



# SAS® SQL 1: Essentials

## Duration

2 days

## Delivery

Classroom

## Course code

SQL1

## Online registration

[www.sas.com/uk/education/courses/sql1.html](http://www.sas.com/uk/education/courses/sql1.html)

## UK CONTACT INFORMATION

▶▶ [www.sas.com/uk/education](http://www.sas.com/uk/education)

▶▶ 0845 402 9902

▶▶ [education@suk.sas.com](mailto:education@suk.sas.com)

This course teaches you how to process SAS® data using Structured Query Language (SQL).

### Learn how to:

- query and subset data
- summarise and present data
- combine tables, including complex joins and merges
- create and modify table views and indexes
- replace multiple DATA and PROC steps with one SQL query.

### Who should attend:

SAS programmers and business analysts.

### Prerequisites:

Before attending this class, you should be able to:

- submit SAS programs on your operating system
- create and access SAS data sets
- use arithmetic, comparison, and logical operators
- invoke SAS procedures.

You can gain this experience from the *SAS Programming 1: Essentials* course. No knowledge of SQL is necessary.

### Course contents:

#### Getting Started

- course logistics
- introducing the Structured Query Language
- introducing the business scenario.

#### Basic Queries

- overview of the SQL procedure
- specifying columns
- specifying rows.

#### Displaying Query Results

- presenting data
- summarising data.

#### Subqueries

- noncorrelated subqueries
- correlated subqueries (self-study).

#### SQL Joins

- introduction to SQL joins
- complex SQL joins.

#### Set Operators

- introduction to set operators
- the EXCEPT operator
- the INTERSECT operator
- the UNION operator
- the OUTER UNION operator.

#### Creating Tables and Views

- creating views with the SQL procedure
- creating tables with the SQL procedure (self-study)
- integrity constraints (self-study).

#### Additional SQL Procedure Features

- setting SQL procedure options
- dictionary tables and views
- interfacing PROC SQL with the macro language
- program testing and performance.

## Managing Tables

- introduction to indexes
- creating indexes (self-study)
- maintaining tables.

## Accessing Relational Databases (self-study)

- LIBNAME access to DBMS data
- executing DBMS-specific SQL using the SQL Pass-Through Facility.

## Learning More

- SAS resources
- beyond this course.

## Software addressed:

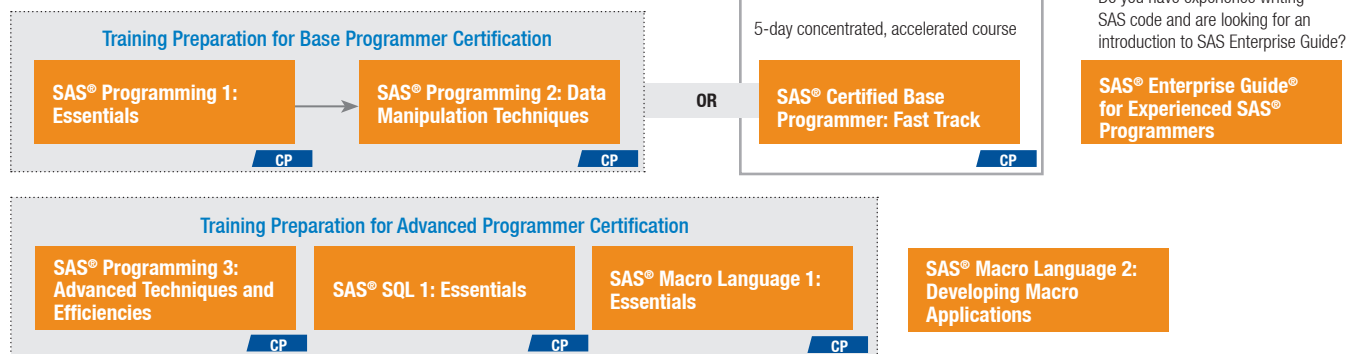
This course addresses the following software products:

- Base SAS®.

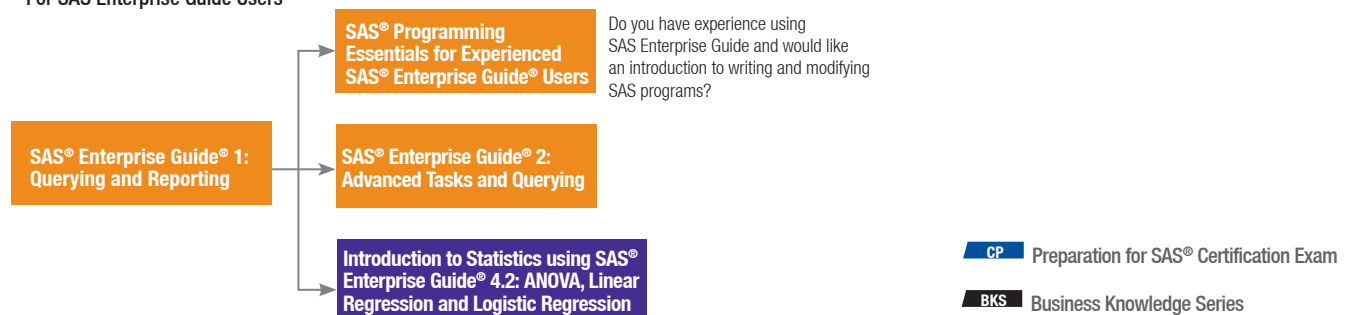
This course is appropriate for learners who are using SAS® 8 or SAS®9 software.

## Training Path for Programmers/Analysts

### For SAS Programmers



### For SAS Enterprise Guide Users



THE  
POWER  
TO KNOW.

SAS UNITED KINGDOM WITTINGTON HOUSE HENLEY ROAD MEDMENHAM  
MARLOW BUCKS SL7 2EB +44 1628 486933 WWW.SAS.COM/UK

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration. Other brand and product names are trademarks of their respective companies. Copyright © 2010, SAS Institute Inc. All rights reserved. 1112UK1010