Values Observations
- Correlation Values Interpretations
- Heart Beat Objective
- Graphical Implementation
- Add Regression Fit
- Scatterplot with Regression
- Scatterplot of Rhdeq vs Rhcap

# 3 Predictive Modeling using <u>Mini</u>tab

# Section 4. Regression Modeling

- Introduction to Regression Modeling
- Identify Independent Variable
- Regression Equation
- Tabulating the Values
- Interpretation and Implementation on Data Sets
- Continue on Interpretation on Database
- Significant Variable
- Calculating Corresponding Values
- Identify Dependent Variable
- Generate Descriptive Statistics & others

# Section 5. Predictive Modeling using MS Excel

- Using Data Analysis Toolpak
- Implementation of Descriptive Statistics
- Descriptive statistics Input Range
- Implementation of ANOVA
- Implementation of T Test
- Implementation Using Correlation
- Implementation Using Regression



### **Section 1. Importing Dataset**

- Importing Datasets in Text and CSV
- Importing Datasets xlsx, xls
   Formats
- Understanding User Operating Concepts
- Software Menus
- Understanding Mean Standard Deviation
- Other Concepts of Understanding Mean SD
- Implementation Using SPSS
- PPT and PDF Files

## **Section 2. Correlation Techniques**

- Basic Correlation Theory
- Interpretation
- Implementation
- Data Editor
- Simple Scatter Plot
- Heart Pulse
- Statistics Viewer
- Heart Pulse (Before and After RUN)
- Interpretation and Implementation on Datasets Example 1, 2, 3 and 4

# Section 3. Linear Regression Modeling

- Introduction to Linear Regression Modeling Using SPSS
- Linear Regression
- Stock Return & T-Value
- Observation
- Scatter Plot Rril v/s Rbse
- Create Attributes for Variables
- Regression Equation
- Interpretation
- Copper Expansion Example
- Energy Consumption Example
- Debt Assessment and others



# Section 4.Multiple Regression Modeling

- Introduction to Basic Multiple Regression
- Important Output Variables
- Multiple Regression

## **Section 5. Logistic Regression**

- Understanding Logistic
   Regression Concepts
- Working on IBM SPSS Statistics Data Editor
- IBM SPSS Viewer
- Variable in the Equation
- Implementation Using MS Excel
- Smoke Preferences
- Heart Pulse Study
- Variables in the Equation
- Smoking Gender Equation
- Generating Output and Observations and others

# Section 6. Multinomial Regression

- Introduction to Multinomial-Polynomial Regression
- Example 1 Health Study of Marathoners
- Note
- Case Processing Summary
- Model Fitting Information
- Asymptotic Correlation Matrix
- Understanding Dataset
- Generating Output
- Parameters Estimates
- Asymptotic Correlations Metrics
- Interpretation of Output
- Interpretation of Output Continues

# **3** Machine Learning with R

#### **Section 17. Neural Networks**

- Black Box Method in Neural Network
- Characteristics of a Neural Networks
- Network Topology of a Neural Networks
- Weight Adjustment and Case
   Update

# Section 18. Neural Networks A Model Building in R

- Introduction Model Building in R
- Installing the Package of Model Building in R
- Nodes in Model Building in R
- Example of Model Building in R

# Section 19. Time Series Analysis

- Time Series Analysis
- Pattern in Time Series Data
- Time Series Modelling
- Moving Average Model
- Auto Correlation Function
- Inference of ACF and PFCF
- Diagnostic Checking
- Forecasting Using Stock Price
- Stock Price Index
- Run Prophet Stock
- Time Series Data Denationalization
- Average of Quarter Denationalization
- Regression of Denationalization

# **Frequently Asked Questions**

Will this predictive modeling course teach me real-life scenarios of predictive modeling?

Yes. The predictive modeling course teaches all concepts with several live data from industry and explains many case studies in lecture. Thus, it is very practical and actual real-life scenarios. For example, it takes stock data and then explains how time series modeling can be done on it. Is the field of predictive modeling in demand these days?

Predictive modeling is a lot in demand. Almost all IT companies are starting with Machine learning and hence they need trained people. Few years down the line, when all these companies will be established with ML, then they will already have enough ML people and hence the right time to learn this skill is NOW.

# **Customer Reviews**

# 66

Great video learning! It is taught nice and clear. At first a bit slow, but as the course progressed, was the tempo at just the right pace with a good articulation. Content was good, with some nice examples worked out and examples from real life, but could be made more elaborate. Looking forward to more courses of the same teacher.

### Nyckees Daan

35

In this course named "Predictive modeling and implementation using MS excel",i learned about the statistical calculation using excel. the course is very comprehensive and easy to memorize because of the expertise of the lecturer. with this course i can avoid many error when doing statistical calculation like Anova. it also helps me to save time. THANKS EDUCBA

#### **SEYNI SOULEY BOUBACAR**

# 66

The course helped me to get insights on the various hypothesis that are done to do the predictive analysis which helps us to make observations and also make predictions and analyze the behavior of the trend, also working on minitab was a great experience wherein getting the descriptive analysis is much more easier than excel.

#### **Atish Palav**

# Predictive Modeling Course

For Queries please contact: Email : info@educba.com



