

# SAS II: Data Manipulation With the SAS System Course Summary

# Description

The course is mostly lecture with some time for exercises, demonstrations and working on problems students bring to class.

# **Topics**

- Introduction to Data Management
- Creating SAS Datasets by Reading and Processing NON SAS Data
- Using SAS Functions
- Iterative Processing
- Using SAS Arrays
- Reading, Combining and Using SAS Data Sets

#### **Audience**

SAS Users who have taken an introductory level course and want to further theirs SAS skills.

# **Prerequisites**

Students should take ProTech's Introduction to SAS before attending this class.

#### Duration

Three Days



# SAS II: Data Manipulation With the SAS System

# **Course Outline**

# I. Introduction to Data Management:

- A. Course Overview
- B. Review of Program Flow
- C. Review of Basic Concepts

# II. Creating SAS Datasets by Reading and Processing NON SAS Data

- A. How to create one observation from more than one record
- B. How to read files with different record layouts
- C. How to generate more than one observation from only one record
- D. How to read hierarchical data

### **III. Using SAS Functions**

- A. How to manipulate numeric values
- B. How to manipulate character values
- C. How to use functions for data conversion
- D. How to use other useful functions

## IV. Iterative Processing

- A. How to read data with DO loops
- B. Generating data with DO loops
- C. Typical SAS applications using DO loops

## V. Using SAS Arrays

- A. How to use SAS arrays
- B. Using SAS arrays to transpose SAS data sets

# VI. Reading, Combining, and Using SAS Data Sets

- A. How to use special tools to read a SAS data set
- B. How to perform complex joins with the SAS System.
- C. How to use special tools while joining SAS data sets
- D. How to perform random sampling with the SAS System (with and without replacement)
- E. How to use SAS data sets in table lookup applications