

SAS Business Knowledge Series



Succeed using SAS in a tech-driven world.





SAS Business Knowledge Series 3

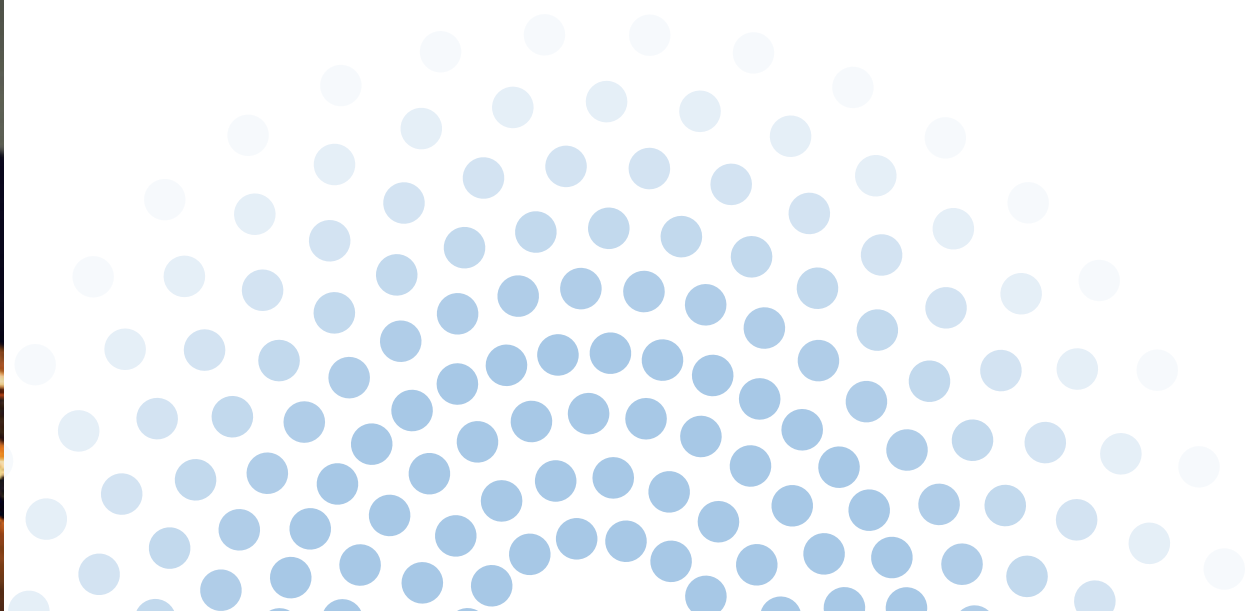
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SAS Business Knowledge Series

A unique collaboration between SAS and a global network of experts. Together we deliver the latest in advanced analytics, machine learning, data management and more to help you succeed in an increasingly tech-driven world.

What We Offer

Classroom Training

Our instructors deliver real-world knowledge, cutting-edge techniques and useful tips by combining expertly designed lectures and software demonstrations, Q&A sessions and hands-on computer workshops. Join us for an interactive learning experience delivered at a SAS training facility.

Live Web Classroom Training

Bring instructor-led training directly to your desktop while accommodating your busy schedule. Using a web browser and your telephone, interact with our instructor, who will guide your learning and answer your questions in real time.

On-Site Training

The same quality content and instruction as our classroom training delivered at your convenience at your location. Ask questions and generate discussion unique to your organization's needs in a private setting and eliminate staff travel time and expenses.

E-Learning

SAS Education's self-paced learning products provide flexible, convenient training options. Most e-courses cover the same content as the corresponding instructor-led courses and use movies, demos, interactive questions, quizzes and hands-on practice sessions to dynamically present the course.



SAS® Foundation Tools

Providing strength and integration for SAS® products and solutions.

SAS® Programming Training

Data Cleaning Techniques

Explore a variety of techniques for detecting and correcting errors in raw data, SAS data sets and more complex data structures.

Classroom attendees receive a complimentary PDF of Cody's book.

