

# 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
<b>Freshman</b>		
<b>Fall</b>		
MATH 202	Calculus and Analytic Geometry I	4
First Year Seminar		3
General Ed		3
General Ed		3
Elective		3
		<b>Credits</b>
		<b>16</b>
<b>Spring</b>		
MATH 203	Calculus and Analytic Geometry II	4
MATH 260	Introductory Statistics	4
General Ed		3
General Ed		3
Elective		3
		<b>Credits</b>
		<b>17</b>
<b>Sophomore</b>		
<b>Fall</b>		
MATH 209	Multivariate Calculus	4
General Ed		3
General Ed		3
Elective		3
		<b>Credits</b>
		<b>13</b>
<b>Spring</b>		
MATH 314	Proofs in Number Theory and Topology	3
General Ed		3
Elective		3
Elective		3
Elective		3
		<b>Credits</b>
		<b>15</b>
<b>Junior</b>		
<b>Fall</b>		
MATH 305	Ordinary Differential Equations	4
MATH 320	Linear Algebra and Matrix Theory	4
General Ed		3
Elective		3
		<b>Credits</b>
		<b>14</b>
<b>Spring</b>		
MATH 328	Abstract Algebra	3
MATH 355	Applied Mathematical Optimization	3
General Ed		3

Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Senior</b>		
<b>Fall</b>		
MATH 323	Analysis	4
Elective		3
Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
MATH 385	Foundations of Geometry	3
Math Upper Level Elective		3
Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>121</b>

## 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
<b>Freshman</b>		
<b>Fall</b>		
MATH 202	Calculus and Analytic Geometry I	4
First Year Seminar		3
General Ed		3
General Ed		3
General Ed		2
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
MATH 203	Calculus and Analytic Geometry II	4
MATH 260	Introductory Statistics	4
General Ed		3
General Ed		3
Elective		2
<b>Credits</b>		<b>16</b>
<b>Sophomore</b>		
<b>Fall</b>		
MATH 209	Multivariate Calculus	4
MATH 320	Linear Algebra and Matrix Theory	4
General Ed		3
General Ed		3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
MATH 314	Proofs in Number Theory and Topology	3
General Ed		3
Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>15</b>
<b>Junior</b>		
<b>Fall</b>		
MATH 323	Analysis	4

MATH 360	Theory of Probability (if fall even)	3
General Ed		3
General Ed		3
Elective		3
Elective if not taking MATH 360		0
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
MATH 355	Applied Mathematical Optimization	3
MATH 361	Mathematical Statistics (if spring odd)	3
General Ed		3
Elective		3
Elective		3
Elective if not taking MATH 361		0
<b>Credits</b>		<b>15</b>
<b>Senior</b>		
<b>Fall</b>		
MATH 329	Applied Regression Analysis	4
MATH 360	Theory of Probability (if fall even and not already taken)	3
Elective		3
Elective		3
Elective if not taking MATH 360		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
MATH 361	Mathematical Statistics (if spring odd and not already taken)	3
Math Upper Level Elective (MATH 430 Design of Experiments or MATH 431 Multivariate Statistical Analysis)		4
Elective		3
Elective if not taking MATH 361		3
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>120</b>