This course is designed for SAS users with statistical experience who wish to perform statistical analyses using various SAS procedures. The course covers a range of statistical topics including statistical inference, analysis of variance, multiple regression, categorical data analysis, and logistic regression.

Learn how to:
- describe activity-based costing (ABC) methodology
- use SAS Activity-Based Management 6 software for reporting cost data
- construct an ABC model
- import and export model data
- perform dimensional analysis using online analytical processing techniques
- make decisions about the structure of your models.

Who should attend:
Statisticians, researchers and business analysts who use SAS programming to generate analyses using either continuous or categorical response (dependent) variables.

Prerequisites:
You should be able to execute SAS programs and create SAS data sets. This knowledge can be gained by attending a SAS Programming 1: Essentials course.
You should also have an understanding of statistics including: p-values, hypothesis testing, analysis of variance and regression analysis, probably gained from an undergraduate course in statistics.

Course contents:

Introduction to Statistics
- examining data distributions
- obtaining and interpreting sample statistics using the UNIVARIATE and MEANS procedures
- constructing confidence intervals
- performing simple hypothesis tests.

Analysis of Variance
- performing one-way analysis of variance with the GLM procedure
- performing multiple comparisons
- performing two-way ANOVA with and without interactions.

Regression
- producing scatter plots with the GPLOT procedure
- producing correlations with the CORR procedure
- fitting a simple linear regression model with the REG procedure
- understanding the concepts of multiple regression
- building and interpreting models.

Regression Diagnostics
- examining residuals
- investigating influence and collinearity.

Categorical Data Analysis
- describing categorical data
- producing frequency tables with the FREQ procedure
- examining tests for general and linear association
- understanding the concepts of logistic regression
- fitting a logistic regression model using the LOGISTIC procedure.
Software addressed:
This course covers SAS/STAT® and touches on SAS/GRAPH®.
Delegates can benefit from this course even if SAS/GRAPH is not installed at their site.

Training Path for Statistical Analysts

For SAS® Programmers


Statistics 2: ANOVA and Regression → Categorical Data Analysis Using Logistic Regression

For SAS® Enterprise Guide® Users


CP Preparation for SAS® Certification Exam