Ron Cody, author; or Mark Jordan or Jim Simon, SAS

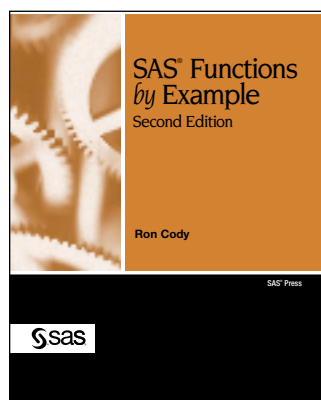


SAS® Functions by Example

Discover practical SAS functions you haven't seen in other SAS programming courses and start resolving everyday programming problems more quickly and efficiently.

Classroom attendees receive a complimentary PDF of Cody's book.

Ron Cody, author; or Mark Jordan, SAS



For a full list of classes, view the [programming learning path](#).

Ron Cody, EdD, is a retired professor from the Robert Wood Johnson Medical School who now works as a private consultant and a national instructor for SAS. A SAS user since 1977, Cody's extensive knowledge and innovative style have made him a popular presenter at local, regional and national SAS conferences. He has written or co-written numerous books as well as countless articles in medical and scientific journals.

Featured Instructor

Ron Cody



“

Ron is an excellent instructor who has a strong grasp of his content. He creates a learning environment that promotes asking questions and finding answers. Throughout the course, I was amazed at his in-depth understanding of using SAS to solve data issues.”

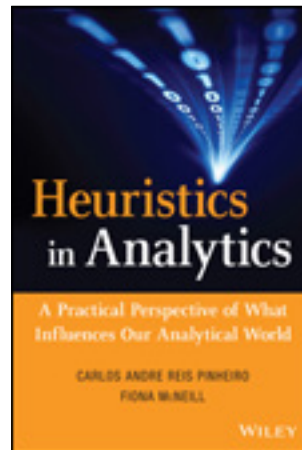
Statistical Analysis Training

Analytical Approaches to Solving Problems in Communications and Media

Learn a variety of analytical techniques that address business problems using real industry scenarios, including customer acquisition, churn, fraud detection and risk assessment.

Classroom attendees receive a complimentary PDF of Pinheiro's book.

Carlos Andre Reis Pinheiro, PhD, SAS



Multilevel Modeling of Hierarchical and Longitudinal Data Using SAS®

Discover how to identify complex and dynamic patterns within multilevel data to inform a variety of decision-making needs.

Catherine Truxillo, PhD, SAS

Profit-Driven Business Analytics

Combining theoretical and technical insights into daily operations and long-term strategy, this course provides invaluable guidance for practitioners seeking to reap the advantages of true profit-driven business analytics.

Classroom attendees receive a complimentary PDF of Baesen's book.

Bart Baesens, PhD, University of Southampton (UK)



Strategic Planning and Decision Making: Powered by SAS® **NEW!**

Learn the functions and tools of a corporate strategist or strategic planner, using analytics and basic statistical techniques to better inform strategic business and decision-making challenges.

Howard S. Friedman, PhD, Columbia University and Partner, DataMed Solutions or Paul W. Thurman, DBA, Columbia University

User-Friendly, Comprehensive SAS® Statistical Applications: Classification Models **NEW!**

Integrate statistical and graphical analysis tools while mastering user-friendly, precompiled SAS macro applications to perform comprehensive analysis – all without writing SAS code or using point-and-click.

George Fernandez, PhD, SAS

User-Friendly, Comprehensive SAS® Statistical Applications: Multivariate Models **NEW!**

Perform data preparation, exploration and comprehensive multivariate statistical models with user-friendly, precompiled SAS macro applications – all without writing SAS code or using point-and-click.

George Fernandez, PhD, SAS

User-Friendly, Comprehensive SAS® Statistical Applications: Regression Models **NEW!**

Master user-friendly, precompiled SAS macro applications to perform comprehensive multiple linear and binary logistic regression analyses – all without writing SAS code or using point-and-click.

George Fernandez, PhD, SAS

For a full list of classes, view the [statistical analysis learning path](#).



SAS® Advanced Analytics

Where power meets purpose.

