

Degree: **Bachelor of Science**  
 Major: **Mathematics**  
 Emphasis: **Applied Mathematics** \_APM

**UNIVERSITY CORE CURRICULUM (Common across majors)**

		SCH	PREREQUISITES
_____	COMM 1311	Foundations of Communication	3
_____	ENGL 1302	Writing and Rhetoric	3
_____	See Catalog	Language, Philosophy & Culture	3
_____	HIST 1301	US History I	3
_____	HIST 1302	US History II	3
_____	POLS 2305	US GOVT	3
_____	POLS 2306	TX GOVT	3
_____	See Catalog	Creative Arts	3
_____	See Catalog	Social Science	3
			<b>27</b>

**UNIVERSITY CORE CURRICULUM Specific to this major (SEE NOTE BELOW)**

_____	MATH 2413	Calculus I	-3	Math 1314+1316 or Math 2312 or beyond
_____	PHYS 2425	UNIVERSITY PHYSICS I	-3	Math 2413
_____	PHYS 2426	UNIVERSITY PHYSICS II	-3	Math 2414
_____	CAO Option 1	labs from PHYS 2425,2426, and MATH 2413	-3	varies
_____	CAO Option 2	MATH 2414	-3	Math 2413

**NOTE: Taking core curriculum classes other than those listed in the major specific university core classes section above will result in you taking additional courses that may not be required to complete your degree. Please consult your major academic advisor for more details.**

**SUPPORTING COURSES**

_____	PHYS 2425	UNIVERSITY PHYSICS I Can also count in core	4	Math 2413
_____	PHYS 2426	UNIVERSITY PHYSICS II Can also count in core	4	Math 2414

**MATHEMATICS CORE**

_____	MATH 2305	DISCRETE MATH I	3	Math 1314+1316 or Math 2312 or beyond
_____	MATH 2413	CALCULUS I Can also count in core	4	Math 1314+1316 or Math 2312 or beyond
_____	MATH 2414	CALCULUS II Can also count in core	4	Math 2413
_____	*MATH 3311	LINEAR ALGEBRA	3	Math 2413
_____	*MATH 3313	FNDTN NUMBER THEORY (FL)	3	Math 2414, Math 2305
_____	MATH 2415	CALCULUS III	4	Math 2414
_____	COSC 1330	Programming for Scientists, Engineers & Mather Can use COSC 1435, or 1436, or 1330	3	

**APPLIED/INDUSTRIAL MATHEMATICS TRACK CORE (12)**

_____	MATH 3314	FOUNDATIONS OF REAL NUMBERS (SP)	3	Math 2414, Math 2305
_____	*MATH 3315	DIFF EQUATIONS	3	Math 2414
_____	*MATH 3345	STATISTICAL MODELING AND DATA ANALYSIS	3	Math 2414, COSC 1330
FALL	*COSC 3385	NUMERICAL METHODS	3	COSC 1435 or COSC 1330 & other courses recommended
_____	MATH 4301	INTRODUCTION TO ANALYSIS	3	

**MATHEMATICS ADVANCED SEQUENCE (6 hours)**

Choose 2 courses from the Following :

_____	MATH 4315	PARTIAL DIFFERENTIAL EQUATIONS	3	MATH 3315, MATH 3470
_____	MATH 4342	INTRO TO MATHEMATICAL STATISTICS	3	MATH 3470 MATH 3342 recommended
_____	*MATH 4385	APPL MODELING (SP)	3	MATH 3315, MATH 3342 and Sr. standing

**UPPER MATH ELECTIVES**

(6 SCH)

_____	MATH 3000/4000 COURSE		3	
_____	MATH 3000/4000 COURSE		3	
_____			3	
_____			3	
_____			3	
_____			3	
_____			3	

**FREE ELECTIVES TO REACH UNIVERSITY MINIMUM REQUIREMENTS (12-19 SCH)**

_____	9 SCH UD electives		9	
_____	3-10 SCH any level elective (UCCP included here)		3	

**University Requirements**

Minimum Total Hours for degree:	120	Minimum Major grade point average (g.p.a.):	2.25
*Upper Division minimum total hours: 36 on plan W/ minor(6UD)	45	First Year Seminar Requirement: UCCP 1101/1102	2
*Upper Division minimum residency hours:	36		
*Upper Division minimum major residency hrs:	12		
Cumulative TAMU-CC minimum g.p.a.:	2		
Foreign Language Requirement:	see catalog		