

SAS® Education

Course Catalogue

SAS® Foundation



2012

Providing knowledge through
global training and certification

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 | THE
POWER
TO KNOW®

What We Offer



Steve Dowse
Manager, SAS Education
Australia and New Zealand

At SAS Education, we strive to provide our customers with the skills to use SAS software to help you solve your business problems. Your success is our goal and the reason we hold such high standards for the development and presentation of our training.

We want your entire training experience to be as informative and valuable as possible; from choosing training that fits your needs, to registering and attending the course.

If you're ever not satisfied with your training experience, let us know and we will make things right. That is our guarantee at SAS Education. We know that your investment in SAS will return more than just the expected benefits, and we hope you'll turn to SAS Education to help you fully utilise the competitive advantage SAS can provide.

Please join us for a successful SAS training experience in 2012.

Public courses are taught at SAS training facilities around Australia and New Zealand. Our instructors deliver critical SAS knowledge and helpful tips using a combination of expertly designed lectures and software demonstrations, question-and-answer sessions and hands-on computer workshops for an interactive learning experience that is second to none.

Custom training services have the same quality content and instructional design as our public courses. This training is delivered at your convenience in a private setting of your choosing. Create customised training that is optimised for your team by selecting any course from our full curricula, combining course segments, or having new training written for you.

SAS e-Learning provides immediate access to award-winning training at your desktop 24/7. Be sure to check out the ever-expanding list of short e-Lectures as well as the dynamic and engaging multimedia e-Courses. SAS e-Learning allows you to train without travel time and cost.

Business Knowledge Series is a unique partnership between SAS and external professionals who bring their real-world knowledge directly to you. The courses are authored by respected practitioners who use SAS to solve common business problems.

SAS Certification recognises excellence using SAS software. With growing, worldwide demand for professionals with a high level of SAS software knowledge, certification can help you distinguish yourself as a leading SAS professional.

For the most current information on what we offer, visit us on the Web at www.sas.com/australia/training

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Discover the other courses we offer for Statistical and Business Analysts



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SAS® Global Certification

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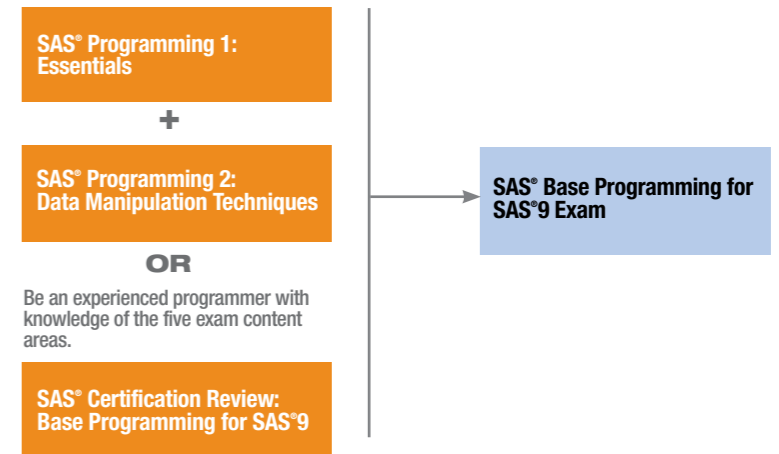
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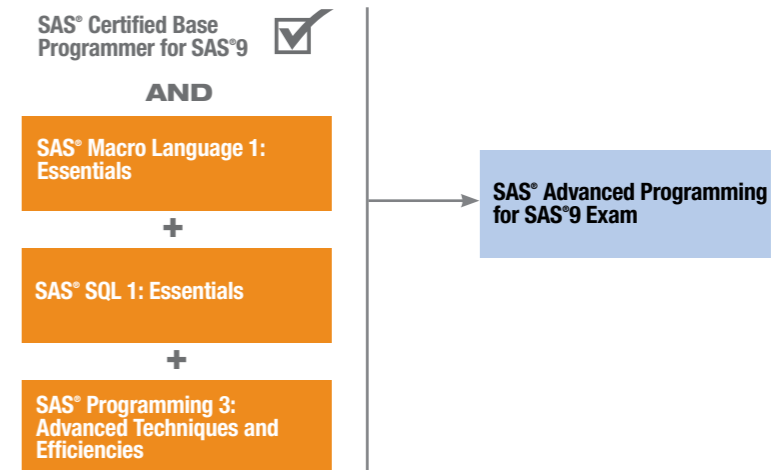
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- supports world-class organisations with a metric to attract the brightest and retain the best employees