Data Science Training

Communicating Technical Findings With a Non-Technical Audience

Design and communicate effective presentations, learn presentation organization and effective use of visual aids. Students are provided with an individual analysis of their behavioral style.

Catherine Truxillo, PhD, SAS

Explaining Analytics to Decision Makers: Insights to Actions

What are the main hurdles in explaining analytics and how can you overcome them? Learn multiple approaches, including understanding your audience, using visualization, messaging, presentations and more.

Jeff Zeanah, Z Solutions Inc.

Leading With Analytics

Lead your organization to greater success by pairing your expertise about the business with an understanding of where and how data science can help. Build on your strengths to collaborate effectively with experienced data scientists and to mentor novice analytics professionals and learn about five organizational styles for analytics with proven business outcomes.

Catherine Truxillo, PhD, or Carel Badenhorst, SAS

Social Network Analytics

Learn how to leverage social networks for analytical purposes. This course starts by describing the basic concepts of social networks and their applications in marketing, risk, fraud and HR. It then defines various social metrics and illustrates how they can be used for community mining.

Bart Baesens, PhD, University of Southampton (UK)

Strategies and Concepts for Data Scientists and Business Analysts

Find out which skills data scientists and statistical business analysts need to succeed in today's data-driven economy.

Catherine Truxillo, PhD; or Jeffrey Thompson, PhD; or Peter Christie, SAS

For a full list of classes, view the [data scientist learning path](#).





SAS® Advanced Analytics
Where power meets purpose.

Forecasting and Econometrics Training

Introduction to Applied Econometrics

Sharpen your skills by learning to develop and use single-equation econometric models, which help you better understand your economic/business landscape and improve forecasting.

Oral Capps Jr., PhD, Texas A&M University

Advanced Topics in Applied Econometrics

Intermediate/advanced topics in working with econometric models shape this course, which details additional techniques for improving your ability to make sound forecasts.

Oral Capps Jr., PhD, Texas A&M University

Electric Load Forecasting: Fundamentals and Best Practices

Using conceptual and hands-on exercises, this course covers electric load forecasting from both statistical and practical aspects using language and examples from the power industry.

Tao Hong, PhD, University of North Carolina, Charlotte

Electric Load Forecasting: Advanced Topics and Case Studies

Explore advanced topics in electric load forecasting in both hands-on lab exercises and lectures.

Tao Hong, PhD, University of North Carolina, Charlotte

For a full list of classes, view the [forecasting and econometrics learning path](#).

Dr. Oral Capps is a demand and price analyst, with expertise in econometric modeling and forecasting methods. He is a nationally and internationally recognized leader in demand analysis, specializing in working with large databases. Capps currently serves as Executive Professor, Regents Professor and holder of the Southwest Dairy Marketing Endowed Chair in the Department of Agricultural Economics at Texas A&M University as well as Co-Director of the Agribusiness, Food and Consumer Economics Research Center.

Featured Instructor

**Oral Capps
Jr., PhD**



“Dr. Capps is a great instructor, very knowledgeable, enthusiastic and very happy to answer all questions.”



SAS® Advanced Analytics

Where power meets purpose.

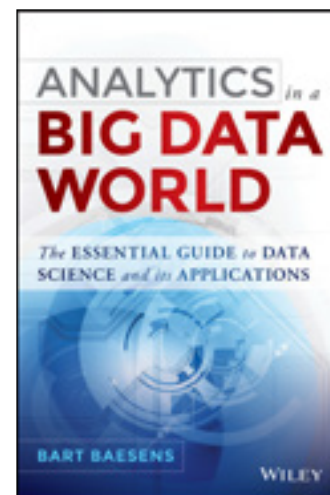
Data Mining Training

Advanced Analytics in a Big Data World

How can you successfully adopt recently proposed, state-of-the-art analytical and data science techniques for advanced customer intelligence applications? This highly interactive course provides both theoretical and technical insights, as well as practical implementation details illustrated by real-life cases.

Classroom attendees receive a complimentary PDF of Baesen's book.

