

Duration 2 days

Overview

Presented by **Ron Cody**, author of *Cody's Data Cleaning Techniques Using SAS Software* and *SAS Functions by Example*. This course covers many useful functions that can solve everyday problems quickly and efficiently and that are not discussed in other programming courses. It is ideal for anyone who programs in Base SAS, especially DATA step programming.

Learn how to

- use functions to process and compare character variables and strings
- use array functions
- use variable information functions.

Who should attend: SAS programmers

Pre-requisites

Before attending this course, participants should have completed the **SAS Programming 1: Essentials** course. Completion of the **SAS Programming 2: Data Manipulation Techniques** course is also recommended or, alternatively, a minimum of one year of SAS programming experience. Some familiarity with arrays, DO loops, the FIRSTOBS and LASTOBS options would be useful but is not essential.

Course Contents

Character Functions Part 1

- storage length of character variables
- functions that change case
- functions that extract and search for strings
- functions that join strings
- functions that remove blanks from strings or take strings apart
- functions that count substrings or characters

Character Functions Part 2

- the ANY and NOT functions
- functions that replace words or characters
- functions that compare strings

Date and Time Functions

- SAS date functions
- SAS time functions
- SAS datetime functions
- SAS interval functions

Array functions

- the DIM function
- array boundaries and the related functions
- temporary arrays

Descriptive Statistics Functions

- functions that count missing and nonmissing values for SAS variables
- functions that compute descriptive statistics
- functions that determine the ordering of data values

Special Truncation and Mathematical Functions

- special functions
- functions to obtain values from previous functions
- truncation functions
- commonly used mathematical functions

Random Number Functions

- uniform random numbers
- randomly generated data sets
- selecting random subsets of a SAS data set
- random assignments of subjects
- random number call routine

Variable Information Functions

- selected V functions

Perl Regular Expression Functions

- writing regular expressions
- the PRX functions