MATHEMATICS AND STATISTICS MAJOR (BS)

Degree Requirements

Code	Title	Hours
General Education Requirements		
https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext		53-57
Major Requirements		**45**
A. Complete the following:		
MA 125	Calculus I	4
MA 126	Calculus II	4
ST 210	Stat Reason and Application	3
or ST 315	Applied Probability-Statistics	
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
ST 335	Applied Regression Analysis	3
B. Select 21 hours from see C and D below		
C. Select nine hours from the following:		9
MA 410	History of Mathematics - W	
MA 413	Abstract Algebra I - W	
MA 414	Abstract Algebra II - W	
MA 434	Topology	
MA 436	Numerical Analysis	
MA 437	Complex Variables	
MA 451	Probability	
MA 452	Financial Mathematics	
MA 458	Operations Research - W	
MA 467	Mathematical Logic	
MA 481	Cryptography	
MA 486	Advanced Calculus I	
MA 487	Advanced Calculus II	
MA 490	Special Topics	
MA 494	Directed Studies	
MA 499	Honors Senior Project - H	
ST 415	Stat Qual Control Reliability	
ST 425	Applied Linear Models	
ST 450	Categorical Data Analysis	
ST 460	Multivariate Stat Analysis	
ST 470	Theory of Statistics	
ST 475	Stat Computing and Graphics	
ST 480	Statistical Practicum - W	
ST 490	Special Topics	
ST 494	Directed Studies	
ST 499	Honor Senior Project - H	
D. Select 12 additional hours from the following:		12
MA 311	Intro to Number Theory	
MA 316	Linear Algebra II	
MA 320	Foundations of Math - W	
MA 321	Elementary Geometry	
MA 332	Differential Equations II	
MA 354	Comp Assist Math Modeling - W	
MA 367	Combinatorial Enumeration	
MA 390	Special Topics	
MA 410	History of Mathematics - W	
MA 413	Abstract Algebra I - W	
MA 414	Abstract Algebra II - W	
MA 434	Topology	
MA 436	Numerical Analysis	
MA 437	Complex Variables	
MA 451	Probability	
MA 452	Financial Mathematics	
MA 458	Operations Research - W	
MA 467	Mathematical Logic	
MA 481	Cryptography	
MA 486	Advanced Calculus I	
MA 487	Advanced Calculus II	
MA 490	Special Topics	
MA 494	Directed Studies	
MA 499	Honors Senior Project - H	
ST 340	Design-Analysis of Experiments	
ST 345	Sampling-Survey Techniques	
ST 350	Applied Time Series Analysis	
ST 355	Nonparametric Stat Methods	
ST 415	Stat Qual Control Reliability	
ST 425	Applied Linear Models	
ST 450	Categorical Data Analysis	
ST 460	Multivariate Stat Analysis	
ST 470	Theory of Statistics	
ST 475	Stat Computing and Graphics	
ST 480	Statistical Practicum - W	
ST 490	Special Topics	
ST 494	Directed Studies	
ST 499	Honor Senior Project - H	
Minor Requirements		
A minor is required for this degree program		18-24
A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE		**120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

Notes:

- Collaborate with the academic advisor to choose upper division electives appropriate for your educational goals.

Graduation Plan

(120 Total Hours)

Course	Title	Hours
First Year		
Fall		
MA 125	Calculus I	4
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Natural Scie with Lab	Area III, B [1]	4

Fine Arts	Area II, C [1]	3
	Hours	**16**
Spring		
MA 126	Calculus II	4
EH 102	English Composition II (or Honors)	3
CA 110	Public Speaking	3
Natural Sci with Lab	Area III, B [1]	4
	Hours	**14**
Second Year		
Fall		
MA 227	Calculus III	4
ST 315	Applied Probability-Statistics	3
Foreign Language I	Area II, D [1]	3
Math or Stats Elective	300 level or higher [1]	3
Minor course		3
	Hours	**16**
Spring		
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
Foreign Language II	Area II, D [1]	3
History	Area IV, A [1]	3
Minor Course		3
	Hours	**15**
Third Year		
Fall		
ST 335	Applied Regression Analysis	3
Math or Stats Elective	300 level or higher [1]	3
English Literature	Area II, B [1]	3
Social/Behavioral Elective	Area IV, B [1]	3
Minor Course		3
	Hours	**15**
Spring		
Math or Stats Elective	300 level or higher [1]	3
Math Elective	400 level [1]	3
Humanities	Area II, D [1]	3
Social/Behavioral Elective	Area IV, B [1]	3
Minor Course		3
	Hours	**15**
Fourth Year		
Fall		
Math or Stats Elective	300 level or higher [1]	3
MA 486	Advanced Calculus I	3
Humanities Elective	Area II, D [1]	3
Social/Behavioral Elective	Area IV, B [1]	3
Minor Course		3
	Hours	**15**
Spring		
MA 487	Advanced Calculus II	3
Minor Course		3
Minor Course		3
Minor Course/Elective		3
Elective		2
	Hours	**14**
	Total Hours	**120**

[1] See General Education Requirements