

BASE SAS CERTIFICATION:

Introduction to SAS Programming

- ✓ Working with the Windows
- ✓ Enhance Editor
- ✓ Result Window
- ✓ Log Window
- ✓ Explorer Window
- ✓ Output Window
- ✓ Program Editor Window

Basics Of SAS language

- ✓ SAS Libraries
- ✓ Data Sets
- ✓ Creating a SAS Program
- ✓ Components of SAS Program
- ✓ Characteristics of SAS Program
- ✓ Layout of SAS Program

Accessing Data

- ✓ Use FORMATTED, LIST and COLUMN input to read raw data files
- ✓ Use INFILE statement options to control processing when reading raw data files
- ✓ Use various components of an INPUT statement to process raw data files including column and line pointer controls, and trailing @ controls
- ✓ Combine SAS data sets using the DATA step

Creating SAS data sets

- ✓ Create temporary and permanent SAS data sets
- ✓ Create and manipulate SAS data values
- ✓ Control which observations and variables in a SAS data set are processed and output

Data Step Processing

- ✓ Program Data Vector (PDV)
- ✓ Execution Phase and Compilation Phase
- ✓ Get Started with Output Delivery System (ODS)

Statement Options

- ✓ Global Statements
- ✓ Local Statements
- ✓ List Input
- ✓ Modified Input
- ✓ Column Input
- ✓ Named Input

Managing Data

- ✓ Exploring SAS data libraries using base SAS utility procedures
- ✓ Sorting observations in a SAS data set
- ✓ Conditionally execute SAS statements
- ✓ Use assignment statements in the DATA step
- ✓ Modify variable attributes using options and statements in the DATA step
- ✓ Use SAS functions to manipulate character data, numeric data, and SAS data values
- ✓ Use SAS functions to convert character data to numeric and vice versa

Combining SAS Data Sets

- ✓ Concatenation
- ✓ One-One Merging
- ✓ Match Merging
- ✓ One-One Reading
- ✓ Updating or Setting

Conditional Statements

- ✓ IF & IF THEN statement
- ✓ IF ELSE statement
- ✓ Where condition
- ✓ Like , Into Statements
- ✓ Loops (Do, While)

Writing Data to External Files

- ✓ File Statement
- ✓ Put Statement

Introduction to SAS Functions

Generating Reports

- ✓ Generate list reports using the PRINT and REPORT procedures
- ✓ Enhance reports through the use of labels, SAS formats, user-defined formats
- ✓ Generate summary reports and frequency tables using base SAS procedures

Debugging and Handling Errors

- ✓ Identify and resolve programming logic errors
- ✓ Checking for Errors, Warnings, Un-Initialization , missing values
- ✓ Recognize and correct syntax errors
- ✓ Examine and resolve data errors

Procedures

- ✓ Proc Sort
- ✓ Proc Transpose
- ✓ Proc Print, Proc Printto
- ✓ Proc Contents
- ✓ Proc Formats
- ✓ Proc Append, Proc Tabulate
- ✓ Proc Options, Proc Report
- ✓ Proc Import, Proc Export
- ✓ Proc Freq
- ✓ Proc Means

Introduction to SAS Macro Language Elements

- ✓ Introduction to Macro Variables
- ✓ Automatic Macro Variables
- ✓ User define Macro Variables
- ✓ How Macro processing will undergo inside the SAS system
- ✓ Macro Statements
- ✓ Macro Functions
- ✓ Autocall Macros