

Mathematics & Statistics Curriculum Guides

The following are only examples of four-year Mathematics degree programs and are subject to change without notice. Students should consult a Mathematics program advisor to ensure that they have the most accurate and up-to-date information available about a particular four-year degree option.

- Mathematics Emphasis
- Statistics Emphasis

Mathematics

An example: Four year plan for **Mathematics Major with Mathematics Emphasis**

120 credits necessary to graduate.

Plan is a representation and categories of classes can be switched. Check with your advisor.

Course	Title	Credits
Freshman		
Fall		
MATH 202	Calculus and Analytic Geometry I	4
MATH 260	Introductory Statistics	4
First Year Seminar		3
General Ed		3
Credits		14
Spring		
MATH 203	Calculus and Analytic Geometry II	4
MATH 314	Proofs in Number Theory and Topology	3
General Ed		3
General Ed		3
Elective		3
Credits		16
Sophomore		
Fall		
MATH 209	Multivariate Calculus	4
General Ed		3
General Ed		3
Elective		3
Elective		3
Credits		16
Spring		
MATH 320	Linear Algebra and Matrix Theory	4
General Ed		3
General Ed		3
Elective		3
Elective		3
Credits		16
Junior		
Fall		
MATH 305	Ordinary Differential Equations	4
MATH 328	Abstract Algebra	3
General Ed		3
Elective		3
General Ed		3
Credits		16
Spring		
MATH 355	Applied Mathematical Optimization	3
MATH 385	Foundations of Geometry	3
General Ed		3
Elective		3
Elective		3
Credits		15

Senior		
Fall		
MATH 323	Analysis	4
Elective		3
Elective		3
Elective		3
Elective		3
Credits		16
Spring		
Math Upper Level Elective	MATH 406 (Odd year); MATH 410 (Even year)	3
Elective		3
Elective		3
Elective		3
Elective		3
Credits		15
Total Credits		124

Statistics

An example: Four year plan for **Mathematics Major with Statistics Emphasis**

120 credits necessary to graduate.

Plan is a representation and categories of classes can be switched. Check with your advisor.

Course	Title	Credits
Freshman		
Fall		
MATH 202	Calculus and Analytic Geometry I	4
MATH 260	Introductory Statistics	4
First Year Seminar		3
General Ed		3
Credits		14
Spring		
MATH 203	Calculus and Analytic Geometry II	4
MATH 306	Statistical Programming	3
General Ed		3
General Ed		3
Elective		3
Credits		16
Sophomore		
Fall		
MATH 209	Multivariate Calculus	4
General Ed		3
General Ed		3
Elective		3
Elective		3
Credits		16
Spring		
MATH 314	Proofs in Number Theory and Topology	3
MATH 320	Linear Algebra and Matrix Theory	4
General Ed		3
General Ed		3
Elective		3
Credits		16
Junior		
Fall		
MATH 323 or MATH 329	Analysis (Only Odd years. Take MATH 329 otherwise.) or Applied Regression Analysis	4
MATH 360	Theory of Probability (Only Even years. Take an elective otherwise.)	3
General Ed		3
Elective		3
Elective		3
Credits		16

Spring		
MATH 355	Applied Mathematical Optimization	3
MATH 361	Mathematical Statistics (Only Odd years. Take an elective otherwise.)	3
General Ed		3
General Ed		3
Elective		3
Credits		15
Senior		
Fall		
MATH 329 or MATH 323	Applied Regression Analysis (Only Even years. Take MATH 323 otherwise.) or Analysis	4
MATH 360	Theory of Probability (Only Even years. Take an elective otherwise.)	3
Elective		3
Elective		3
Elective		3
Credits		16
Spring		
MATH 361	Mathematical Statistics (Only Odd years. Take an elective otherwise.)	3
Math Upper-level Elective	MATH 430 (Even year); MATH 431 (Odd year)	4
Elective		3
Elective		3
Elective		3
Credits		16
Total Credits		125