



SAS Programming Course Outline

Audience:

SAS® users who wish to extend their knowledge of SAS software. The course builds on the tools and techniques taught in the SAS Fundamentals course.

Prerequisites:

This course is a significant step up from the SAS Fundamentals training course; we would recommend at least 6 months experience of using the SAS System on a regular basis.

Objectives:

After the course, attendees will have a thorough knowledge of the internals of the SAS System, be able to write advanced data steps, combine and transpose SAS files and deal with many kinds of data manipulation problems, as well as being able to write more efficient programs.

Duration:

3 Days.

COURSE TOPICS

P1 Refresher

- Course Objectives
- Refresh on SAS and the SAS Environment
- Writing SAS Programs
- The Data Step and Data Manipulation
- Analysis and Reporting

P2 Data Step Internals

- Data Step Processing Logic
- Compilation & Execution

P3 Data Handling

- Functions and Call Routines
- Formatting Techniques

P4 Data Step Processing

- Dataset Options
- Loops
- Arrays
- Select Statements

P5 Reading Data From SAS Files

- Overview
- SET Applications
- Sampling from SAS Data Files

P6 Combining SAS Files

- Overview
- Appending SAS Files
- MERGE Applications
- UPDATE Applications
- Table Lookups

P7 Summarising Data

- Data Summarisation
- Data Transposition
- DATA Step Methods

P8 Reading External Files

- Review of Simple Methods
- Format Modifiers
- Read, Test and Read in the Rest
- Files with Repeating Groups

P9 Managing the SAS Environment

- Data Libraries
- Password Protection
- Audit Trail
- System Options and Utilities
- Batch Processing

P10 Advanced Reading of External Files (Reference)

- Multiple Input Files
- Reading Variable Length Data
- Files with Delimiters
- Reading with Transposition