



Department Of Mathematics Faculty

Federico Ardila

Combinatorics

Sheldon Axler

Functional Analysis

David Bao

Differential Geometry

Matthias Beck

Analytic Number Theory,
Discrete Geometry

Henry Boateng

Scientific Computing,
Computational Chemistry,
Applied Mathematics

Emily Clader

Algebraic Geometry

Luella Fu

Large Scale Statistics

Arek Goetz

Dynamical Systems

Joseph Gubeladze

Algebraic Combinatorics,
K-Theory

Shandy Hauk

Mathematics and Statistics
Education, Dynamical
Systems

Tao He

Statistics, Quantitative
Biology

Serkan Hosten

Applied Algebraic Geometry

Eric Hsu

Mathematics Education

Mohammad Kafai

Statistics: Nonparametric

Gerianne Krause

Discrete Mathematics

Judith Kysh

Mathematics Education

Chun-Kit Lai

Harmonic Analysis

Jean-Pierre Langlois

Game Theory

Shidong Li

Applied Computational
Harmonic Analysis

Ornella Mattei

Applied Mathematics,
Mathematical Modeling

Alexandra Piryatinska

Statistics

Dustin Ross

Algebraic Geometry

Alexander Schuster

Complex Analysis

Kimberly Seashore

Mathematics Education

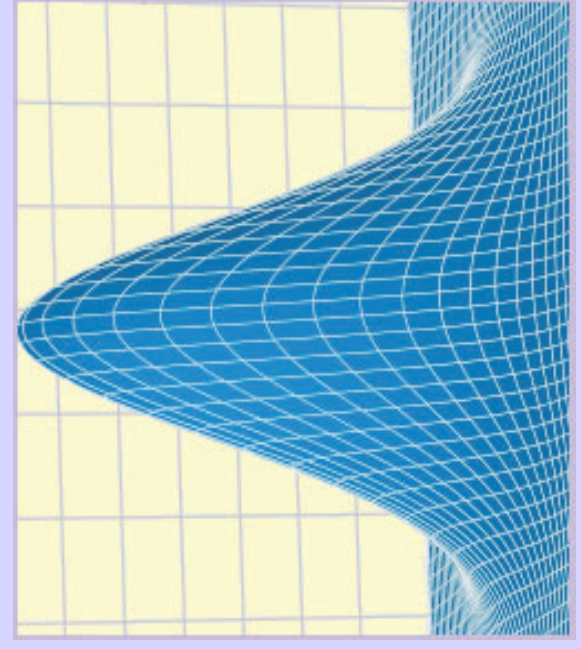
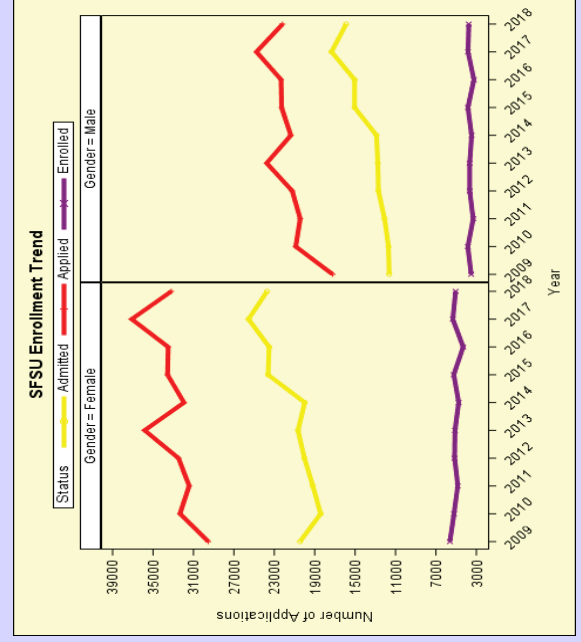


**SAN FRANCISCO
STATE UNIVERSITY**

**Masters of Science
in Statistical Data Science**

**Department of Mathematics
College of Science and Engineering**

**Thornton Hall 937
Department of Mathematics
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132**

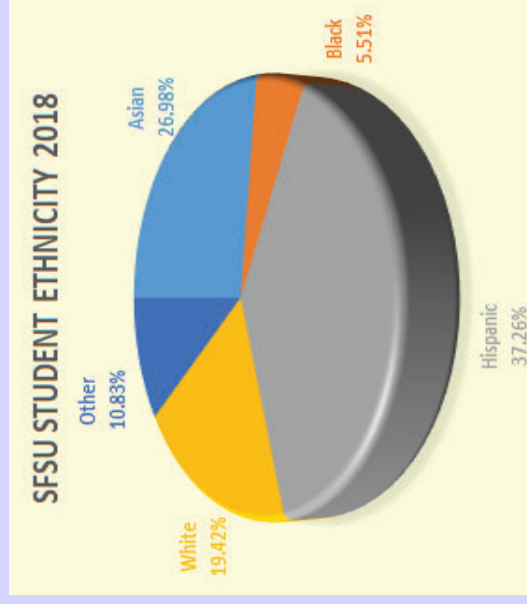


The purpose of the program is to deliver a comprehensive curriculum in the field of statistical data science to prepare students with backgrounds in statistics, mathematics, computer science, engineering, and other quantitative fields, for the data science workforce or a doctoral program.

