# **ACADEMIC MAP**

# Applied/Industrial Track Mathematics, Bachelor of Science



First Year		
Fall		Hours
UNIV 1101	University Seminar I	1
ENGL 1301	Writing and Rhetoric I	3
MATH 2413	Calculus I	4
POLS 2305	U.S. Government and Politics	3
American Histor	y Core Requirement	3
	Hours	14
Spring		
UNIV 1102	University Seminar II	1
ENGL 1302	Writing and Rhetoric II	3
or COMM 131		
MATH 2414	Calculus II	4
POLS 2306	State and Local Government	3
	y Core Requirement	3
Minor Course		3
	Hours	17
Second Year		
Fall		
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, Philos	sophy & Culture Core Requirement	3
	Hours	17
Spring		
PHYS 2426	University Physics II	4
MATH 3315	Differential Equations	3
MATH 3314	Foundations of Real Numbers	3
Minor Course		3
Creative Arts Co	re Requirement	3
	Hours	16

Third Year		
Fall		
MATH 3311	Linear Algebra	3
COSC 3385	Numerical Methods	;
MATH Upper El	ective	3
Minor Course		3
Elective (to me	et 120 hrs)	3
	Hours	15
Spring		
MATH 3345	Statistical Modeling and Data Analysis	;
MATH Upper Elective		
Minor Course		;
Social and Behavioral Sciences Core Requirement		
Elective (to meet 120 hrs)		
	Hours	1:
Fourth Year		
Fall		
MATH 4185	Senior Mathematics Seminar	
MATH 4301	Introduction to Analysis	;
MATH Upper El	ective	
Minor Course		
Elective (to me	et 120 hrs)	(
	Hours	13
Spring		
MATH 4285	Mathematics Major Capstone	:
Minor Course		
Elective (to meet 120 hrs)		
Elective (to meet 120 hrs) Elective (to meet 120 hrs)		3
Total Hours		12



# **CAREER MAP**

# **Applied/Industrial Track- Mathematics**





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.

#### **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

# **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

## STUDENT ORGANIZATIONS

- Math Club
- Student Council of Math and Science Teachers

## 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

### CAREER OPTIONS

- Data Analyst/Data Scientist
- Statistical Analyst
- Database Administrator
- Math Teacher
- Logistician
- Accountant
- Actuary
- Computer Systems Analyst
- Quantitative Analyst