# Bachelor of Science with an Applied Mathematics and Statistics Major

## Bachelor of Science with an Applied Mathematics and Statistics Major Requirements

### First-Year Gateway Experience
- GFCL 100  Global Foundations of Character and Leadership
- GFOB 100  Global Foundations of Organizations and Business
- WRIT 106  Writing Workshop
- IDEA 101  Bryant IDEA: Innovation and Design Experience For All

## Applied Mathematics and Statistics Major Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>AM 230</td>
<td>Actuarial Statistics I</td>
</tr>
<tr>
<td>AM 231</td>
<td>Actuarial Statistics II</td>
</tr>
<tr>
<td>MATH 490</td>
<td>Applied Mathematics and Statistics Capstone Seminar</td>
</tr>
</tbody>
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Select seven of the following:

- AM 332  Actuarial Statistics III
- or MATH 350 Statistics II
- AM 333  Advanced Probability
- AM 340  Mathematical Interest Theory I
- AM 341  Mathematics of Finance, Insurance, and Pensions
- AM 342  Mathematical Interest Theory II
- AM 440  Actuarial Mathematical Models and Stochastic Calculus
- ECO 315  Econometrics
- MATH 226  Linear Algebra
- MATH 228  Discrete Structures
- MATH 354  Software Application for Mathematics
- MATH 391  Applied Mathematics and Statistics Internship
- MATH 409  Elementary Number Theory
- MATH 421  Statistical Analysis With R
- MATH 435  Geometry
- MATH 455  SAS Programming and Applied Statistics
- MATH 456  Statistical and Mathematical Decision Making
- MATH 460  Applied Data Mining
- MATH 461  Applied Multivariate Statistics
- MATH 470  Statistical Design and Analysis of Experiments
- MATH 475  Applied Analytics Using SAS
- MATH 488  Sports Statistics
- MATH 497  Directed Study in Mathematics

## Liberal Arts Core Requirements

- ECO 113  Microeconomic Principles
- ECO 114  Macroeconomic Principles
- LCS 121  Introduction to Literary Studies
- MATH 121  Calculus and Analytic Geometry I
- MATH 122  Calculus and Analytic Geometry II
- MATH 223  Calculus and Analytic Geometry III

## Liberal Arts Distributions - Modes of Thought

- Two Humanities Survey Courses
- Two Social Science Modes of Thought
- One Historical Mode of Thought (Upper Division)
- One Literary Mode of Thought (Upper Division)
- Two Scientific Modes of Thought

## Business Minor Requirement


## Electives

Subject to programmatic constraints, students may elect to take additional business courses beyond the required minor, not to exceed a combined total of 30 credit hours in the College of Business.

1. Students who choose MATH 455, MATH 460, MATH 461, and either MATH 475 or MATH 470 may earn SAS® certification in data mining. To earn certification, a student must achieve at least a 'B' average in all of these courses with no grade lower than a 'C' in any one course.

2. Include one Lab Science. One science course must be taken at the 300 or 400 level.

A minimum 122 credit hours required for graduation