Admission Requirements

- **Baccalaureate degree** from a regionally accredited institution, or shall have completed equivalent academic preparation as determined by the appropriate campus authority;
- **Baccalaureate degree** in a quantitative field in but not limited to statistics, mathematics, computer science, physics, engineering or relevant fields. Successful applicants are expected to have completed three semesters of **calculus, linear algebra, and upper division undergraduate courses in probability and statistics with a grade of B or better.** However, an applicant who is deficient in probability theory and/or statistics may be admitted conditionally on passing **MATH 440 Probability and Statistics I** and/or **MATH 441/741 Probability and Statistics II** satisfactorily during the first calendar year of study;

- **Good academic standing** at the last college or university attended;
- **3.0 GPA** in their earned undergraduate degree or in the last **60 semester (90 quarter) units** completed, or have earned a post-baccalaureate degree.



Total Units Required to complete the Degree: 30 Units

Required Courses: 15 Units

Math 742	Probability Models	3
Math 748	Theory and Applications of Statistical and Machine Learning	3
Math 760	Multivariate Statistical Methods	3
Math 761	Computational Statistics	3
Math 895 OR Math 896EXM & Math 899 OR Math 898	Internship Project Culminating Experience Exam and Expository Paper Master's Thesis	3

Elective Course: 15 Units

No more than **9 units** could be from **undergraduate only** courses. Per student's specialization interest and upon Graduate Advisor's approval, the student will choose a set of electives from one of the following areas:

- **Probability and Statistics Electives:**
 - Math 440 Probability and Statistics I
 - Math 441/741 Probability and Statistics II
 - Math 424/724 Introduction to Linear Models
 - Math 447 Design and Analysis of Experiments
 - Math 448 Introduction to Statistical Learning and Data Mining
 - Math 449 Categorical Data Analysis
- **Mathematics Electives:**
 - Math 400 Numerical Analysis
 - Math 430 Mathematics of Optimization
 - Math 460 Mathematical Modeling
 - Math 471/771 Fourier Analysis and Applications
 - Math 477/777 Partial Differential Equations
 - Math 495 Introduction to Wavelets and Frames with Applications
 - Math 710 Measure and Integration
 - Math 725 Advanced Linear Algebra
 - Math 899 Independent Study
- **Computer Science Electives:**
 - CSC 621/821 Biomedical Imaging and Analysis
 - CSC 671/871 Neural Networks
 - CSC 675/875 Introduction to Database Systems
 - CSC 869 Data Mining
 - CSC 874 Topics in Big Data Analysis
- **Biology Electives:**
 - BIOL 458 Biometry
 - BIOL 638/738 Biometry and Genome Annotation
 - BIOL 710 Advanced Biometry
 - BIOL 815 Advanced Phylogenetic Analysis

Application Process

- Apply to San Francisco State University using the Cal State Apply website: <https://www2.calstate.edu/apply>
- Prepare the following documents to upload:
 - **Personal Statement** of Purpose
 - **Minimum of two letters of recommendation**
 - **Transcript(s)**
- **GRE General Test** scores, minimum 150 on the quantitative and verbal reasoning segments
- **International Students** refer to the website: <https://grad.sfsu.edu/content/international-application-submission>

• All graduate study applicants, regardless of citizenship, whose native language is not English must demonstrate English language proficiency. To demonstrate your English language ability, you should submit an official Test of English as a Foreign Language, **TOEFL (minimum 550/80)** or International English Language Testing System, **IELTS (minimum 6.5)**

- If applicant meets the preliminary admissions criteria, then the application is forwarded to the Mathematics Department for final review

Contacts and Further Information

MS Graduate Advisors:

Dr. Mohammad Kafai (kafai@sfsu.edu)

Dr. Alexandra Piryatinska (alpiryat@sfsu.edu)

Division of Graduate Studies Website: <http://grad.sfsu.edu>

Office of International Programs Website: <http://oip.sfsu.edu>

Mathematics Department Website: <http://math.sfsu.edu>

