

# College of Natural Sciences and Mathematics DEPARTMENT OF MATHEMATICS MATHEMATICS BACHELOR OF ARTS CLASS OF 2027

CONCENTRATION IN PROBABILITY AND STATISTICS

TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6	TERM 7	TERM 8
MATH 150A (GE B.4) 4 units	MATH 106 4 units	MATH 250A 4 units	MATH 280 4 units	MATH 307 4 units	MATH 335 4 units	MATH 438 4 units	MATH 435 4 units
MATH 180 4 units	MATH 107 4 units	MATH 207 4 units	MATH 320 (Computer Programming) 3 units	MATH 340 or Math 370 4 units	MATH 380 (Upper-Division Writing) 3 units	MATH 439 4 units	MATH 437 4 units
MATH 151A 1 unit	MATH 151B 1 unit	MATH 251A 1 unit	MATH 338 (GE B.5) 4 units	GE C.1 3 units	GE D.1 3 units	MATH 350 4 units	GE F 3 units
GE A.1 3 units	GE A.2 3 units	GE B.1 3 units	GE C.2 3 units	GE E 3 units	Upper Division GE D.3 3 units	GE Area C 3 units	Upper Division GE C.3 3 units
CNSM 101 (GE A.3) 3 units	GE B.2 3 units	GE D.2 3 units	GE B.3 1 unit	1 unit of elective to complete 120 units	American Government 3 units		
15 units	15 units	15 units	15 units	15 units	16 units	15 units	14 units

37	GE lower division
6	GE upper division
66	Mathematics Required Courses
3	Mathematics Supporting Courses
4	Pick 1 of 2 Courses
1	Electives
3	University Requirement
120	TOTAL UNITS

## INSTRUCTIONS FOR COMPLETING THE MATHEMATICS BACHELOR OF ARTS

- 1. Meet with your assigned faculty advisor each semester to plan and review your academic progress.
- 2. Visit your College of Natural Sciences and Mathematics Student Success Team in MH 488 to review GE and graduation requirements.
- 3. Complete GE courses in areas A1, A2, and A3 with a C- or higher. Complete a total of 12 units in GE Area B. One GE Course in B, C, D, or E must double-count as a Z course. Check your Titan Degree Audit for courses that appear in both categories.
- 4. <u>All</u> Mathematics courses must be completed with a grade of C or higher.
- 5. Apply for Graduation through your Student Center at the start of Term 7.



#### **MATHEMATICS BACHELOR OF ARTS PROBABILITY & STATISTICS Concentration**

The Math Major is for students who are preparing to (1) enter a graduate study in mathematics, (2) seek math-related careers in business, industry or government, or (3) pursue a career in teaching.

### MATHEMATICS CORE AND SUPPORTING COURSES

• Complete the courses listed below (42 units total)

Course	Course Title	
MATH 180	Strategies of Problem Solving (4)	
MATH 150A	Calculus I (4)	
MATH 151A	Calculus I Workshop (1)	
MATH 106	Calculus II (4)	
MATH 107	Intro Computational Linear Algebra (4)	
MATH 151B	Calculus II Workshop (1)	
MATH 250A	Calculus III (4)	
MATH 251A	Calculus III Workshop (1)	
MATH 207	Intro Linear Algebra and Differential Equations (4)	
MATH 280	Strategies of Proof (4)	
MATH 307	Linear Algebra (4)	
MATH 350	Advanced Calculus I (4)	
MATH 380	History of Mathematics (3, upper div writing req)	

• Probability & Statistics Concentration Requirements (31 units total) Probability & Statistics Required Courses (27 units)

MATH 320	Intro to Mathematical Computation (3)
MATH 335	Mathematical Probability (4)
MATH 338	Statistics Applied to Natural Sciences (4)
MATH 435	Mathematical Statistics (4)
MATH 437	Modern Approaches to Data Analysis (4)
MATH 438	Introduction to Stochastic Processes (4)
MATH 439	Data Analysis (4)

Probability & Statistics Elective Courses (4 units)

MATH 340	Numerical Analysis (4)
MATH 370	Mathematical Model Building (4)

#### GENERAL EDUCATION REQUIREMENTS

• Area A Core Competencies - Complete one course in each subarea for a total of 9 units of lower division.

Subarea	Title	
A1	Oral Communications	
A2	Written Communication	
A3	Critical Thinking (CNSM 101)	

• Area B Scientific and Quantitative Reasoning - Complete one course in each subarea; the course in B3 must be associated with the course taken to satisfy B1 or B2. Area B courses must include 9 lower division and 3 upper division units (\*).

Subarea	Title	
B1	Physical Science	
B2	Life Science	
B3	Laboratory Experience	
B4	Mathematics/Quantitative Reasoning	
B5 (*)	Implications/Explorations in Math and Natural Sci	

• Area C Arts and Humanities - Complete 3 units from C.1; 3 units from C.2; 3 units from C.3; and 3 units from either C.1 or C.2 for a total of 9 lower division and 3 upper division units (\*).

Subarea	Title
C1	Introduction to the Arts
C2	Introduction to the Humanities
C3 (*)	Explorations in the Arts/Humanities

• Area D Social Sciences - Complete 9 lower and 3 upper division units (\*).

Area	Title	
D1	Introduction to the Social Sciences	
D2	American History, Institutions, and Values	
D3(*)	Explorations in the Social Sciences	

#### • Area E Lifelong Learning and Self Development - Complete 3 units.

• Area F Ethnic Studies - Complete 3 units.

• Area Z Cultural Diversity. (3 units). One GE Course in B, C, D, or E must double-count as a Z course.

\* Graduation Requirement - An American Government course is required for students in this catalog year. Please look at your TDA.