



Department Of Mathematics Faculty

<b>Federico Ardila</b>	Combinatorics
<b>Matthias Beck</b>	Analytic Number Theory, Discrete Geometry
<b>Henry Boateng</b>	Scientific Computing, Computational Chemistry, Applied Mathematics
<b>Emily Clader</b>	Algebraic Geometry
<b>Luella Fu</b>	Large Scale Statistics
<b>Arek Goetz</b>	Dynamical Systems
<b>Shandy Hauk</b>	Mathematics and Statistics Education, Dynamical Systems
<b>Tao He</b>	Statistics, Quantitative Biology
<b>Serkan Hosten</b>	Applied Algebraic Geometry
<b>Eric Hsu</b>	Mathematics Education
<b>Mohammad Kafai</b>	Statistics: Nonparametric
<b>Chun-Kit Lai</b>	Harmonic Analysis
<b>Shidong Li</b>	Applied Computational Harmonic Analysis
<b>Ananda Majumdar</b>	Statistics
<b>Ornella Mattei</b>	Applied Mathematics, Mathematical Modeling
<b>Alexandra Piryatinska</b>	Statistics
<b>Dustin Ross</b>	Algebraic Geometry
<b>Alexander Schuster</b>	Complex Analysis
<b>Kimberly Seashore</b>	Mathematics Education

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

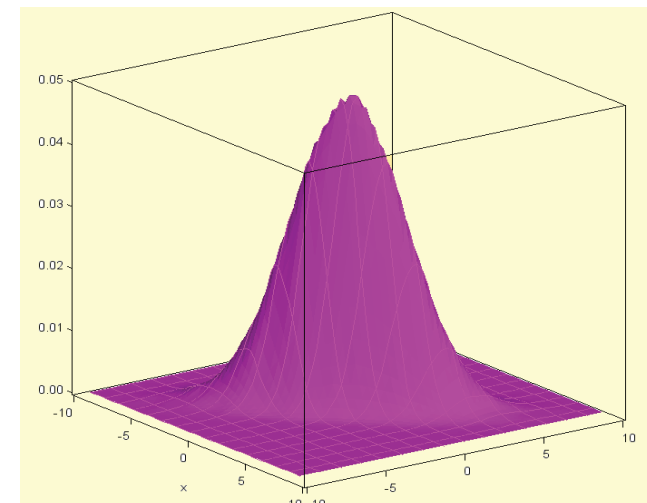
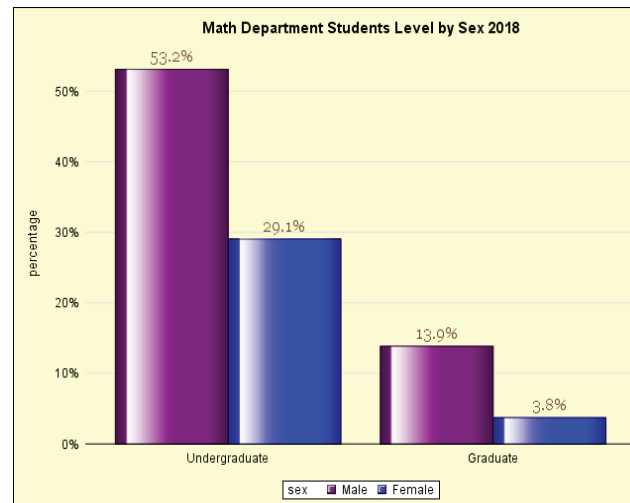


**SAN FRANCISCO**  
**STATE UNIVERSITY**

# Bachelor of Science in Statistics

Department of Mathematics

College of Science and Engineering



Statistics is basic to quantitative research in the biological, physical, and social sciences. Because its methods are based on mathematics, it requires a firm understanding of mathematical methods as well as an appreciation of scientific method, computation, and practical problems.

Statistics is important for all sciences because a great deal of advanced work in each scientific discipline involves statistical analysis for proper interpretation of data. In addition, many laws, proposals, and programs in society require statistics to evaluate collected quantitative data.

To give the students both breadth and depth and to introduce the students to a variety of fields where statistics may be applied, we offer four emphases for the degree: Science, Economics, Business Decision Science, and Business Information Systems.

## Total Major Units Required to Complete the Degree: 55 Units

### 46 Units: Required Core Courses

<b>Math 226</b>	Calculus I	4
<b>Math 227</b>	Calculus II	4
<b>Math 228</b>	Calculus III	4
<b>Math 301</b>	Exploration and Proof(GWAR)	3
<b>Math 209</b>	Mathematical Computing	3
<b>Math 325</b>	Linear Algebra	4
<b>Math 338</b>	Introduction to SAS	3
<b>Math 440</b>	Probability and Statistics I	3
<b>Math 441</b>	Probability and Statistics II	3
<b>Math 424</b>	Introduction to Linear Models	3
<b>Math 442</b>	Probability Models	3
<b>Math 447</b>	Design and Analysis of Experiments	3
<b>Math 448</b>	Introduction to Statistical Learning and Data Mining	3
<b>Math 449</b>	Categorical Data Analysis	3

May substitute CSC 215, or CSC 309 for Math 209

### 9 Units : Guided Elective Courses:

**3 Upper-division or graduate courses with advisor's approval from one of the 4 Guided Elective**

### Guided Elective in Science:

<b>Math 370</b>	Real Analysis	3
<b>Math 376</b>	Ordinary Differential Equations	3
<b>Math 400</b>	Numerical Analysis	3
<b>Math 425</b>	Applied and Comp Linear Algebra	3
<b>Math 430</b>	Mathematics of Optimization	3
<b>Math 443</b>	Introduction to Time Series Analysis	3
<b>Math 460</b>	Mathematical Modeling	3

### Guided Elective in Economics:

<b>Econ 301</b>	Intermediate Microeconomics	3
<b>Econ 302</b>	Intermediate Macroeconomics	3
<b>Econ 312</b>	Introduction to Econometrics	3
<b>Econ 715</b>	Mathematical Economics	3
<b>Econ 731</b>	Econometric Theory and Applications	3
<b>Econ 825</b>	Applied Time Series Econometrics	3

### Guided Elective in Business DS:

<b>DS 311</b>	Technologies in Data Analytics	3
<b>DS 408</b>	Computer Simulation	3
<b>DS 412</b>	Operations Management	3
<b>DS 604</b>	Applied Business Forecasting	3
<b>DS 624</b>	Quality Management	3

### Guided Elective in Business ISYS:

<b>ISYS 363</b>	Information Systems for Management	3
<b>ISYS 463</b>	Information Systems Analysis and Design	3
<b>ISYS 569</b>	Information Systems for Business Process Management	3
<b>ISYS 650</b>	Business Intelligence	3

### Contact:

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SFSU Distribution of Student Classification Level 2018

