



College of Natural Sciences and Mathematics

DEPARTMENT OF MATHEMATICS

MATHEMATICS BACHELOR OF ARTS

CLASS OF 2027

CONCENTRATION IN APPLIED MATHEMATICS

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 207 4 units	MATH 280 4 units	MATH 307 4 units	MATH 310 4 units	MATH 350 4 units	MATH 406/437/470 4 units
MATH 180 4 units	MATH 107 4 units	MATH 250A 4 units	MATH 320 3 units	MATH 340 4 units	MATH 335 4 units	MATH 370 4 units	MATH 406/437/470 4 units
GE A.1 3 units	GE B.1 3 units	GE D.1 3 units	MATH 338 (GE B.5) 4 units	MATH 380 (Upper Division Writing) 3 units	GE F 3 units	MATH 440 4 units	GE D.2 3 units
CNSM 101 (GE A.3) 3 units	GE A.2 3 units	GE B.2 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
	GE C.1 3 units		GE B.3 1 unit		American Government 3 units		
14 units	17 units	14 units	15 units	14 units	17 units	15 units	14 units

37	GE lower division
6	GE upper division
74	Mathematics Required Courses
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. **All** 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
APPLIED MATHEMATICS 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 (39 units total)

Course	Course Title
MATH 180	Strategies of Problem Solving (4)
MATH 150A	Calculus I (4)
MATH 106	Integral Calculus and Differential Equations (4)
MATH 107	Intro Computational Linear Algebra (4)
MATH 250A	Calculus III (4)
MATH 207	Differential Equations and Linear Algebra (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)

- Applied Mathematics Concentration Requirements (35 units total)

Applied Mathematics Required Courses (23 units)

MATH 310	Ordinary Differential Equations (4)
MATH 320	Intro Computational Mathematics (3)
MATH 335	Mathematical Probability (4)
MATH 338	Statistics for the Natural Sciences (4)
MATH 340	Numerical Analysis (4)
MATH 370	Mathematical Model Building (4)

Applied Mathematics Elective Courses (12 units)

MATH 406	Introduction to Partial Differential Equations (4)
MATH 437	Modern Data Analysis (4)
MATH 440	Advanced Numerical Analysis (4)
MATH 470	Advanced 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.