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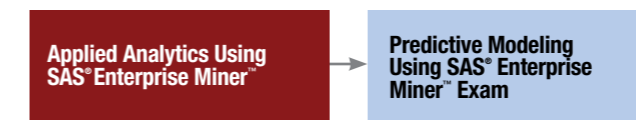


SAS® Certified Advanced Programmer for SAS®9



Other credentials:

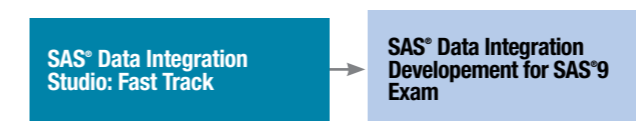
SAS® Certified Predictive Modeler Using SAS® Enterprise Miner™



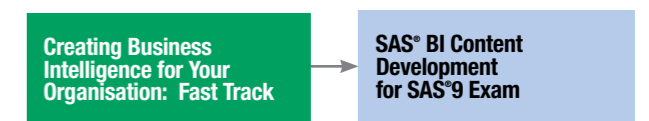
SAS® Certified Platform Administrator for SAS®9



SAS® Certified Data Integration Developer for SAS®9



SAS® Certified BI Content Developer for SAS®9





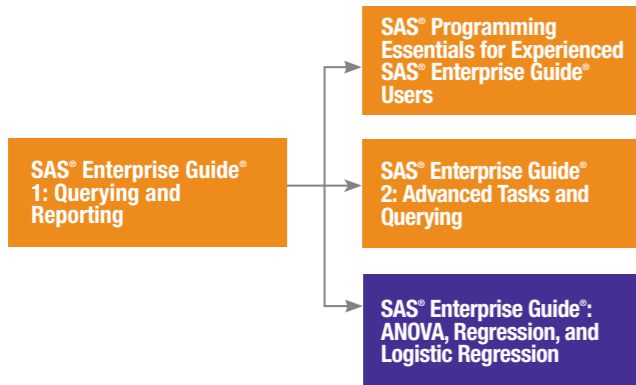
I'm responsible for accessing and managing data and for performing complex queries and analyses. I use SAS Enterprise Guide for these tasks.

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I'm responsible for accessing and managing data and for performing complex queries and analyses. I write SAS programs for these tasks.

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SAS® Programming Essentials for Experienced SAS® Enterprise Guide® Users

This course is for experienced SAS Enterprise Guide users who want to gain extra value from the product by understanding the code that it generates and methods of enhancing that code.

Learn how to:

- analyse the way in which SAS Enterprise Guide and SAS programs work together
- evaluate the structure and syntax of a SAS program
- access and manage data using the DATA step

Who should attend: Experienced SAS Enterprise Guide users

Delivery: Classroom

Duration: 2 days

Course code: EGP142

SAS® Enterprise Guide®: ANOVA, Regression, and Logistic Regression

This course is designed for SAS Enterprise Guide users who want to perform statistical analyses.

Learn how to:

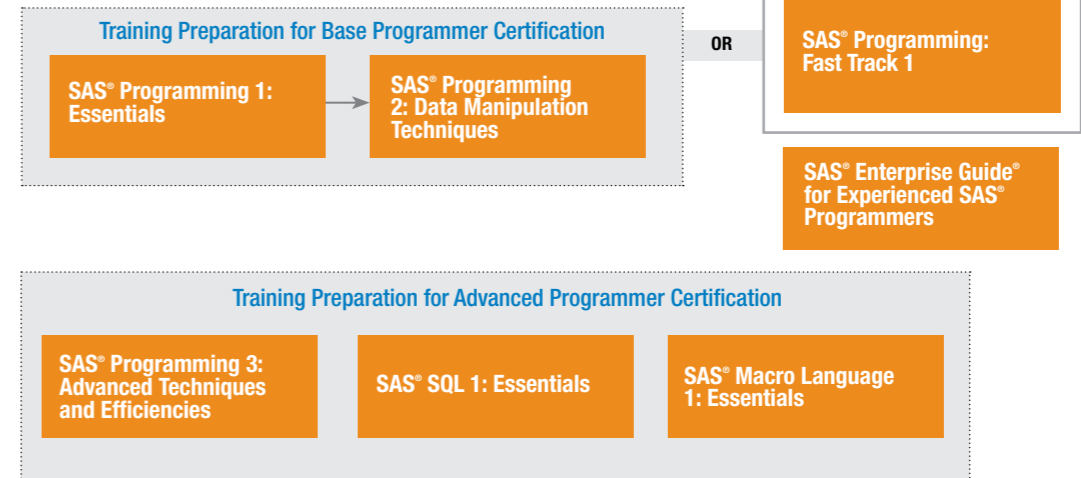
- generate descriptive statistics and explore data with graphs
- perform analysis of variance
- perform linear regression and assess the assumptions
- use diagnostic statistics to identify potential outliers in multiple regression
- use chi-square statistics to detect associations among categorical variables
- fit a multiple logistic regression model.

