NAME:_____ WT ID:_____ DATE:_____

Mathematics (Grades 7-12) Certification
Department of Mathematics
Classroom Center, Room 420   (806)651-2540

CORE CURRICULUM COURSES: 42 HOURS ♦	HRS	
Communication (Code 10)		
ENGL 1301 Introduction to Academic Writing and Argumentation	3	
COMM 1315, 1318, or 1321	3	
Mathematics (Code 20)		
See **University Core Requirements** below	(3)	
Life and Physical Sciences (Code 30)		
See **University Core Requirements** below	(6)	
Language, Philosophy and Culture (Code 40)		
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*/**, or 2371 **Choose 1**	3	
Creative Arts (Code 50)		
ARTS 1303, ARTS 1304; DANC 2303; HUMA 1315; MUSI 1306 **or** 1208 **and** 1209* (extra MUSI hour moves to Code 90); or THRE 1310 **Choose 1**	3	
American History (60)		
HIST 1301, 1302, 2301, 2381 **Choose 2**	6	
Government/Political Science (Code 70)		
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Code 80)		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 **Choose 1**	3	
Component Area Option (Code 90)		
See **University Core Requirements** below	(6)	

MATHEMATICS (GRADES 7-12) CERTIFICATION REQUIREMENTS: 92-96 HOURS A grade of "C" or better and a 2.75 GPA is required.^

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* 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: 38-42 HOURS A 2.75 combined GPA^ is required for Mathematics, Other Degree, and Supporting Area requirements below.		
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 3306* Secondary Mathematics and Technology	3	
MATH 3321* Probability **OR** MATH 4361* Engineering Statistics	3	
MATH 3325* Introduction to Proofs	3	
MATH 3331* Secondary Principles in Geometry	3	
MATH 4310* Modern Algebra with Cryptography	3	
MATH 4341* Advanced Calculus	3	

Bachelor of Science Degree
Major: Mathematics
BS.MATH.EDS (465) – TExES Exams: 160, 235

Select four courses from: MATH 3321* Probability **OR** MATH 4361* Statistics for the Sciences (one not taken above) MATH 3311* Linear Algebra MATH 3340* Calculus III MATH 3342* Differential Equations I MATH 3343* Differential Equations II MATH 4340* Complex Variables I MATH 4362* Introduction to Numerical Analysis	12	

OTHER DEGREE REQUIREMENTS: 6 HOURS		
CS 1315* Programming Fundamentals **OR** CIDM 1315 Programming Fundamentals	3	
MATH 4370* (MPS 4370) Senior Investigations **OR** MPS 4393* Math/Physical Science/Engineering Technology Honors	3	

EDUCATION REQUIREMENTS: 27 HOURS (A grade of "C" or better and 2.75 GPA is required.^)		
EDPD 3340* Educational Foundations	3	
EDPD 4340* Classroom Management	3	
EDRD 4386* Secondary Reading in Content Area	3	
EDSE 4320* Teaching in Secondary Schools I	3	
EDSE 4330* Teaching in Secondary Schools II	3	
EDSE 4340* Student Teaching—Secondary	3	
EDSE 4341* Student Teaching—Secondary	3	
EPSY 3341* Educational Psychology	3	
EPSY 3350 Children with Special Needs	3	

SUPPORTING AREA: 6 HOURS Take six hours from a supporting area: CS, Science or MATH.		
CS, Science or MATH course	3	
CS, Science or MATH course	3	

ELECTIVES: 0-1 HOUR ♦		
ELECTIVE	0-1	
TOTAL HOURS REQUIRED FOR DEGREE	**120-123**	

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

NOTE: At least 39 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU, and 30 of the final 36 hours counted toward the degree 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.

NOTE: This is NOT a degree plan. After completing 30 hours, students are encouraged to request an official degree plan by using the online Degree Plan Request form. The dean's office of the School of Engineering, Computer Science and Mathematics, located in the Engineering and Computer Science Building, Room 119 (or call 806-651-5257), can answer questions about the degree plan. Students who have completed 45 hours will not be allowed to progress without requesting a degree plan.

Mathematics (Grades 7-12) Certification
Department of Mathematics
Bachelor of Science Degree
BS.MATH.EDS

CC 420   651-2540   Degree Plan Total Hours: 123   Major Code: 465

First Year

Fall	Hrs		Spring	Hrs
Hours 13		**Hours 16**		
CORE 10-ENGL 1301	3		CORE 90-ENGL 1302 or 2311	3
CORE 20-MATH 1314	3		MATH 2412**	4
CORE 10-COMM 1315, 1318 or 1321	3		CORE 80 See Checklist for Options	3
CORE 60-HIST 1301, 1302, 2301 or 2381	3		CORE 60-HIST 1301, 1302, 2301 or 2381	3
CORE 90-IDS 1071*	1		CS OR CIDM 1315	3

Second Year

Fall	Hrs		Spring	Hrs
Hours 17		**Hours 17**		
MATH 2413	4		MATH 2412	4
PHYS 1401/1401L or 2425/2425L	4		PHYS 1402/1402L or 2426/2426L	4
CS, SCI MATH ELECT See Checklist for Options	3		MATH 3331	3
CORE 70-POSC 2305 or 2306	3		CORE 70-POSC 2305 or 2306	3
CORE 40 See Checklist for Options	3		EPSY 3350	3

Third Year

Fall	Hrs		Spring	Hrs
Hours 15		**Hours 12**		
MATH 3325	3		MATH ELECITVE See Checklist for Options	3
MATH ELECTIVE See Checklist for Options	3		MATH 3306	3
EDPD 3340	3		MATH 4310	3
CS, SCI MATH ELECT See Checklist for Options	3		EPSY 3341	3
CORE 50 See Checklist for Options	3			

Fourth Year

Fall	Hrs		Spring	Hrs
Hours 12		**Hours 12**		
MATH ELECTIVE See Checklist for Options	3		MATH ELECTIVE See Checklist for Options	3
EDRD 4386	3		MATH 4341	3
EDSE 4320	3		EDSE 4330	3
MATH 4361 or 3321	3		MATH OR MPS 4370 or 4393	3

Fifth Year

Fall	Hrs		Spring	Hrs
Hours 9		**Hours**		
EDPD 4340	3			
EDSE 4340	3			
EDSE 4341	3			

Notes: * MATH 2412 (1) or MATH 2413 (1) can substitute for IDS 1071 (1) if these are used to satisfy CORE 20 requirements. (If not taking IDS 1071, suggest taking a core out of Spring, 1st year during fall 1st year.)

** MATH 2412 is recommended over MATH 1316 for this degree plan but it will be accepted.

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 45 hours. Students should always seek the advice of their academic adviser before scheduling classes.

5/4/15