

SAS

Demo session

1 hour

- About sas
- History of sas
- What are the sectors using sas? Importance
- What is sas and uses?
- Sas introduction
- Sas working environment
- Why sas?
- Clinical
- Finance and banking sectors.

SESSION-1

3 hours

- Introduction about sas windows
- Source of data in different format
- Data step block and procedure step block and statements
- Procedures list
- Lay outs of the sas program
- Characteristics of sas programs
- Rules for sas files name and variables name

INPUT METHODS

- List Input Method
- Column Input Method
- Format Input Method
- Double Trailing Method
- Named Input Method
- Modified Input Method
- Mixed Input Method

ADVANCE INPUT METHODS

- Pointers
- Line controllers
- Column controllers
- Line hold specifies
- Format modifiers

Session2

1 hour

Understanding DATA Step Processing

- Introduction
- Objectives
- Writing Basic DATA Steps How SAS Processes Programs
- Compilation Phase
- Input Buffer
- Program Data Vector
- Syntax Checking
- Data Set Variables
- Descriptor Portion of the SAS Data Set
- Summary of the Compilation Phase
- Execution Phase

Session 3**1hour****Proc step**

- Proc print
- Proc print to;
- How to save different windows permanently?
- Proc sort
- How to eliminate duplicate values and observations from raw data by using sort procedure

Proc import and export

- From Text file, CSV, Excel, Word, Access, Dbase, Lotus and Oracle
- Options

Section4**2hours****FUNCTIONS**

- Arithmetic functions
- String functions and advance string functions
- Date and time functions along with informat and formats
- By using functions select observations randomly
- Types of errors in functions
- Difference between if and where stm?
- Introduction to PROC FORMAT
- Invoking PROC FORMAT
- Permanently Storing Your Formats
- Specifying Value Ranges
- Defining Multiple Formats
- Associating User-Defined Formats with Variables
- Referencing Your Formats

Section5**1hour**

- working on existing datasets by using Set statement
- Update statement
- Modify statement
- Difference between modify and set statement
- Merge statement
- Proc append with options

Section6**1hour**

- Converts variables as data values and values as variables by using Proc transpose
- Validate the listings by using Proc compare
- Proc copy
- Creation of .xpt files

Section7**1hour****Arrays**

- Processing Variables with Arrays
- Creating One-Dimensional Arrays
- Understanding SAS Arrays
- General Form of an Array
- Specifying the Array Name
- Specifying the Dimension
- Specifying Array Elements
- Creating Variables in an ARRAY Statement
- Assigning Initial Values to Arrays
- Understanding Multidimensional Arrays
- Defining a Multidimensional Array

Section8**1hour**

- Proc tabulate with statements and options
- Proc report with statements and options

Section9**2hours****Producing Descriptive Statistics**

- Introduction
- Computing Statistics for Numeric Variables
- Computing Statistics Using PROC MEANS
- Specifying Variables in PROC MEANS
- Creating a Summarized Data Set Using PROC MEANS
- Creating a Summarized Data Set Using PROC SUMMARY
- Producing Frequency Tables
- Producing Frequency Tables Using PROC FREQ
- Specifying Variables in PROC FREQ
- Changing the Table Format
- Creating Tables in List Formats
- Suppressing Table Information
- proc correlation and regression
- Proc ANOVA (analysis of variance).

Section10**1hour****Proc chart and Gchart with options.****Proc plot with options.**

- Introduction about Graphs
- Producing Charts
- Producing graphical chartsProducing charts

ODS**1hour**

- output delivery system
- Generates Html
- Rtf
- PDF files
- Styles
- Assigning of formats in ODS

Section11**2hours****Proc sql**

- INTRODUCTION TO DATABASE
- Understanding sql through SAS
- DDL Commands in SQL
- DML Commands in SQL
- Working with Joins
- Working with Indexes
- Working with Functions
- Constraints
- Creating Views
- Proc Sql Statement ,functions and operators
- Connect, Disconnect statements
- Aliases
- Case Function

Macros

- Introduction to Macros
- Type of Macros
- Macro Variables
- Macro Processing
- Macro Functions
- Automatic macro Variables
- SYMPUT
- SYMGET
- Permanent storage of macros
- Conditions in macros

Domain knowledge

- Introduction to drug discovery and development
- drug development
- Phase 1,2,3,4 trials
- CDISC introduction
- What is the domain datasets used in clinical studies?
- List the variables in clinical datasets