



B.S. APPLIED MATHEMATICS CONCENTRATION in STATISTICS

Program Requirements

Support Courses (17 units)

Math 100W.....Technical Writing Workshop

8 units from Economics, Business, Science, or Engineering. The choices must be approved by the Mathematics Department.

6 additional upper division support units from Math, CS, Science, Engineering, Economics, or Business. All of these units can be in Math 203 or similar applied mathematics projects. The choices must be approved by the Mathematics Department.

For a list of approved lower division and upper division support courses, go to <http://www.sjsu.edu/math/programs/undergraduate/>

Required Lower Division Courses (13-15 units)

Math 30 or 30P, 31, 32 Calculus I, II, III
Math 42.....Discrete Mathematics

Required Upper Division Courses (18 units)

Math 129A Linear Algebra I
Math 161AApplied Statistics I
Math 161B Applied Statistics II
Math 163.....Probability Theory
Math 164 Mathematical Statistics
Math 167.....Programming in SAS

Complete 18 units from:

Math 112, Math 131A* or 132, Math 142, Math 143C,
Math 143M, Math 162, Math 178, Math 261A,
Math 261B, Math 265, Math 266.

* Math 108 is prerequisite to Math 131A.

Total units required for degree120

For More Information

Department of Mathematics
San José State University
One Washington Square
San Jose, CA 95192-0103
www.sjsu.edu/math/

This degree program is recommended for students who wish to pursue a career in statistics. This program also prepares a student for graduate study in probability and statistics.

The concentration in statistics is appropriate for students pursuing a career involving the collection and analysis of numerical data, the use of statistical techniques to predict population growth or economic conditions, the use of statistics to analyze medical, environmental, legal and social problems, or to help business managers make decisions and carry out quality control. The statistics concentration also provides a solid foundation for students who plan to become actuaries.

For information concerning careers in Statistics, see <http://www.amstat.org/careers/>

Notes

1. To enroll in mathematics course, a student must have obtained a **C-** or better in each of its prerequisite courses. A grade of **C-** or better is required in all courses counted toward the major.

2. Transfer students should see an advisor to file a course equivalency form for courses being used to satisfy the math major. This major requires 36 units of upper division math. All courses taken at a community college transfer to SJSU as lower division units. If linear algebra was taken at a community college, then an additional approved 3-unit upper division math course will be needed to obtain the required 36 units of upper division math. Math 101, 105, 106, 107A, 107B, 110L, and certain Math 196 courses cannot be used..

3. Math majors completing the concentration in statistics can use Physics 50 to satisfy GE Areas B1 and B3.

4. Students are expected to consult the SJSU Catalog for course descriptions, prerequisites, restrictions on enrollments for credit, and other university policies.

5. If a student wishes to pursue this degree but is not enrolled in this major, the student must submit a Change of Major Form with the Department Office (MH 308). The approved form must then be filed with the Student Services Center.

Computing Facilities

The department maintains a computer laboratory for student use to support course work in the department. Students may use the computer lab either by registering for one unit of lab or by paying a semester fee. There is also a Macintosh lab serving classes for future K-12 teachers of mathematics. It is equipped with 20 iMacs. All computers in the department are networked.

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SJSU does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, marital status, pregnancy, age, disability, disabled veteran's or Vietnam veteran's status. This policy applies to all SJSU student, faculty and staff programs and activities. Questions regarding this policy should be directed to the Office of Equal Opportunity, Administration Room 112, (408) 924-1115.

**Sample Program for
BSACM – Emphasis in Statistics**
Effective Spring 2009

Freshman Year

Fall	Units	Spring	Units
GE Area E or MUSE	3	Math 31	4
GE A2 English 1A *	3	Math 42	3
GE A3 Philosophy 57 °	3	GE C3 English 1B	3
GE B4 Math 30 or 30P/30W**	3 – 6	GE B2 Life Science	3
Physical Education	1	GE A1 Oral Communication	3
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	13-16		16

Sophomore Year

Fall	Units	Spring	Units
Math 32	3	Math 129A	3
GE Areas D2 & F	3	Math 161A	3
GE Areas B1 & B3	3	Lower Division support course	4
Lower Division support course	4	GE Area C1	3
Physical Education	1	GE Areas D3 & F	3
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	14		16

Junior Year

Fall	Units	Spring	Units
Math 161B	3	Upper Division Math (from list)	3
Math 167	3	Upper Division Math (from list)	3
Upper Division support course	3	Upper Division Math (from list)	3
GE Area C2	3	Upper Division support course	3
GE Area D1	3	GE Area Z Math 100W *	3
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	15		15

Senior Year

Fall	Units	Spring	Units
Math 163	3	Math 164	3
Upper Division Math (from list)	3	Upper Division Math (from list)	3
Upper Division Math (from list)	3	GE Area V	3
GE Areas R & S	6	Free electives	4 – 7
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	15		13-16

* Requires a placement exam. See the Schedule of Classes for test dates and further explanation.

+ Requires satisfaction of the ELM requirement.

° Recommended course for GE A3.