



### Department Of Mathematics Faculty

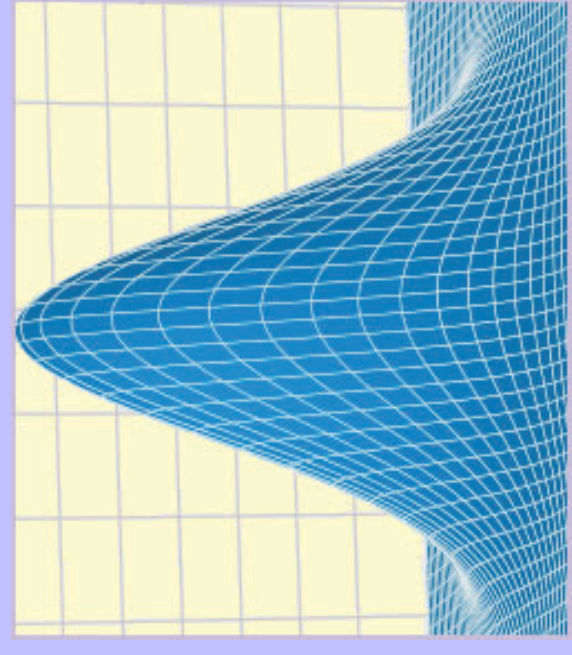
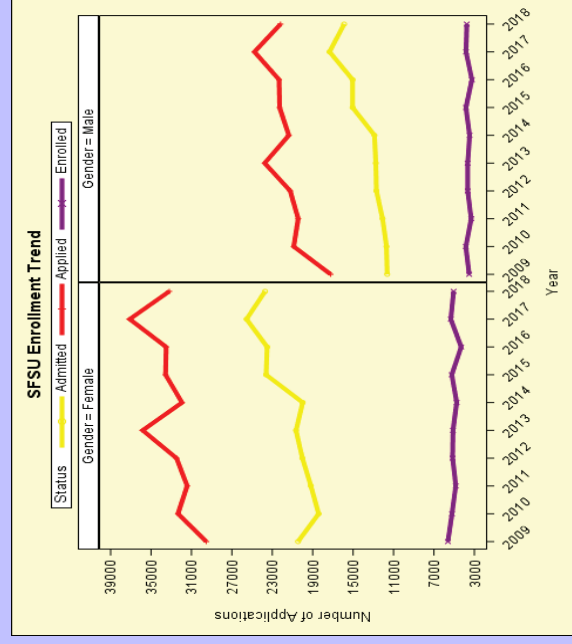
- Federico Ardila** Combinatorics
- Sheldon Axler** Functional Analysis
- David Bao** Differential Geometry
- Matthias Beck** Analytic Number Theory, Discrete Geometry
- Henry Boateng** Scientific Computing, Computational Chemistry, Applied Mathematics
- Emily Clader** Algebraic Geometry
- Luella Fu** 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

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



## Masters of Science in Statistical Data Science

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

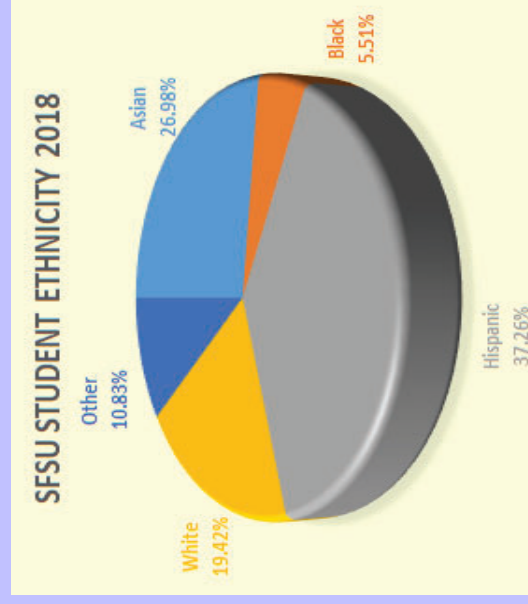


The purpose of the program is to deliver a comprehensive curriculum in the field of statistical data science to prepare students with backgrounds in statistics, mathematics, computer science, engineering, and other quantitative fields, for the data science workforce or a doctoral program.

## 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	Advanced 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 442 Probability Models
  - Math 447 Design and Analysis of Experiments
  - Math 448 Introduction to Statistical Learning
  - Math 449 Categorical Data Analysis
  - Math 899 Independent Study

- **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

- **Computer Science Electives:**
  - CSC 621/821 Biomedical Imaging and Analysis
  - CSC 675/875 Introduction to Database Systems
  - CSC 869 Data Mining
  - CSC 872 Pattern Analysis Machine Intel
  - 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)**

- **International Students** refer to the website: <http://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](mailto:kafai@sfsu.edu))

**Dr. Alexandra Piryatinska** ([alpiryat@sfsu.edu](mailto: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>

