### West Texas A&M University Advising Services Degree Checklist 2020-2021

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

NAME:	WT ID:	DATE:
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# Mathematics College of Engineering

CORE CURRICULUM COURSES: 42 HOURS ◆	HRS	
Communication (Core 10)		
ENGL 1301 Introduction to Academic Writing and Argumentation	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  Language, Philosophy and Culture (Core 40)	(6)	
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  Creative Arts (Core 50)	3	
ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 Choose 1	3	
American History (Core 60)	_	П
HIST 1301, 1302, 2301, 2381 Choose 2  Government/Political Science (Core 70)	6	
POSC 2305 and 2306	6	
Social and Behavioral Sciences (Core 80)		
AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1	3	
Component Area Option (Core 90)	(0)	
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 fo	r majo	r.
UNIVERSITY CORE REQUIREMENTS: 15 HOURS •		
<u>CORE 20</u> MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3]	3	
CORE 30 PHYS 1401*[3] and PHYS 1402*[3] OR	6	
PHYS 2425*[3] and 2426*[3]		
<u>CORE 90</u> 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  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	21	

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

CS 1315* Programming Fundamentals <b>OR</b> CIDM 1315 Programming Fundamentals	3	
MATH 3306*/*** Secondary Mathematics and Technology OR CS 1337, 1337L Introduction to Object-Oriented Programming ***	3	
MATH 4370* (MPS 4370) Senior Investigations <b>OR</b> 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 39 advanced (3000- or 4000-level) hours.	6-9	
ELECTIVES (ANY LEVEL)	21-28	
MINIMUM HOURS REQUIRED FOR DEGREE	120	

- ♦ 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 (RELI) and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

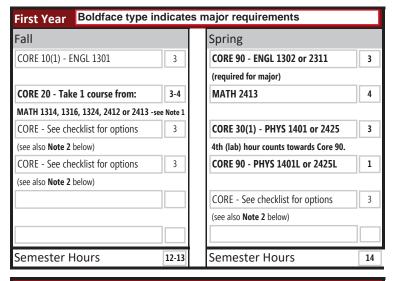
NOTE: This is NOT a degree plan. After completing 30 hours, students must request an official degree plan (using the online <u>Degree Plan Request form</u>) in order to progress. Students who have questions about their degree plan should contact the office of the dean of the College of Engineering, located in the Engineering and Computer Science Building, Room 119 (or call 806-651-5257).

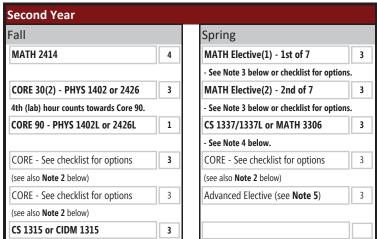
## WTAMU ADVISING SERVICES 2020-2021 Curriculum Guide

Major Code: 115

Semester Hours

Major: Mathematics, B.S.

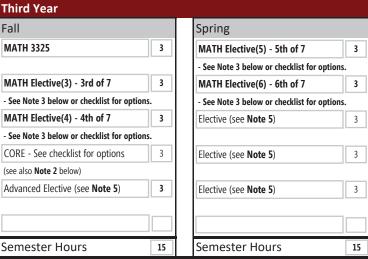


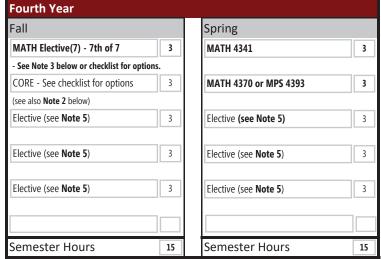


17

Semester Hours

15





#### **Degree Total Hours 120**

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.

Identified Marketable Skills:

Top 3 Local Employers or Industries/Professional Programs/Possible Career Opportunities

### Prerequisites/Important Sequences/Other degree Notes:

Note 1 - CORE 20: The fourth hour from MATH 2412 or 2413 (if taken for Core 20) will count towards Core 90.

Note 2 - CORE: Mathematics 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.

Note 3 - Math Electives: Select seven courses (21 hours) from MATH 3311, 3321, 3340, 3342, 3343, 4310, 4340, 4361, and 4362.

Note 4 - CS 1337 or MATH 3306: Mathematics majors seeking teacher certification must take MATH 3306, and those who are not seeking teacher certification must take CS 1337.

Note 5 - Electives: At least 39 hours of advanced work (3000- or 4000-level) must be earned at WTAMU. A minimum of six hours of advanced electives will be needed (if MATH 3306 is taken); more may be needed if students have advanced-level transfer courses.