What tracks are available in the Statistics & Applied Mathematics program?

A track emphasizing statistics, a track emphasizing applied mathematics, and an MS track emphasizing applied mathematical modeling in conjunction with computational methods.

What are the unit requirements for the M.S. and Ph.D.?

**M.S. Program:** 35 units of core courses plus two additional 5-unit courses from an approved list, for a total requirement of 45 units. For the M.S. degree, students will conduct a capstone research project in their second year.

**Ph.D. Program:** 35 units of core courses plus four additional 5-unit courses from an approved list, for a total requirement of 55 units. Ph.D. students will be required to serve as teaching assistants for at least two quarters during their graduate study. Certain exceptions apply.

**SciCAM M.S. Program:** Plan 1 requires 25 units of core courses, plus one 5-unit approved elective, 10 units of supervised research, and a thesis. Plan 2 requires 25 units of core courses, plus 15 units of approved electives and a passing score on the SciCAM Comprehensive Examination.

What salary (on top of tuition and fees) do first-year Graduate Student Researchers in your program earn?

Our GSRs earn between $7,042.50 - $8,212.50 per quarter.

When are graduate applications due for your programs?

January 3rd of each year for SAM M.S. and Ph.D.
February 1st of each year for SciCAM M.S.

Where can I find detailed information about the admission and application process?

[grad.soe.ucsc.edu/admissions](http://grad.soe.ucsc.edu/admissions)

Who can I contact for more information?

Lisa Slater, Graduate Program Adviser
(831)459-3609, lmslater@ucsc.edu

ams.ucsc.edu
Nicholas Brummell Fluid dynamics, magnetohydrodynamics, numerical simulations of geophysical and astrophysical dynamics, especially solar interior physics, supercomputing

David Draper Bayesian statistics, hierarchical modeling, Bayesian nonparametric methods, model specification and model uncertainty, quality assessment, risk assessment, statistical applications in the environmental, medical, and social sciences

Pascale Garaud Astrophysical and Geophysical fluid dynamics, magnetohydrodynamics, analytical and numerical solutions of partial differential equations related to these phenomena

Marcella Gomez Control and dynamical systems, partial differential equations, stochastic systems, systems biology, and delay systems. Particular applications include modeling, analysis, and design of bacterial networks involved in gene regulation, metabolic engineering, and spatial patterning

Qi Gong Computational methods for real-time control systems, trajectory optimization and motion planning, nonlinear filtering and observer design, robust and adaptive control of nonlinear systems, industry applications of control theory

Abhishek Halder Systems, control and optimization. Theory focus: dynamics and control of stochastic systems, uncertainty propagation and nonlinear estimation, Monge-Kantorovich optimal transport, randomized algorithms, density control

Athanasios Kottas Bayesian nonparametrics, mixture models, modeling and inference for point processes, nonparametric regression, survival analysis, applications in biometrics, ecology and environmental sciences

Herbert Lee Computer simulation experiments, spatial statistics, inverse problems, model selection and model averaging, nonparametric regression, neural networks, classification and clustering

Juhee Lee Bayesian statistics, bayesian nonparametrics, modeling in biosciences and clinical trials

Marc Mangel (Emeritus) Mathematical modeling of biological phenomena, especially quantitative issues in fishery management; mathematical and computational aspects of aging and disease, impact of technology on biological systems

Raquel Prado Bayesian non-stationary time series modeling, multivariate time series, biomedical signal processing and statistical genetics

Abel Rodríguez Bayesian nonparametrics, Bayesian time series and spatial models, machine learning, document modeling, public health, financial econometrics, structural proteomics, genomics

Bruno Sansó Bayesian spatio-temporal modeling, environmental and geostatistical applications, modeling of extreme values, statistical assessment of climate variability

Daniele Venturi Uncertainty Quantification (UQ) and computational probability, multi-fidelity stochastic modeling and data-driven stochastic multiscale mathematics, numerical analysis and high-performance scientific computing, probability density function methods for forward and inverse UQ problems, Mori-Zwanzig approach to dimension reduction and uncertainty quantification, functional differential equations

Hongyun Wang Single molecule studies and biophysics, statistical physics, stochastic processes and stochastic differential equations, classical analysis, numerical analysis