

WEEK 01 Base SAS - Accessing & Combining Data in SAS

Summary: This topic covers the introduction to SAS and various Data Access and Validation techniques.

- Reporting and Formatting Data
- Subsetting Observations and Variables
- Accessing and Manipulating Data
- Combining and Validating Data in SAS
- Creating Summary Reports

9 hours

WEEK 02 Base SAS - Data Manipulation

Summary: This topic covers Data Processing and Data Manipulation techniques. You will learn about the various functions in SAS and techniques to manipulate data.

- Writing Observations to Multiple Datasets
- Working with Formatted Raw Files
- Functions in SAS
- Loops and Arrays
- Merging in Special Scenarios

12 hours

WEEK 03 Advanced SAS - Writing Macros

Summary: This topic covers how Macro variables and Macro Programs are implemented in SAS.

- Purpose of Macro Facility
- Automatic and User Defined Variables
- Macro Variable Reference
- Defining and Calling Macro
- Conditional and Iterative Processing

6 hours

WEEK 04 Advanced SAS – Data Manipulation in SQL Proc

Summary: This topic covers Data Processing and Data Manipulation techniques using SQL Syntax.

- Basic Queries in SQL Proc
- Displaying Query Results
- SQL Joins and Subquery
- Set Operators
- Creating Tables and Views

3 hours

WEEK 05 Advanced SAS -Programming Efficiency & Optimization

Summary: This topic covers Programming Efficiency & optimization techniques used in SAS programming.

- Measuring Efficiency
- Controlling I/O Processing and Memory
- Accessing Observations
- Creating and Using an Index
- Compressing SAS Dataset

6 hours

WEEK 06 Advanced SAS – Using Arrays, Hash &Hiter Objects

Summary: This topic covers using Data Structures in SAS programming.

- Using Data Step Arrays
- Using Data Step Hash and Hiter
- Combining Data Horizontally
- Expert Programmer Technique
- Creating User-Defined Functions

6 hours

WEEK 07 Statistical Concepts

Summary: This topic covers the various statistical concepts used in SAS

- Introduction to Statistics
- Inferential Statistics
- Sampling

3 hours

WEEK 08 Capstone Project

Summary: The course ends with students submitting a capstone project. Our experts review each of these projects in detail and provide valuable feedback to students. The industry endorsed CISP certificate is provided upon successful completion of the project.

- Choose topic from multiple options
- Evaluation by industry experts
- Feedback on project submission
- CISP certificate awarded

3 hours

CASE STUDIES



TITANIC

An interesting project where students are given the task to predict the survival of passengers on the Titanic based on various factors such as gender, age, passenger class and port of embarkation.



COLONIAL BROADCASTING

A major American television network, must determine whether fact-based or fiction-based television movies garner higher ratings. Furthermore, the network must decide whether to accept a fixed fee or a sliding-scale contract.



CLASS EXAMINATION

Here we look at a class with 22 students and how they performed in a given exam. Using analytical tools, you need to identify how the overall class performed and provide a report on the performance of every student in this examination.



MONEY LAUNDERING

This case study can be utilized to enhance students' understanding and appreciation of data analytics for fraud detection in financial institutions. It requires a predictive analytic solution, in the form of a time series model, for combating money laundering at a regional bank.