

# Statistics Option

M 171Q	Calculus I	4
M 172Q	Calculus II	4
M 221	Introduction to Linear Algebra	3
M 242	Methods of Proof	3
M 273Q	Multivariable Calculus	4
M 333	Linear Algebra	3
or M 441	Numerical Linear Algebra & Optimization	
STAT 217Q	Intermediate Statistical Concepts (Preferred and requires STAT 216Q as a prerequisite)	3
or STAT 332	Statistics for Scientists and Engineers	
STAT 408	Statistical Computing and Graphical Analysis	3
STAT 411	Methods for Data Analysis I	3
STAT 412	Methods for Data Analysis II	3
STAT 421	Probability Theory	3
STAT 422	Mathematical Statistics	3
STAT 441	Experimental Design	3
STAT 446	Sampling	3
Choose four from the following:		12
STAT 431	Nonparametric Statistics	
STAT 436	Introduction to Time Series Analysis	
STAT 437	Introduction to Applied Multivariate Analysis	
STAT 439	Introduction to Categorical Data Analysis	
STAT 448	Mixed Effects Models	
STAT 490R	Undergraduate Research	
STAT 491	Special Topics	
Other courses approved by an advisor may be substitutes. At least one science must have a lab.		

Total Credits 57

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. The following is a typical program of study:

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 172Q - Calculus II		4	
University Core and Electives		9	
Year Total:	15	16	
Sophomore Year		Credits	
	Fall	Spring	
M 273Q - Multivariable Calculus	4		
M 242 - Methods of Proof	3		
STAT 217Q - Intermediate Statistical Concepts or STAT 332 - Statistics for Scientists and Engineers	3		
Science Electives	4		

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 Above)	6		
University Core and Electives	6		
STAT 422 - Mathematical Statistics		3	
Math or Stat Elect (See List Above)		6	
University Core and Electives		6	
Year Total:	15	15	
Total Program Credits:			120

## 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.

### **Font Notice**

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.