

ACADEMIC MAP

MATHEMATICS-APPLIED/INDUSTRIAL TRACK
Bachelor of Science



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1

SEMESTER 1 - FALL	CREDITS	COMPLETED
UNIV 1101 UNIVERSITY SEMINAR I	1	✓
MATH 2413 CALCULUS I	4	
POLS 2305 U.S. GOVERNMENT AND POLITICS	3	
COMMUNICATION CORE REQUIREMENT	3	
AMERICAN HISTORY CORE REQUIREMENT	3	

TOTAL CREDITS: 14

2

SEMESTER 2 - SPRING	CREDITS	COMPLETED
UNIV 1102 UNIVERSITY SEMINAR II	1	
MATH 2414 CALCULUS II	4	
POLS 2306 STATE AND LOCAL GOVERNMENT	3	
COMMUNICATION CORE REQUIREMENT	3	
AMERICAN HISTORY CORE REQUIREMENT	3	
MINOR COURSE	3	

TOTAL CREDITS: 17

YEAR 1

3

SEMESTER 3 - FALL	CREDITS	COMPLETED
COSC 1330 PROGRAMMING FOR SCIENTISTS, ENGINEERS, AND MATHEMATICIANS	3	
MATH 2415 CALCULUS III	4	
PHYS 2425 UNIVERSITY PHYSICS I	4	
MATH 3313 FOUNDATIONS OF NUMBER THEORY	3	
LANGUAGE, PHILOSOPHY & CULTURE CORE REQUIREMENT	3	

TOTAL CREDITS: 17

4

SEMESTER 4 - SPRING	CREDITS	COMPLETED
PHYS 2426 UNIVERSITY PHYSICS II	4	
MATH 3315 DIFFERENTIAL EQUATIONS	3	
MATH 3314 FOUNDATIONS OF REAL NUMBERS	3	
MINOR COURSE	3	
CREATIVE ARTS CORE REQUIREMENT	3	

TOTAL CREDITS: 16

YEAR 2

5

SEMESTER 5 - FALL	CREDITS	COMPLETED
MATH 3311 LINEAR ALGEBRA	3	
COSC 3385 NUMERICAL METHODS	3	
MATH UPPER ELECTIVE	3	
MINOR COURSE	3	
ELECTIVE (TO MEET 120 HRS)	3	

TOTAL CREDITS: 15

6

SEMESTER 6 - SPRING	CREDITS	COMPLETED
MATH 3345 STATISTICAL MODELING AND DATA ANALYSIS	3	
MATH UPPER ELECTIVE	3	
MINOR COURSE	3	
SOCIAL AND BEHAVIORAL SCIENCES CORE REQUIREMENT	3	
ELECTIVE (TO MEET 120 HRS)	3	

TOTAL CREDITS: 15

YEAR 3

7

SEMESTER 7 - FALL	CREDITS	COMPLETED
MATH 4185 SENIOR MATHEMATICS SEMINAR	3	
MATH 4301 INTRODUCTION TO ANALYSIS	3	
MATH UPPER ELECTIVE	3	
MINOR COURSE	3	
ELECTIVE (TO MEET 120 HRS)	3	

TOTAL CREDITS: 13

8

SEMESTER 8 - SPRING	CREDITS	COMPLETED
MATH 4285 MATHEMATICS MAJOR CAPSTONE	2	
MINOR COURSE	3	
ELECTIVE (TO MEET 120 HRS)	3	
ELECTIVE (TO MEET 120 HRS)	3	
ELECTIVE (TO MEET 120 HRS)	3	

TOTAL CREDITS: 14

YEAR 4



CAREER MAP

MATHEMATICS-APPLIED/INDUSTRIAL TRACK

Bachelor of Science



The mathematics program provides its majors and graduate students with preparation for careers in education, science, and commerce, as well as providing a solid foundation for further study in mathematics. In support of the graduate program, the mathematics faculty pursues scholarship in mathematics, applications of mathematics, and instruction in mathematics. Finally, the mathematics program serves the community by providing its expertise to local schools, industry, and businesses. There are three tracks for the degree: Secondary Mathematics Teaching, leading to teacher certification; Applied/Industrial Mathematics, preparing students for employment; and General Mathematical Studies, preparing students for further studies in mathematics.

CONTACT INFORMATION

Career Counselor:

Career and Professional Development Center
UC 304 | 361.825.2628
career.center@tamucc.edu

Internship Coordinator:

Alexey Sadovski
CI 338 | 361.825.2477
alexey.sadovski@tamucc.edu

Department Contact:

Department of Mathematics & Statistics
CI 301 | 361.825.3928
math@tamucc.edu

ADDITIONAL SOURCES OF INFORMATION

1. American Mathematical Society
2. Mathematical Association of America
3. National Council for Teachers in Mathematics
4. Society for Industrial and Applied Mathematics

STUDENT ORGANIZATIONS

- Math Club
- Student Council of Math and Science Teachers

CAREER OPTIONS

• Bookkeeper	• Mathematician
• Database Administrator	• Math Teacher
• Logistician	• Accountant
• Actuary	• Computer Systems Analyst

SKILLS/ATTRIBUTES

• Critical Thinking/Problem Solving
• Teamwork/Collaboration
• Professionalism/Work Ethic
• Oral / Written Communication
• Leadership
• Digital Technology
• Career Management
• Global/Multicultural Fluency
• Analytical
• Logical Thinking
• Math