Bart Baesens, PhD, or Christophe Mues, PhD, University of Southampton (UK); or Wouter Verbeke, PhD, University of Brussels (Belgium); or Thomas Verbraken, PhD, KU Leuven (Belgium); or Stefan Lessmann, PhD, Humboldt University (Germany)



Analytics: Putting It All to Work

Need extensive practical advice and guidelines on how to put all the analytical tools and concepts to work? Learn to efficiently use and deploy predictive and descriptive analytics to optimize and streamline strategic business processes.

Bart Baesens, PhD, or Christophe Mues, PhD; or Cristian Bravo, PhD, University of Southampton (UK); or Wouter Verbeke, PhD, University of Brussels (Belgium); or Thomas Verbraken, PhD, KU Leuven (Belgium); or Stefan Lessmann, PhD, Humboldt University (Germany)

Best Practices in Cluster Analysis for Customer Relationship Management (CRM)

COMING SOON!

Learn best practices when doing cluster analysis, for both CRM and a wide range of analytics fields.

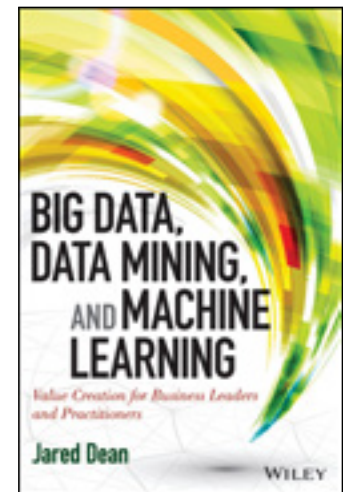
Don Wedding, PhD

Big Data, Data Mining and Machine Learning

Drawing on the instructor's extensive experience consulting with clients and his own projects, this course covers a wide range of topics, including an introduction to data mining algorithms, segmentation, data mining methodology, time-series data mining, text mining and more.

Classroom attendees receive a complimentary PDF of Dean's book.

Jared Dean, SAS



Customer Life Cycle Management Using SAS®

Explore popular metrics and methods used to measure customer valuation, including Customer Lifetime Value (CLV), learn different strategies to maximize CLV over a customer's life cycle and more.

Goutam Chakraborty, PhD, Oklahoma State University

Customer Segmentation Using SAS® Enterprise Miner™

Emphasizing practical skills and providing theoretical knowledge, this hands-on, comprehensive course covers segmentation analysis in the context of business data mining.

Goutam Chakraborty, PhD, Oklahoma State University

Net Lift Models: Optimizing the Impact of Your Marketing Efforts

Discover how incremental lift models can maximize the difference in response rates between clients who receive an offer and a control group, helping you target clients who are most likely to be motivated by marketing.

Terry Woodfield, PhD, SAS



SAS® Advanced Analytics

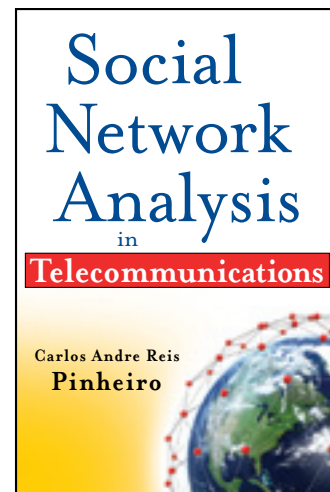
Where power meets purpose.

Social Network Analysis for Business Applications

Learn to build networks from raw data and explore different approaches for analyzing customers, focusing on their relationships and connections within the network.

Classroom attendees receive a complimentary PDF of Pinheiro's book.

Carlos Andre Reis Pinheiro, PhD, SAS



Survival Data Mining: A Programming Approach

Calling all predictive modelers, data analysts and data scientists! This advanced course uses SAS/STAT® software to illustrate various survival data mining methods and their practical implementation.

Mike Patetta or Chip Wells, PhD, SAS

Survival Data Mining Using SAS® Enterprise Miner™

Designed for analysts, this advanced course covers predictive hazard modeling for customer history data using SAS Enterprise Miner to illustrate survival data mining methods and their practical implementation.

Mike Patetta or Chip Wells, PhD, SAS

For a full list of classes, view the [data mining learning path](#).

