

# 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 100G	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

MATH 226	Linear Algebra
AM 230	Actuarial Statistics I
AM 231	Actuarial Statistics II
AM 332	Actuarial Statistics III
MATH 460	Applied Data Mining
MATH 461	Applied Multivariate Statistics

Programming Elective (2 of the following): 21

MATH 354	Software Application for Mathematics
MATH 421	Statistical Analysis With R
MATH 455	SAS Programming and Applied Statistics
ISA 330	Programming for Data Science

Advanced Electives (3 of the following):

MATH 228	Discrete Structures
MATH 409	Elementary Number Theory
MATH 470	Statistical Design and Analysis of Experiments
MATH 475	Applied Analytics Using SAS
MATH 488	Sports Statistics
MATH 490	Applied Mathematics and Statistics Capstone Seminar
MATH 497	Directed Study in Mathematics

At most only 1 of the following Advanced Electives:

ECO 315	Econometrics
ECO 440	Machine Learning Applied to Economics
FIN 466	Data Analysis for Finance

### 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
Two Humanities Survey Courses	

### Liberal Arts Distributions - Modes of Thought

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 <sup>2</sup>

### Business Minor Requirement

Selection is made from a variety of business minors (Business Administration, Entrepreneurship, Finance, Global Supply Chain Management, Human Resource Management, Information Systems, International Business, Management, Marketing, Marketing Analytics, and Sales).

### 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.

- Students who choose MATH 455, MATH 460, MATH 461, and either MATH 475 or MATH 470 may earn SAS<sup>®</sup> 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.
- Include one Lab Science. One science course must be taken at the 300 or 400 level.

A minimum 122 credit hours required for graduation