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).

Course Title Units
First Semester
CSC 210 or CSC 309 Introduction to Computer Programming or Computer Programming for Scientists and Engineers 3
or University Elective if CSC 210 met in transfer
MATH 325 Linear Algebra 3
MATH 440 Probability and Statistics I 3
GE Area A: Written English Communication II (A4) 3
or University Elective if A4 was met in transfer
Upper Division GE: UD-B, UD-C, or UD-D 3
Units 15
Second Semester
MATH 301GW Exploration and Proof - GWAR 3
MATH 441 Probability and Statistics II 3
MATH 448 Introduction to Statistical Learning and Data Mining 3
MATH 449 Categorical Data Analysis 3
US History (bulletin.sfsu.edu/undergraduate-education/graduation-requirements/#USHaGR) 3
or University Elective if US History met in transfer
Units 15
Third Semester
MATH 338 Introduction to SAS 3
MATH 424 Introduction to Linear Models 3
MATH 442 Probability Models 3
Upper Division GE: UD-B, UD-C, or UD-D 3
Units 15

Fourth Semester
MATH 447 Design and Analysis of Experiments 3
Major Emphasis – Take Three 1 9
Upper Division GE: UD-B, UD-C, or UD-D 3
Units 15
Total Units 60

1 Major Emphasis (9 units)
Select three courses from one emphasis in consultation with the statistics advisor.

Business Emphasis
- 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)
- ISYS 363 Information Systems for Management (3 units)
- ISYS 463 Information Systems Analysis and Design (3 units)
- ISYS 464 Managing Enterprise Data (3 units)
- ISYS 569 Information Systems for Business Process Management (3 units)
- ISYS 650 Business Intelligence (3 units)

Economics Emphasis
- 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 Theory (3 units)
- ECON 825 Applied Time Series Econometrics (3 units)

Science Emphasis
- MATH 370 Real Analysis I (3 units)
- MATH 376 Ordinary Differential Equations I (3 units)
- MATH 400 Numerical Analysis (3 units)
- MATH 430 Mathematics of Optimization (3 units)
- MATH 460 Mathematical Modeling (3 units)
- MATH 491 Game Theory (3 units)
- MATH 493 Introduction to Actuarial Mathematics (3 units)
- MATH 494 Non-Parametric Statistics (3 units)

To Do at SF State:
 Enough total units to reach 120 minimum for graduation; 40 units minimum at the upper-division level; to include the following:

University-Wide Requirements: 9-18 Units
- ENG 214 or equivalent A4 course (0-3 units) if not taken before transfer
- 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)
- Students entering the major with the AS-T in Mathematics are not required to fulfill SF State Studies or Complementary Studies requirements.
Statistics Major: 39-42 units
MATH 226, MATH 227 and MATH 228 met in transfer; CSC 210 may have been met in transfer.

• Core (30-33 units)
• Emphasis (9 units) in one of the following areas of emphasis:
  Business, Economics, or Science. Consult with a department advisor.

University Electives: Zero 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.