## **Mathematics Major**

## **Area of Emphasis**

Students must complete requirements in one of the following areas of emphasis:

- Mathematics Emphasis
- Statistics Emphasis

## **Mathematics**

Code	Title	Credits
Supporting Courses		16
MATH 202	Calculus and Analytic Geometry I	
MATH 203	Calculus and Analytic Geometry II	
MATH 209	Multivariate Calculus	
MATH 260	Introductory Statistics	
Upper-Level Courses		29
MATH 305	Ordinary Differential Equations	
MATH 314	Proofs in Number Theory and Topology	
MATH 320	Linear Algebra and Matrix Theory	
MATH 323	Analysis	
MATH 328	Abstract Algebra	
MATH 355	Applied Mathematical Optimization	
MATH 385	Foundations of Geometry	
Elective Courses (choose one of the following):		
MATH 410	Complex Analysis	
MATH 425	Dynamical Systems	
MATH 492	Special Topics in Mathematics	
Total Credits		45

## **Statistics**

**Total Credits** 

Code	Title	Credits
Supporting Courses		16
MATH 202	Calculus and Analytic Geometry I	
MATH 203	Calculus and Analytic Geometry II	
MATH 209	Multivariate Calculus	
MATH 260	Introductory Statistics	
Upper-Level Courses		28
MATH 314	Proofs in Number Theory and Topology	
MATH 320	Linear Algebra and Matrix Theory	
MATH 323	Analysis	
MATH 329	Applied Regression Analysis	
MATH 355	Applied Mathematical Optimization	
MATH 360	Theory of Probability	
MATH 361	Mathematical Statistics	
Elective Courses (choose one of the following):		
MATH 430	Design of Experiments	
MATH 431	Multivariate Statistical Analysis	
MATH 492	Special Topics in Mathematics	