Who should attend: Statisticians and business analysts who want to use a point-and-click interface to SAS

Delivery: Classroom

Duration: 3 days

Course code: EGBS43



SAS® Programming 1: Essentials

This course is for users who want to learn how to write SAS programs. It is the entry point to learning SAS programming and is a prerequisite to many other SAS courses. If you do not plan to write SAS programs and you prefer a point-and-click interface, you should attend the SAS® Enterprise Guide® 1: Querying and Reporting course.

Learn how to:

- navigate the SAS windowing environment
- read various types of data into SAS data sets
- validate and clean SAS data sets
- create SAS variables and subset data
- combine SAS data sets
- create and enhance listing and summary reports.

Who should attend: Anyone getting started writing SAS programs

Level II: Fundamental

Delivery: Classroom, e-Course

Duration: 3 days (24 hours for e-Course)

Course code: PRG1

Certification: This course is suggested preparation for the SAS® Base Programming for SAS®9 exam.

SAS® Programming 2: Data Manipulation Techniques

This course is for those who need to learn SAS DATA step programming techniques for processing, controlling, and manipulating SAS data sets. The course builds on the concepts that are presented in the SAS® Programming 1: Essentials course and is not recommended for beginning SAS software users.

Learn how to:

- control SAS data set input and output
- combine SAS data sets
- summarise, read, and write different types of data
- perform DO loop and SAS array processing
- transform character, numeric, and date variables.

Who should attend: Business analysts and SAS programmers

Delivery: Classroom, e-Course

Duration: 3 days (24 hours for e-Course)

Course code: PRG2

Certification: This course is suggested preparation for the SAS® Base Programming for SAS®9 exam.

SAS® Programming 3: Advanced Techniques and Efficiencies

This course is for SAS programmers who prepare data for analysis. The comparisons of manipulation techniques and resource cost benefits are designed to help programmers choose the most appropriate technique for their data situation.

Learn how to compare various SAS programming techniques that enable you to:

- control memory, I/O, and CPU resources
- create and use indexes
- combine data horizontally and vertically
- use hash and hiter DATA step component objects, arrays, and formats as lookup tables
- compress SAS data sets
- sample your SAS data sets.

Who should attend: Experienced SAS programmers

Level IV: Expert

Delivery: Classroom, e-Course

Duration: 3 days (24 hours for e-Course)

Course code: PRG3

SAS® Macro Language 1: Essentials

This course focuses on the components of the SAS macro facility and how to design, write, and debug macro systems. Emphasis is placed on understanding how programs with macro code are processed.

Learn how to:

- perform text substitution in SAS code
- automate and customise the production of SAS code
- conditionally or iteratively construct SAS code
- use macro variables and macro functions.

Who should attend: Experienced SAS programmers who have a sound understanding of DATA step processing and who want to write SAS programs that are reusable and dynamic

Delivery: Classroom, e-Course

Duration: 2 days (16 hours for e-Course)

Course code: MAC1

Certification: This course is suggested preparation for the SAS® Advanced Programming for SAS®9 exam.

SAS® Programming Fast Track 1

This course is designed for programmers who need a solid foundation for programming in SAS in a condensed timeframe and who can learn at an accelerated pace. The course teaches you SAS programming essentials, such as creating SAS data sets and writing summary reports, as well as data manipulation techniques. This is a fast track course that covers the syllabus of SAS® Programming 1: Essentials and SAS® Programming 2: Data Manipulation Techniques.

