BACHELOR OF SCIENCE IN STATISTICS ROADMAP – QUANTITATIVE REASONING CATEGORY III/IV

120 Total Units Required
Minimum Number of Units in the Major: 55

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

Course	Title	Units
First Semester		
MATH 197	Prelude to Calculus I (Prerequisite for MATH 226) [1]	3
GE Area 1: English Communication		3
GE Area 3: Arts and Humanities		3
GE Area 4: Social and Behavioral Sciences [2]		3
GE Area 5: Physical and Biological Sciences [3]		3-4
	Units	**15-16**
Second Semester		
MATH 198	Prelude to Calculus II (Prerequisite for MATH 226, GE 2) [1]	3
GE Area 1A: English Composition [4]		3
GE Area 1: English Communication		3
GE Area 3: Arts and Humanities		3
SF State Studies or University Elective		3
	Units	**15**
Third Semester		
MATH 226	Calculus I (Major Core, GE 2) [1]	4
GE Area 4: Social and Behavioral Sciences [2]		3
GE Area 5: Physical and Biological Sciences [3]		3-4
U.S. and California Government (https://bulletin.sfsu.edu/undergraduate-education/american-institutions/#usg)		3
SF State Studies or University Elective		3
	Units	**16-17**
Fourth Semester		
MATH 227	Calculus II (Major Core)	4
Select One (Major Core):		3
MATH 209	Mathematical Computing	
CSC 101	Introduction to Computing	
CSC 309	Computer Programming	

Course	Title	Units
MATH 301GW	Exploration and Proof - GWAR (Major Core)	3
MATH 325	Linear Algebra (Major Core)	4
	Units	**14**
Fifth Semester		
MATH 228	Calculus III (Major Core)	4
MATH 440	Probability and Statistics I (Major Core)	3
Select One:		4
CSC 215	Intermediate Computer Programming (if CSC 101 taken)	
SF State Studies or University Elective (if MATH 209 or CSC 309 taken)		
GE Area 3UD: Upper-Division Arts or Humanities		3
	Units	**14**
Sixth Semester		
MATH 338	Introduction to SAS (Major Core)	3
MATH 441	Probability and Statistics II (Major Core)	3
MATH 448	Introduction to Statistical Learning and Data Mining (Major Core)	3
MATH 449	Categorical Data Analysis (Major Core)	3
Guided Electives (9 Units Total) [5]		3
	Units	**15**
Seventh 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 Total) [5]		3
GE Area 5UD or 2UD: Upper-Division Sciences or Upper-Division Mathematical Concepts		3
	Units	**15**
Eighth Semester		
Guided Electives (9 Units Total) [5]		3
GE Area 4UD: Upper-Division Social and Behavioral Sciences		3
SF State Studies or University Elective - Take Three		10
	Units	**16**
	Total Units	**120-122**

1 Students should use their Pathway/Category (https://gatorsmartstart.sfsu.edu/pathways/) to determine the appropriate GE 2 course option. For directions on how to view your Pathway/Category, visit how to find your pathway (https://gatorsmartstart.sfsu.edu/howtofindyourpathways/). Questions? Contact Gator Smart Start. (https://gatorsmartstart.sfsu.edu/)

2 First-time freshmen must take one lower-division Area 4 course that meets US History (USH).

3 Consider taking a class combined with a laboratory or a separate lab to fulfill 5C if not already satisfied.

4 Students should use their Pathway/Category (https://gatorsmartstart.sfsu.edu/pathways/) to determine the appropriate GE 1A course option. For directions on how to view your Pathway/Category, visit how to find your pathway (https://gatorsmartstart.sfsu.edu/howtofindyourpathways/). Questions? Contact Gator Smart Start. (https://gatorsmartstart.sfsu.edu/)

5 **Guided Electives** **(9 units)**
A full list of courses that can fulfill this requirement can be found in the Degree Requirements (https://bulletin.sfsu.edu/colleges/science-engineering/mathematics/bs-statistics/#degreerequirementstext).