Michael Patetta is a statistical instructor who teaches courses such as Bayesian Analyses Using SAS®, Longitudinal Data Analysis With Discrete and Continuous Responses, Survival Data Mining: A Programming Approach, and Multilevel Modeling of Hierarchical and Longitudinal Data Using SAS®. He has a master's degree from the University of North Carolina at Chapel Hill and has been with SAS since 1994. Patetta also consults on statistical projects and is currently writing a predictive modeling course using SAS® Viya®.

Featured Instructor

Michael
Patetta



"Mike is clear, engaging, thoughtful, extremely knowledgeable, super open to student questions, and his examples and analyses and SAS code are always maximally relevant to real-world data analysis situations."

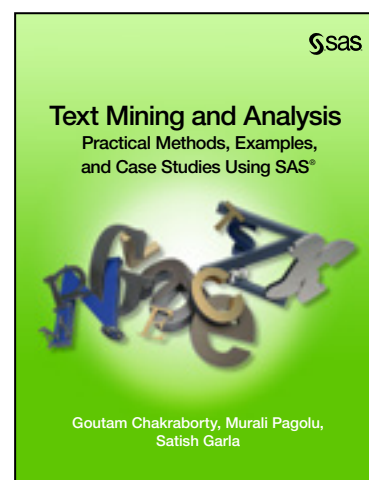
Text Analytics Training

Text Analytics and Sentiment Mining Using SAS®

This hands-on course takes a comprehensive look at how to organize, manage and mine textual data to extract insightful information that helps improve business operations and performance.

Classroom attendees receive a complimentary PDF of Chakraborty's book.

Goutam Chakraborty, PhD, Oklahoma State University



For a full list of classes, view the [text analytics learning path](#).

JMP® Statistical Analysis Training

Applied Statistics for Engineers

Learn to use JMP statistical software for engineering and scientific approaches to data analysis by focusing on descriptive statistics, graphical analysis, hypothesis testing, analysis of variance and model building.

Wayne Levin or Cy Wegman, Predictum Inc.

Applied Statistics for Scientists

Engineers, scientists and technicians handling product or process improvement will benefit from this combination of JMP with basic, intermediate and advanced analytical methods, complete with interactive illustrations to help explain statistical concepts.

Heath Rushing or Jim Wisnowski, PhD, Adsurgo LLC

Quality by Design (QbD) Using JMP® Software

Learn to establish a systematic approach to pharmaceutical development that's defined by quality by design (QbD) principles using design of experiments (DOE).

Heath Rushing, Adsurgo LLC

Statistics for FDA Process Validation Using JMP® Software

Discover how to establish a systematic approach to implementing statistical methodologies into a process development and validation program consistent with the FDA guidance.

Heath Rushing, Adsurgo LLC or Richard Burdick, PhD, Arizona State University

For a full list of classes, view the [JMP statistical analysis learning path](#).



SAS® Solutions

Specific skills based on specific business activity.

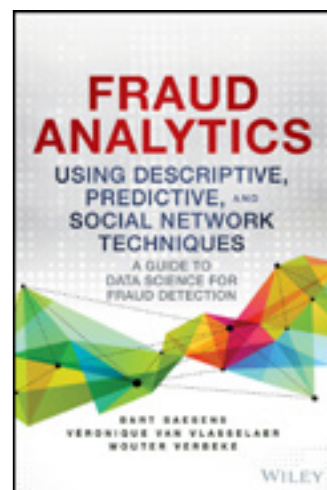
Fraud and Security Intelligence Training

Fraud Detection Using Descriptive, Predictive and Social Network Analytics

Fraud patterns in historical data can be used to fight fraud. Real-life case studies help clarify techniques shared in this course, which are relevant to a variety of applications, including insurance fraud, credit card fraud, anti-money laundering, health care fraud, telecommunications fraud, click fraud, tax evasion and counterfeiting. Classroom attendees receive a complimentary PDF of Baesen's book.

*Bart Baesens, PhD, or Christophe Mues, PhD, University of Southampton (UK);
or Wouter Verbeke, PhD, University of Brussels (Belgium); or Stefan Lessmann, PhD,
Humboldt University (Germany)*

For a full list of classes, view the [fraud and security intelligence learning path](#).