Learn how to:

- navigate the SAS windowing environment
- read various types of data into SAS data sets
- validate and clean SAS data sets
- create SAS variables and subset data
- combine SAS data sets
- create and enhance listing and summary reports

- control SAS data set input and output
- summarise, read, and write different types of data
- perform DO loop and SAS array processing
- transform character, numeric, and date variables.

Who should attend: SAS users who need a solid foundation for programming in SAS in a condensed timeframe and who can learn at an accelerated pace. This course is only recommended for those people who have programmed in another language before.

Delivery: Classroom

Duration: 5 days

Course code: FAST92AU

Certification: This course is suggested preparation for the SAS® Base Programming for SAS®9 exam.

SAS® Enterprise Guide® for Experienced SAS® Programmers

This course introduces experienced SAS programmers to SAS Enterprise Guide as an interface to write and submit code, as well as use the point-and-click tasks to generate queries, reports and graphics.

Learn how to:

- write, edit and submit SAS programs in SAS Enterprise Guide
- use point-and-click tasks and wizards to access data and create queries, reports and graphics
- customise task output by modifying the code that is generated by SAS Enterprise Guide
- use the concept of SAS Enterprise Guide Project to combine SAS programs with point-and-click functionality, including automated exporting and scheduled updates.

Who should attend: Experienced SAS programmers who want to learn the point-and-click functionality of SAS Enterprise Guide, including the intricacies of using it as a primary programming interface

Delivery: Classroom

Duration: 2 days

Course code: EGSP43

SAS® SQL 1: Essentials

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

Delivery: Classroom, e-Course

Duration: 2 days (16 hours for e-Course)

Course code: SQL1

Certification: This course is suggested preparation for the SAS® Advanced Programming for SAS®9 exam.

SAS® Macro Language 2: Developing Macro Applications

This course is designed for experienced SAS macro programmers who want to learn to develop and use macro applications. New techniques and best practices are taught within the context of the applications.

Learn how to:

- create a framework for developing macro applications
- develop reusable macros
- read and process data
- pass and process macro parameters

Who should attend: Experienced SAS macro programmers who have a solid understanding of the macro facility

Delivery: Classroom, e-Course

Duration: 2 days (16 hours for e-Course)

Course code: MAC2

Business Knowledge Series

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SAS® REPORT WRITING



Report Writer

I'm responsible for performing queries and generating reports. I write SAS programs or use SAS Enterprise Guide to perform these tasks.

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For SAS Programmers

SAS® Programming 1: Essentials

CP

For SAS Enterprise Guide Users

SAS® Enterprise Guide® 1: Querying and Reporting

SAS® Programming Essentials for Experienced SAS® Enterprise Guide® Users

SAS® Report Writing 1: Using Procedures and ODS

SAS/GRAPH® 1: Essentials

CP Preparation for SAS® Certification Exam

SAS/GRAPH® 1: Essentials

This course teaches you how to produce high-quality presentation graphics using SAS/GRAPH software.

Learn how to:

- design graphs that describe their data in the most appropriate fashion
- customise default graph elements such as axes and legends
- apply annotations that supplement the features available with SAS/GRAPH procedures
- deliver graphs in multiple formats, such as static image files and client-generated images.

Who should attend: SAS users who must generate graphs using SAS program code in batch or noninteractive execution environments such as SAS Stored Processes, or have the need to produce a large quantity of graphs with minimal user interaction

Delivery: Classroom

Duration: 3 days

Course code: GRP1

SAS® Report Writing 1: Using Procedures and ODS

This course teaches you how to create detailed tabular, summary, and listing reports. You also learn how to send report output to the major Output Delivery System (ODS) destinations.

Learn how to:

- use PROC REPORT to generate tabular detail reports, detail reports with subtotals and grand totals, and detail reports with computed columns
- generate summary reports based on GROUP, ACROSS, or CLASS variables using PROC REPORT and PROC TABULATE
- insert appropriate summary lines into reports
- send report output to the RTF, PDF, and HTML destinations
- change reports using ODS options and style overrides.

Who should attend: SAS programmers, data managers, report writers, and analysts who must generate reports with the REPORT procedure and the TABULATE procedure and who are familiar with basic SAS procedure syntax and logic

Delivery: Classroom

Duration: 3 days

Course code: RPT1



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