

**MAJOR: STATISTICS AND ACTUARIAL SCIENCE, B.S.**

DEPARTMENT OF MATHEMATICS AND STATISTICS

Statistics and actuarial science 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. Advisors have information on the national actuarial examinations.

TYPICAL PROGRAM OF STUDY			
FIRST YEAR			
FALL SEMESTER		SPRING SEMESTER	
WRIT 1120 College Writing	3 cr	CS 1511 Computer Science I	5 cr
MATH 1296 Calculus I or MATH 1596 Honors Calculus I <sup>^</sup>	5 cr	MATH 1297 Calculus II or MATH 1597 Honors Calculus II	5 cr
Liberal education requirement	<u>7 cr</u>	Liberal education requirement	<u>6 cr</u>
Total:	15 cr	Total:	16 cr
SECOND YEAR			
MATH 3298 Calculus III	4 cr	MATH 3280 Differential Equations w/Linear Algebra	4 cr
STAT 3611 Introduction to Probability & Statistics	4 cr	MATH elective <sup>1</sup>	3-4 cr
Liberal education or minor field courses	<u>6 cr</u>	Liberal education or minor field courses	<u>8 cr</u>
Total:	14 cr	Total:	14-15 cr
THIRD YEAR			
MATH elective <sup>1</sup>	3-4 cr	STAT 5511 Regression Analysis	3 cr
WRIT 31xx Advanced Composition	3 cr	STAT 5531 Probability Models	4 cr
Liberal education or minor field courses	<u>8 cr</u>	Liberal education or minor field courses	<u>8 cr</u>
Total:	14-15cr	Total:	15 cr
FOURTH YEAR			
MATH 3941 Undergraduate Colloquium	1 cr	STAT 5572 Statistical Inference	4 cr
STAT 5571 Probability	4 cr	Liberal education or minor field courses	<u>11 cr</u>
Liberal education or minor field courses	<u>10 cr</u>	Total:	15 cr
Total:	15 cr		

<sup>^</sup>First math course is determined by math placement exam. This schedule presupposes placement into Math 1296.

<sup>1</sup>Students are required to take 6-7 credits of electives chosen from the following courses: MATH 3299, MATH 3355, or MATH 4326

FOR ADDITIONAL INFORMATION:

Department of Mathematics and Statistics  
 Solon Campus Center 140  
 218-726-8747 or 218-726-8254  
 math@d.umn.edu  
 http://www.d.umn.edu/math

## STATISTICS AND ACTUARIAL SCIENCE, B.S.

MAJOR COURSE REQUIREMENTS	CREDITS	PREREQUISITES	SEMESTER TO BE COMPLETED	GRADE
<b>FIRST YEAR</b>				
WRIT 1120 College Writing	3			
CS 1511 Computer Science I	5	3.5 years of high school math		
MATH 1296 Calculus I or MATH 1596 Honors Calculus I <sup>1</sup> <i>AND</i> MATH 1297 Calculus II or MATH 1597 Honors Calculus II	5	Placement or MATH 1250 with 'C-' or better		
	5	MATH 1290, 1296 or 1596 with 'C-' or better		
<b>SECOND YEAR</b>				
MATH 3280 Diff Equations w/ Linear Algebra	4	MATH 1297 or 1597 with 'C-' or better		
MATH 3298 Calculus III	4	MATH 1297 or 1597 with 'C-' or better		
MATH elective <sup>1</sup>	3-4			
STAT 3611 Intro to Probability & Statistics	4	MATH 1290, 1296 or 1596 with 'C-' or better		
<b>THIRD YEAR</b>				
WRIT 3150 Advanced Writing	3	WRIT 1120; 60 credits		
MATH elective <sup>1</sup>	3-4			
STAT 5511 Regression Analysis	3	STAT 3611, and MATH 3298 or 4326		
STAT 5531 Probability Models	4	STAT 3611 and MATH 1297 or 1597		
<b>FOURTH YEAR</b>				
MATH 3941 Undergraduate Colloquium	1	Dept approval; must regis during sem of 16th point		
STAT 5571 Probability	4	STAT 3611, and MATH 3298		
STAT 5572 Statistical Inference	4	STAT 5571		

<sup>^</sup> First math course is determined by math placement exam. This schedule presupposes placement into Math 1296. Students may take Math

<sup>1</sup>Students are required to take 6-7 credits of electives chosen from the following courses: MATH 3299, MATH 3355, or MATH 4326

NOTE: In addition to the above requirements, students must complete the liberal education program and a minor (or a second major) to earn a B.S. degree.