# **West Texas A&M University Advising Services Degree Checklist** 2016-2017

(For assistance completing this form, contact Advising Services at 806-651-5300)

NAME:	WT ID:	DATE:

## **Mathematics 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	3	
Creative Arts (Code 50)	1	
ARTS 1303, ARTS 1304; DANC 2303; HUMA 1315; MUSI 1306 <b>or</b> 1208 <b>and</b> 1209* (extra MUSI hour moves to Code 90); Or THRE 1310 <b>Choose 1</b>	3	
American History (Code 60)		
HIST 1301, 1302, 2301, 2381 Choose 2	6	
Government/Political Science (Code 70)		
POSC 2305 and 2306	6	
	U	oxdot
Social and Behavioral Sciences (Code 80)		l I
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1	3	
Component Area Option (Code 90)		1
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	r majo	r.
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]	6	
PHYS 2425*[3] and 2426*[3]		
CORE 90 ENGL 1302* or 2311*	3	•
CORE 90 PHYS 1401L[1] and 1402L[1] or 2425L[1] and 2426L[1] AND	3	
IDS 1071[1], MATH 2412[1], or 2413[1]		
MATHEMATICS REQUIREMENTS: 44-48 HOURS		
MATH 1316* Plane Trigonometry <b>OR</b> MATH 2412* Pre-Calculus (if not taken to satisfy Core 20)	0-4	
MATH 2413* Calculus I	4	
MATH 2414* Calculus II	4	
MATH 3325* Introduction to Proofs	3	
MATH 4341* Advanced Calculus	3	
Take 21 semester hours from:		
MATH 3311* Linear Algebra		
MATH 3321* Probability	21	
MATH 3340* Calculus III		
MATH 3342* Differential Equations I cont.⇒		

# **Bachelor of Science Degree BS.MATH (115)**

MATH 4340* Complex Variables I MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis  CS 1315* Programming Fundamentals OR CIDM 1315 Programming Fundamentals  MATH 3306*/*** Secondary Mathematics and Technology OR CS 1337, 1337L Introduction to Object-Oriented Programming ***  MATH 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology Honors  BACHELOR OF SCIENCE REQUIREMENTS Covered by requirements for major.  ELECTIVES: 30-34 HOURS BY ADVISEMENT *  ADVANCED ELECTIVES Additional hours to provide a minimum of 39 advanced (3000- or 4000-level) hours.  ELECTIVES (ANY LEVEL)	,	21-28	
MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis  CS 1315* Programming Fundamentals OR CIDM 1315 Programming Fundamentals  MATH 3306*/*** Secondary Mathematics and Technology OR CS 1337, 1337L Introduction to Object-Oriented Programming ***  MATH 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology Honors  BACHELOR OF SCIENCE REQUIREMENTS Covered by requirements for major.  ELECTIVES: 30-34 HOURS BY ADVISEMENT •  ADVANCED ELECTIVES Additional hours to provide a minimum of 39 advanced (3000- or			
MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis  CS 1315* Programming Fundamentals OR CIDM 1315 Programming Fundamentals  MATH 3306*/*** Secondary Mathematics and Technology OR CS 1337, 1337L Introduction to Object-Oriented Programming ***  MATH 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology Honors  BACHELOR OF SCIENCE REQUIREMENTS Covered by requirements for major.  OPTIO	Additional hours to provide a minimum of 39 advanced (3000- or	6-9	
MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis  CS 1315* Programming Fundamentals OR CIDM 1315 Programming Fundamentals  MATH 3306*/*** Secondary Mathematics and Technology OR CS 1337, 1337L Introduction to Object-Oriented Programming ***  MATH 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology 3	Covered by requirements for major.	OPT	ΓΙΟΝ
MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis  CS 1315* Programming Fundamentals OR CIDM 1315 Programming Fundamentals  MATH 3306*/*** Secondary Mathematics and Technology OR CS 1337, 1337L Introduction to Object-Oriented	MPS 4393* Math/Physical Science/Engineering Technology	3	
MATH 4361* Statistics for the Sciences MATH 4362* Introduction to Numerical Analysis  CS 1315* Programming Fundamentals OR	OR CS 1337, 1337L Introduction to Object-Oriented	3	
MATH 4361* Statistics for the Sciences		3	
MATH 3343* Differential Equations II MATH 4310* Modern Algebra with Cryptography	MATH 4340* Complex Variables I MATH 4361* Statistics for the Sciences		

- ◆ 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. \*\*\* Mathematics majors seeking teacher certification must take MATH 3306, and those who are not seeking teacher certification must take CS 1337.

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 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** Mathematics Advising Services Bachelor of Science Degree **BS.MATH**

Degree Plan Total Hours: 120 Major Code: 115 CC 420 651-2540

First Ye	First Year						
	Fall	Spring					
	CORE 10-ENGL 1301	3		CORE 90-ENGL	3		
Н			Н	1302 or 2311			
o u	CORE 20-MATH 2412	3	o u	MATH 2413	4		
r			r				
S	CORE 10-COMM	3	s	CORE 60-HIST	3		
	1315, 1318, or 1321			1301, 1302, 2301, or 2381			
13	CORE 60-HIST	3	14	CORE 30-PHYS	4		
13	1301, 1302, 2301, or 2381		14	1401/1401L or 2425/2425L			
	IDS 1071*	1					

Secon	Second Year						
	Fall			Spring			
	MATH 2414	4	l	MATH ELECTIVE	3		
Н			H o u r s	See Checklist for Options			
o u	CORE 30-PHYS	4		MATH ELECTIVE	3		
r	1402/1402L or 2426/2426L			See Checklist for Options			
S	CORE 40	3		CS 1337/1337L OR	3		
	See Checklist for Options			MATH 3306			
17	CORE 70-POSC	3	15	CORE 70-POSC	3		
1,	2305 or 2306		15	2305 or 2306			
	CS 1315 OR CIDM 1315	3		ELECTIVE	3		
				See Checklist for Options			

Third Y	Third Year						
	Fall		Spring				
	MATH 3325	3	l	MATH ELECTIVE	3		
Н			Н	See Checklist for Options			
o u	MATH ELECTIVE	3	o u	MATH ELECTIVE	3		
r	See Checklist for Options		u r	See Checklist for Options			
s	MATH ELECTIVE	3	S	ELECTIVE	3		
	See Checklist for Options			See Checklist for Options			
15	CORE 80	3	15	ADV ELECTIVE	3		
13	See Checklist for Options		13	See Checklist for Options			
	ELECTIVE	3		ELECTIVE	3		
	See Checklist for Options			See Checklist for Options			

Fourth	Fourth Year						
	Fall			Spring			
	MATH ELECTIVE	3	l	MATH ELECTIVE	3		
Н	See Checklist for Options		Н	See Checklist for Options			
o u	ELECTIVE	3	o u	MATH 4341	3		
r	See Checklist for Options		r				
S	CORE 50	3	S	MATH 4370/MPS 4393	3		
	See Checklist for Options						
15	ADV ELECTIVE	3	16	ADV ELECTIVE	3		
13			10	See Checklist for Options			
	ELECTIVE	3		ELECTIVE	4		
	See Checklist for Options			See Checklist for Options			

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.

#### Notes:

\* MATH 2412 (1) or MATH 2413 (1) can substitute for IDS 1071 (1) if these are used to satisfy CORE 20 requirements.

Math 2412 is recommended over MATH 1316 for this degree plan, but MATH 1316 will be accepted.

Mathematics majors seeking teacher certification must take MATH 3306, and those not seeking teacher certification must take CS 1337.