

# Statistics Option

Freshman Year		Credits	
		Fall	Spring
CLS 101US - Knowledge and Community or COMX 111US - Introduction to Public Speaking		3	
M 171Q - Calculus I		4	
University Core and Electives		8	
WRIT 101W - College Writing I			3
M 172 - Calculus II			4
University Core and Electives			6
STAT 216Q - Introduction to Statistics or STAT 332 - Statistics for Scientists and Engineers			3
Year Total:		15	16
Sophomore Year		Credits	
		Fall	Spring
M 273 - Multivariable Calculus or M 283 - Honors Multivariable Calculus		4	
M 242 - Methods of Proof		3	
Science Electives *		4	
STAT 337 - Intermediate Statistics with Introduction to Statistical Computing		3	
M 221 - Introduction to Linear Algebra			3
STAT 408 - Statistical Computing and Graphical Analysis			3
Science Electives *			3
University Core and Electives			6
Year Total:		14	15
Junior Year		Credits	
		Fall	Spring
M 333 - Linear Algebra or M 441 - Numerical Linear Algebra & Optimization		3	
STAT 411 - Methods for Data Analysis I		3	
STAT 446 - Sampling		3	
Science Electives *		3	
University Core and Electives		3	
STAT 412 - Methods for Data Analysis II			3
STAT 441 - Experimental Design			3
Science Electives *			3
University Core and Electives			6
Year Total:		15	15
Senior Year		Credits	
		Fall	Spring
STAT 421 - Probability Theory		3	
Math or Stat Elect (See List Below)		6	
University Core and Electives		6	
STAT 422 - Mathematical Statistics			3
Math or Stat Elect (See List Below)			6
University Core and Electives			6
Year Total:		15	15
<b>Total Program Credits:</b>		<b>120</b>	

## Math or Stat Elective

STAT 425	Biostatistical Data Analysis	3
STAT 431	Nonparametric Statistics	3
STAT 436	Introduction to Time Series Analysis	3
STAT 437	Introduction to Applied Multivariate Analysis	3
STAT 439	Introduction to Categorical Data Analysis	3
STAT 448	Mixed Effects Models	3
STAT 490R	Undergraduate Research	1-6
STAT 491	Special Topics	1-4
STAT 492	Independent Study	1-3

\* 13 credits of Social, Physical or Biological Science approved courses with at least one course that has a lab - consult an advisor for more details.

A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above. Core 2.0 must be completed for graduation.

## Accelerated M.S. Plan

The Accelerated M.S. Program (AMSP) is designed to provide MSU undergraduates a path to earning both the B.S. and the M.S. in Statistics in a total of five years. Undergraduate students earning a B.S. in Statistics at Montana State University may accelerate their program through any combination of Advanced Placement Credit, transfer credit, and higher semester credit loads so that they may receive their B.S. degree after four years and their M.S. degree after the fifth year. The undergraduate student can complete specific graduate level course work during year 4 of the undergraduate program. These courses can be **reserved for graduate credit** towards the M.S. degree. With careful planning by the student and the academic advisor, this can compress the time required to fulfill requirements of both the B.S. and M.S. degrees to a total of five years. The M.S. degree is typically a non-thesis degree (course work and exams only), and **all M.S. requirements described above in the Non-Thesis Plan must be fulfilled**, unless otherwise approved by the student's graduate committee. It is essential that students interested in the accelerated M.S. plan begin discussions with their undergraduate advisor during the freshman year. To learn more about the AMSP, please visit <http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/ms-statistics/>.

## Actuary Profession Bound Students

Actuary profession-bound students are advised to take STAT 421 and STAT 422 during the junior year in order to be prepared for the actuarial exams given during the senior year. For further guidance, see the Actuary Advisor in the Dept. of Mathematical Sciences, 2-214 Wilson Hall.