

## Creating Standard and Automated Graphs in SAS® Software

**Course Length:** 2 days **CEUs** 1.2

**Format:** Hands on Training

### AUDIENCE

This course teaches the graphing techniques available in SAS/Graph Software. SAS® is not only designed for analysis via tables and reports. We learn about its capabilities for plotting, charting, creating custom and three-dimensional graphs. Students will learn how to take information analyzed in SAS, graph it and export the graphs to other software such as a word processor. Students learn that in one program execution, SAS can produce thousands of graphs.

### BENEFITS

Students will be able to:

- Create Plots and Charts
- Use the annotate facility for graph enhancement
- Use symbols for interpolation techniques
- Create graphs and reports on the same display
- Create web published output
- Print graphs
- Create Choropleth, block, cylinder, surface, 2D and 3D charts and maps
- Create color graphs including bars and pies

### PREREQUISITES

Programming I: SAS Essentials course or equivalent understanding.

### COURSE TOPICS

#### Overview

- Types of graphs available in SAS/Graph Software
- Choosing a graph

#### Graphic Basics

- Procs and Catalogs
- Graphics Options

#### Text Graphics

- Slide Production
- Fonts
- Hpos and Vpos
- Data Step Graphics Interface

#### Producing Line Plots and Scatter Plots

- Creating Plots with Multiple Lines
- Using Multiple Axes
- Creating Legends

## Creating Standard and Automated Graphs in SAS® Software

### **Producing Charts**

- Creating Bar Charts
- Creating Block Charts
- Creating Pie Charts
- Creating Star Charts

### **Customizing the Appearance of Output**

- Fonts
- Titles and Footnotes
- Plot Symbols
- Colors and Patterns

### **Maps**

- Geographic Maps
- Prism
- Block
- Surface

### **Three-Dimensional Plots and Contour Plots**

### **Storing and Creating Templates**

- Graphics Replay
- Graphics Catalog Management

### **Annotating Graphs**

- Using Annotate Datasets
- Using Annotate Macro Routines
- Graphics Map and the Graphics Editor