

BACHELOR OF SCIENCE IN STATISTICS – MATH ASSOCIATE DEGREE FOR TRANSFER (ADT) ROADMAP

This is a sample pathway for students who transfer to San Francisco State University in the current Bulletin year with an AS-T in Mathematics. At least 12 units in the major (MATH 226, MATH 227, and MATH 228) and all lower-division GE requirements have been satisfied. Additional units in the major may have been satisfied. Check with a major advisor about the most appropriate course sequence. **Degree completion guaranteed in 60 units; see the Associate Degree for Transfer (ADT) section for more information (<http://bulletin.sfsu.edu/undergraduate-admissions/transfer-students/>).**

To Do at SF State:

Enough total units to reach 120 minimum for graduation; 30 units minimum at the upper-division level; to include the following:

University-Wide Requirements: 9-15 Units

- American Institutions (0-6 units): US History, US Government, California State and Local Government requirements if not taken before transfer.
- Upper-Division GE, Areas B, C, and D (9 units): Courses required for the major may double-count if approved for UD GE.
- Students entering the major with the AS-T in Mathematics are not required to fulfill SF State Studies or Complementary Studies requirements.

Statistics Major: 40-43 units

MATH 226, MATH 227, and MATH 228 met in transfer; CSC 210 may have been met in transfer.

- Core (31-34 units)
- Guided Electives (9 units) in one of the following areas: Science, Economics, Business: Decision Sciences, or Business: Information Systems. Consult with a department advisor.

University Electives: 2 or More Units

Depends on the number of units transferred, course choices made at the community college, and how transferred units are applied to the requirements above.

Course	Title	Units
First Semester		
Select One (Major Core):		3
MATH 309	Mathematical Computing	
CSC 210	Introduction to Computer Programming	
CSC 215	Intermediate Computer Programming	
CSC 309	Computer Programming	
University Elective if CSC 210 met in transfer		
MATH 301GW	Exploration and Proof - GVAR (Major Core)	3
MATH 440	Probability and Statistics I (Major Core)	3
GE Area UD-B: Upper-Division Physical and/or Life Sciences		3
University Elective		2
		Units
		14
Second Semester		
MATH 325	Linear Algebra (Major Core)	4
MATH 338	Introduction to SAS (Major Core)	3
MATH 441	Probability and Statistics II (Major Core)	3
Guided Electives (9 units) - Take One ¹		3
US History (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/#USHaGR) or University Elective if US History met in transfer		3
		Units
		16

Third Semester

MATH 424	Introduction to Linear Models (Major Core)	3
MATH 442	Probability Models (Major Core)	3
MATH 447	Design and Analysis of Experiments (Major Core)	3
Guided Electives (9 units) - Take One ¹		3
U.S. and California Government (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/#usg) or University Elective if US/CA Government met before transfer		3
	Units	15

Fourth Semester

MATH 448	Introduction to Statistical Learning and Data Mining (Major Core)	3
MATH 449	Categorical Data Analysis (Major Core)	3
Guided Electives (9 units) - Take One ¹		3
GE Area UD-C: Upper-Division Arts and/or Humanities		3
GE Area UD-D: Upper-Division Social Sciences		3
	Units	15
	Total Units	60

¹ **Guided Electives (9 units)**

Select three courses from one of the areas (Science, Economics, Business: Decision Sciences, or Business: Information Systems) listed below:

Science

MATH 370 Real Analysis I (3 units)
MATH 376 Ordinary Differential Equations I (3 units)
MATH 400 Numerical Analysis (3 units)
MATH 425 Applied and Computational Linear Algebra (3 units)
MATH 430 Mathematics of Optimization (3 units)
MATH 460 Mathematical Modeling (3 units)

Economics

ECON 301 Intermediate Microeconomic Theory (3 units)
ECON 302 Intermediate Macroeconomic Theory (3 units)
ECON 312 Introduction to Econometrics (3 units)
ECON 715 Mathematical Economics (3 units)
ECON 731 Econometric Methods and Applications (3 units)
ECON 825 Applied Time Series Econometrics (3 units)

Business: Decision Sciences

DS 311 Technologies in Data Analytics (3 units)
DS 408 Computer Simulation (3 units)
DS 412 Operations Management (3 units)
DS 604 Applied Business Forecasting (3 units)
DS 624 Quality Management (3 units)

Business: Information Systems

ISYS 363 Information Systems for Management (3 units)
ISYS 463 Information Systems Analysis and Design (3 units)
ISYS 569 Information Systems for Business Process Management (3 units)
ISYS 650 Business Intelligence (3 units)