

# SAS® Certification Review: SAS® 9.4 Base Programming Performance-Based Exam

Course code: CRBM6

This course provides a review of the majority of topics in the SAS 9.4 Base Programming Performance-Based Exam. It addresses the four exam content areas: Accessing and Creating Data Structures, Managing Data, Generating Reports and Output, and Handling Errors.

Affiliate	Duration	Course price	ITB
Bratislava	2	877 €	0

The prices are without VAT.

## Course terms

Date	Duration	Course price	Type	Course language	Location
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The prices are without VAT.

## Who is the course for

SAS users who are interested in a review course before taking the SAS 9.4 Base Programming Performance-Based Exam, part of the SAS Global Certification Program

## What we teach you

- Read, create, and combine SAS data sets
- Sort observations with the SORT procedure.
- Read delimited data and Microsoft Excel files with the IMPORT procedure and the LIBNAME engine
- Create variables using assignment, conditional, and sum statements
- Manipulate data using SAS functions
- Process data with DO loops
- Restructure data with the TRANSPOSE procedure
- Create reports using the PRINT procedure, the FREQ procedure, the MEANS procedure, and the UNIVARIATE procedure
- Create formats with the FORMAT procedure
- Create external files with ODS, the EXPORT procedure, and the LIBNAME engine
- Identify and resolve programming logic errors

## Required skills

Before attending this course, you should:

- Be an experienced programmer with knowledge of the four exam content areas.
- Have taken SAS Programming 1: Essentials and SAS Programming 2: Data Manipulation Techniques or have equivalent experience.

## Course outline

### SAS 9.4 Base Programming Performance-Based Exam Review

- Specifics about the SAS 9.4 Base Programming Performance-Based Exam
- Specifics about this review course
- Review SAS fundamental concepts
- Using macro variables to simplify code maintenance

### Access and Create Data Structure

- Investigating SAS data libraries
- Accessing SAS data sets and data sources not in SAS (Microsoft Excel and text files)

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# SAS® Certification Review: SAS® 9.4 Base Programming Performance-Based Exam

- Creating SAS data sets and reviewing DATA step processes
- Controlling rows and columns to process and output
- Modifying column attributes

## Manage Data

- Using assignment statements
- Conditional processing with IF-THEN/ELSE
- Sorting and combining tables
- Accumulating subtotals and totals
- Manipulating data with functions
- Iterative processing with DO loops
- Restructuring data with PROC TRANSPOSE

## Error Handling

- Identifying and resolving programming logic errors
- Examining and resolving data errors

## Generating Reports and Output

- Generating list reports using the PRINT procedure
- Generating summary reports and frequency tables using Base SAS procedures
- Enhancing reports with labels, SAS formats, user-defined formats, titles, footnotes, and SAS reporting options
- Generating reports using ODS statements
- Exporting data to text and Microsoft Excel files

## Additional Information

- More specifics about the SAS 9.4 Base Programming Performance-Based Exam
- Additional preparation resources
- Test-taking strategies

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