NAME:_____   WT ID:_____   DATE:_____

Mathematics
College of Engineering
Classroom Center, Room 420   (806)651-2540

Bachelor of Science Degree
BS.MATH (115)

CORE CURRICULUM COURSES: 42 HOURS	HRS	
Communication (Core 10)		
ENGL 1301 Intro. to Academic Writing & Argumentation **OR** ENGL 1311 Writing About Ideas	3	
COMM 1315, 1318, or 1321	3	
Mathematics (Core 20)		
See **University Core Requirements** below	(3)	
Life and Physical Sciences (Core 30)		
See **University Core Requirements** below	(6)	
Language, Philosophy and Culture (Core 40)		
ANTH 2351; ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311, 2312*/**, 2313, 2315*/**, or 2371 **Choose 1**	3	
Creative Arts (Core 50)		
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 **Choose 1**	3	
American History (Core 60)		
HIST 1301, 1302, 2381, 2382, 2301 **Choose 2**	6	
Government/Political Science (Core 70)		
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Core 80)		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; GEOG 1302; PSYC 2301; SOCI 1301 **Choose 1**	3	
Component Area Option (Core 90)		
See **University Core Requirements** below	(6)	

MATHEMATICS MAJOR REQUIREMENTS: 59-63 HOURS
A grade of "C" or better must be earned in all courses required for major.

UNIVERSITY CORE REQUIREMENTS: 15 HOURS ♦		
CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]	3	
CORE 30 PHYS 1401*[3] and PHYS 1402*[3] **OR** PHYS 2425*[3] and 2426*[3]	6	
CORE 90 ENGL 1302*, 1312*, or 2311*	3	
CORE 90 PHYS 1401L[1] and 1402L[1] **or** 2425L[1] and 2426L[1] **AND** IDS 1071[1], MATH 2412[1], or 2413[1]	3	

MATHEMATICS REQUIREMENTS: 44-48 HOURS		
MATH 1316* Plane Trigonometry **OR** MATH 2412* Pre-Calculus (if not taken to satisfy Core 20)	0-4	
MATH 2413* Calculus I	4	
MATH 2414* Calculus II	4	
MATH 3311* Linear Algebra	3	
MATH 3325* Introduction to Proofs	3	
MATH 4341* Advanced Calculus	3	
Take 18 semester hours from: MATH 3321* Probability MATH 3340* Calculus III MATH 3342* Differential Equations I MATH 3343* Differential Equations II MATH 4310* Modern Algebra with Cryptography MATH 4340* Complex Variables I MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis	18	

CS 1315* Programming Fundamentals **OR** CIDM 1315 Programming Fundamentals	3	
CS 1337, 1337L Introduction to Object-Oriented Programming **OR** CIDM 2315 Programming Business Applications	3	
MATH 4370* *(MPS 4370)* Senior Investigations **OR** MPS 4393* Math/Physical Science/Engineering Technology Honors	3	

BACHELOR OF SCIENCE REQUIREMENTS Covered by requirements for major.	OPTION	
ELECTIVES: 30-34 HOURS BY ADVISEMENT ♦		
ADVANCED ELECTIVES Additional hours to provide a minimum of 36 advanced (3000- or 4000-level) hours.	6	
ELECTIVES (ANY LEVEL)	24-28	
MINIMUM HOURS REQUIRED FOR DEGREE	**120**	

* Indicates prerequisites—see catalog for more information.
** Or an equivalent course (second year, second semester) in a foreign language.

NOTE: This is NOT a degree plan. All undergraduate students must request an official degree plan from their academic dean's office by the time they have completed 30 credit hours.

WTAMU ADVISING SERVICES – 2023-2024 Curriculum Guide

Major: Mathematics, B.S.   **Major Code: 115**

Year 1: Fall

CORE 10 (Communication) – ENGL 1301 or 1311	3
CORE 20 (Math) – MATH 1314, 1316, 1324, 2412, or 2413[1]	3-4
CORE – See checklist for options[1]	3
CORE – See checklist for options[1]	3
Total:	12-13

Year 1: Spring

CORE 10 (Communication) – COMM 1315, 1318 or 1321	3
MATH 2413 Calculus I	4
CORE 30 (Life & Phys. Sci.) – PHYS 1401/1401L or 2425/2425L - 4th hour counts towards Core 90	4
CORE – See checklist for options[1]	3
Total:	14

Year 2: Fall

MATH 2414 Calculus II	4
CORE 30 (Life & Phys. Sci.) – PHYS 1402/1402L or 2426/2426L - 4th hour counts towards Core 90	4
CS 1315 Programming Fundamentals **or** CIDM 1315 Programming Fundamentals	3
CORE – See checklist for options[1]	3
CORE – See checklist for options[1]	3
Total:	17

Year 2: Spring

MATH 3311 Linear Algebra	3
MATH Elective – Take 1st of 6 courses from: MATH 3321, 3340, 3342, 3343, 4310, 4340, 4361, 4362	3
CS 1337/1337L Programming Principles I **or** CIDM 2315 Programming Business Applications	3
CORE – See checklist for options[1]	3
Advanced Elective (3000- or 4000-level course)	3
Total:	15

Year 3: Fall

MATH 3325 Introduction to Proofs	3
MATH Elective – Take 2nd of 6 courses from: MATH 3321, 3340, 3342, 3343, 4310, 4340, 4361, 4362	3
MATH Elective – Take 3rd of 6 courses from: MATH 3321, 3340, 3342, 3343, 4310, 4340, 4361, 4362	3
CORE – See checklist for options[1]	3
Advanced Elective (3000- or 4000-level course)	3
Total:	15

Year 3: Spring

MATH Elective – Take 4th of 6 courses from: MATH 3321, 3340, 3342, 3343, 4310, 4340, 4361, 4362	3
MATH Elective – Take 5th of 6 courses from: MATH 3321, 3340, 3342, 3343, 4310, 4340, 4361, 4362	3
Elective	3
Elective	3
Elective	3
Total:	15

Year 4: Fall

MATH Elective – Take 6th of 6 courses from: MATH 3321, 3340, 3342, 3343, 4310, 4340, 4361, 4362	3
CORE – See checklist for options[1]	3
Elective	3
Elective	3
Elective	3
Total:	15

Year 4: Spring

MATH 4341 Advanced Calculus	3
MATH 4370 Senior Investigations **or** MPS 4393 Math/Physical Science/Engineering Honors	3
Elective	3
Elective	3
Elective	3
Total:	15

[1] **CORE:** Math majors are required to take specific courses for Core 20, Core 30, and Core 90. For all other categories, they may select from any available options (see degree checklist). Apart from the major-specific core requirements, there is no set order in which core courses must be taken.

Identified Marketable Skills	Top Three Local Employers or Industries/Professional Programs/Possible Career Opportunities

Additional notes:

- The core curriculum must total exactly 42 hours; excess hours must be moved to the major as an elective or a major requirement and stay within the 120-hour requirement or approved total submitted to the Coordinating Board for degree requirements. Some majors specify particular courses to meet core curriculum requirements when options are available.
- At least 36 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU. A maximum of six semester hours in religion (RELI) and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

DISCLAIMER: This curriculum guide should be used in conjunction with the corresponding degree checklist for general planning purposes only. The degree checklist (later a student's official degree plan) should be referred to as the comprehensive list of all courses required for the degree. An official degree plan is required after completing 30 hours. Students should always seek the advice of their academic adviser before scheduling classes.