

Base SAS Certification Program

Duration- 48 Hours

SAS Essentials : Programming-I

Introduction

- An Overview of the SAS System
- Course data files

SAS Programs

- Introduction to SAS Programs
- Running SAS Programs
- Mastering Fundamental Concepts
- Diagnosing and Correcting Syntax Errors
- Exploring Your SAS Environment

Getting familiar with SAS Data Sets

- SAS Data Libraries
- Types of Libraries
- Permanent v/s Temporary Library

Producing List Report

- Getting Started With the PRINT Procedure
- Sequencing and Grouping Observations
- Identifying Observations
- Special WHERE Statement Operators

Enhancing Output

- Customizing Report Appearance
- Formatting Data Values
- Understanding of Output Delivery system (ODS)
- Different types of ODS (HTML/PDF/RTF etc.)

Creating SAS Data Sets

- Reading Raw Data Files: Column Input
- Reading Raw Data Files: Formatted Input
- Examining Data Errors
- Assigning Variable Attributes
- Changing Variable Attributes
- Reading Excel Spreadsheets

DATA Step Programming

- Reading SAS Data Sets and Creating Variables
- Conditional Processing
- Dropping and Keeping Variables
- Reading Excel Spreadsheets Containing Date Fields

Combining SAS Data Sets

- Concatenating SAS Data Sets
- Merging Data sets
- Merging data sets one-to-one
- Merging data sets one-to-many
- Merging data sets with nonmatches
- Concatenation v/sMerging

Creating Summary Reports

- Introduction of Summary Reports.
- Basic Summary Reports
- The Report Procedure
- The Tabulate Procedure

Introduction to SAS Graphics

- Producing Bar and pie Chart
- Enhancing output
- Producing Plots

SAS Programming II

Introduction

- Overview
- Review of SAS basics
- Review of DATA Step Processing
- Review of Displaying SAS Data Sets
- Working with Existing SAS Data Sets

Controlling Input and Output

- Outputting Multiple Observations
- Writing to Multiple SAS Data Sets
- Selecting Variables and Observations
- Writing to an External File

Summarizing Data

- Creating an Accumulating Total variable
- Accumulating Totals for a Group of Data

Reading & Writing Different Types of Data

- Reading Delimited Raw Data Files
- Controlling When a Record Loads
- Reading Hierarchical Raw data Files

Data Transformations

- Introduction
- Manipulating Character values
- Manipulating Numeric values
- Manipulating Numeric values based on Dates
- Converting variable Type

Debugging Techniques

- Using the PUT/PUTLOG Statement
- Using the DEBUG Option

Processing Data Iteratively

- Do Loop Processing
- Conditional Do Loop processing
- SAS Array Processing
- Using SAS Arrays

Creating and Maintaining Permanent Formats

- Creating permanent formats

Combining SAS® Data Sets

- Match-merging Two or more SAS Data Sets
- Simple Joins Using the SQL Procedure