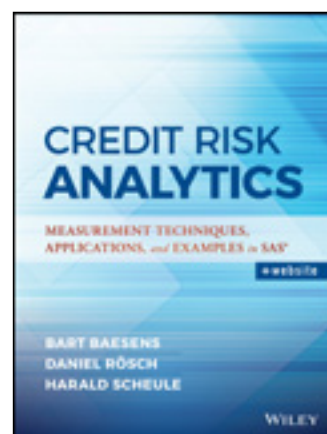
Risk Management Training

Credit Risk Modeling

Real-life case studies and a blend of theoretical and technical insights and practical implementation details will help students learn to develop credit risk models in the context of Basel II and Basel III guidelines. Classroom attendees receive a complimentary PDF of Baesen's book.

Bart Baesens, PhD, or Christophe Mues, PhD; or Cristian Bravo, PhD, University of Southampton (UK); or Wouter Verbeke, PhD, University of Brussels (Belgium); or Stefan Lessmann, PhD, Humboldt University (Germany)

For a full list of classes, view the [risk management learning path](#).



Christophe Mues, PhD, is a professor at the School of Management of the University of Southampton (UK). His key research interests include the business intelligence domain, where he has investigated the use of decision table and diagram techniques in business rule modeling and validation. His other key research areas include knowledge discovery and data mining, especially applying data mining techniques to financial risk management and credit scoring.

Featured Instructor

Christophe Mues



"Christophe explained the big data analytical concepts clearly and completely. He made the complex very simple to understand. I would highly recommend him as an instructor."



SAS® Solutions

Specific skills based on specific business activity.

Health and Life Sciences Training

Administrative Healthcare Data and SAS®

This industry-specific course focuses on the payer side of the industry: the origin, content, management and use of administrative health care data. This course is not a hands-on programming course; it explores the business of medical claims data, health plan members and service providers.

Classroom attendees receive a complimentary PDF of Dickstein's book.

Mark Dalesandro, independent consultant, based on materials developed by author Craig Dickstein



Administrative Healthcare Data and SAS®: Hands-On Programming Workshop

Open to SAS programmers who attended the Administrative Healthcare Data and SAS course, this hands-on workshop explores programming methods and techniques that are useful in the management of administrative health care data.

Mark Dalesandro, independent consultant, based on materials developed by author Craig Dickstein

Establishing Causal Inferences: Propensity Score Matching, Heckman's Two-Stage Model, Interrupted Time Series and Regression Discontinuity Models

Learn methods commonly used in program evaluation and real-world effectiveness studies, including two-stage modeling, interrupted time series, regression discontinuity and propensity score matching.

Howard S. Friedman, PhD, Columbia University and Partner, DataMed Solutions

Propensity Score Matching, Adjustment and Randomized Experiments

Was an increase in customer sales due to sales flyers? Did health improve because of a new medication? What conclusion can be drawn? This course focuses on testing whether the results of a program can be attributed to a given cause.

Howard S. Friedman, PhD, Columbia University and Partner, DataMed Solutions or Paul W. Thurman, DBA, Columbia University

For a full list of classes, view the [health and life sciences learning path](#).

New!

SAS® Academy for Clinical Programming

Launch a career in the pharmaceutical industry.
Become a SAS® Certified Clinical Trials Programmer.

Learn more: sas.com/academy-clinical-programming



Special Offers

support.sas.com/training/discounts

Best Value Deal

- SAS Training Points – Up to 30% off with our prepaid volume discount.

Standard Discounts

- 10% Early-Bird Discount.
- 10% Group Discount.
- E-Learning Multiuser Discount.

Academic Discount Program

Students (part-time and full-time) enrolled in degree-granting academic institutions can save up to 95% off classroom and live web training. Some exclusions apply.

Registration

support.sas.com/bks

800-727-0025

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It pays to share.

Develop a course for the
SAS Business Knowledge Series.

When you share your expertise on business trends and
SAS® software, everyone wins. Reap the financial,
professional and intellectual rewards of teaching SAS users
and learners around the world.

Grow with us.
support.sas.com/bks/partner