Statistics and Actuarial Science Major, B.S.

Department of Mathematics and Statistics

Statistics is concerned with generating and analyzing data. The statistics and actuarial science major trains students in theoretical, applied, and computational statistics used in a wide variety of disciplines. Advisers have information on the national actuarial examinations.

Typical Program of Study:

Fall Semester		*Spring Semester*	
First Year			
Comp 1120 College Writing	3 cr	CS 1511 Computer Science I	5 cr
Math 1296 Calculus I*		Math 1297 Calculus II	
or Math 1596 Honors Calculus I	5 cr	or Math 1597 Honors Calculus II	5 cr
Liberal Education	<u>6 cr</u>	Liberal Education	<u>6 cr</u>
	14 cr		16 cr
Second Year			
Math 3298 Calculus III	4 cr	Math 3280 Diff Eq with Linear Algebra	4 cr
Stat 3611 Intro to Probability & Statistics	4 cr	Math elective course [a]	3-4 cr
Liberal education/minor courses	<u>7 cr</u>	Liberal education/minor courses	<u>9 cr</u>
	15 cr		16 cr
Third Year			
Math elective course [a]	3-4 cr	Stat 5511 Regression Analysis	3 cr
Comp 31XX Advanced Writing	3 cr	Stat 5531 Probability Models	4 cr
Liberal education/minor courses	<u>8 cr</u>	Liberal education/minor courses	<u>7 cr</u>
	15 cr		14 cr
Fourth Year			
Stat 5571 Probability	4 cr	Stat 5572 Statistical Inference	4 cr
Math 3941 Undergraduate Colloquium	1 cr	Liberal education/minor courses	<u>11cr</u>
Liberal education/minor courses	<u>10 cr</u>		15 cr
	15 cr		

* First math course is determined by math placement exam. This schedule presupposes placement into Math 1296 or Math 1526.

[a] Choose at least two of the following electives (6-7 credits total):
        Math 3299 - Intermediate Analysis (3)
        Math 3355 - Discrete Mathematics (4)
        Math 4326 - Linear Algebra (3)

For further information:

Statistics and Actuarial Science Major, B.S.

MAJOR REQUIREMENTS	CREDITS	PREREQUISITES	SEMESTER TO BE COMPLETED	GRADE
YEAR 1				
Comp 1120	3			
CS 1511 Computer Science I	5	3.5 yrs HS math		
Math 1296 Calculus I*	5	Math 1250 with at least a 'C-' or math placement		
or				
Math 1596 Honors Calculus I	5	Placement		
Math 1297 Calculus II	5	Math 1296 with at least a 'C-'		
or				
Math 1597 Honors Calculus II	5	Math 1596 with at least a 'C-'		
YEAR 2				
Math 3280 Differential Equations	4	Math 1297 or 1597 with at least a 'C-'		
Math 3298 Calculus III	4	Math 1297 or 1597		
Math elective course [a]	3-4			
Stat 3611 Intro to Probability & Statistics	4	Math 1296 with at least a 'C-'		
YEAR 3				
Comp 31XX Advanced Writing	3	Comp 1120; 60 credits		
Math elective course [a]	3-4			
Stat 5511 Regression Analysis	3	Stat 3611, Math 3280 or 4236		
Stat 5531 Probability Models	4	Stat 3611, Math 1297 or Math 1597		
YEAR 4				
Math 3941 Undergraduate Colloquium	1	Dept approval; must reg during semester of 16th point		
Stat 5571 Probability	4	Stat 3611 and Math 3298		
Stat 5572 Statistical Inference	4	Stat 5571		

* First math course is determined by math placement exam. This schedule presupposes placement into Math 1296 or Math 1526.

[a] Choose at least two of the following electives (6-7 credits total):
> Math 3299 - Intermediate Analysis (3)
> Math 3355 - Discrete Mathematics (4)
> Math 4326 - Linear Algebra (3)

NOTE: In addition to the above requirements, students must complete the liberal education program, as well as either a second major, or a minor in an area other than mathematics. (Student completing the B.S. in statistics and actuarial sciences will automatically have earned a minor in mathematics.)