

**College of Basic and Applied Sciences
Upper Division Form Fall 2018-2019 Catalog**

Student name _____ Student # _____

Major **MATHEMATICS** Minor _____ (Optional)

Concentration **PROFESSIONAL MATH – INDUSTRIAL TRACK** E-mail _____

Instructions: For students graduating in Fall 2018 or later. One (1) copy signed by major and minor advisors should be filed in DSB 120 three semesters before anticipated graduation. An Intent to Graduate form should also be filed in DSB 120 at the time of Upper Division Form submission.

General Education	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
COMMUNICATION (9 hours)	ENGL 1010			Must earn a grade of C- or better	3
	ENGL 1020			Must earn a grade of C- or better	3
	COMM 2200				3
HISTORY (6 hours) Choose two: HIST 2010, HIST 2020, HIST 2030					3
					3
HUMANITIES AND/OR FINE ARTS (9 hours) Choose one: ENGL 2020, 2030, HUM 2610. Choose two (different rubrics): ANTH 2210, ART 1030 or 1920, DANC 1000, HIST 1010, 1020, 1110, 1120, MUS 1030, PHIL 1030, THEA 1030					3
					3
					3
MATHEMATICS (3 hours)	MATH 1910			Must first have MATH 1730 (Pre-Calculus) with a grade of C or better, Math ACT of 26 or better, or Calculus placement test score of 73 or better. Also considered part of the major.	3 of 4
NATURAL SCIENCES (8 hours) Choose one: ASTR 1030/1031, BIOL 1030/1031, BIOL 1110/1111, BIOL 2010/2011, BIOL 2020/2021, CHEM 1010/1011, CHEM 1030/1031, CHEM 1110/1111, GEOL 1030/1031, GEOL 1040/1041, P G E O 1 0 3 0, PSCI 1030/1031, PSCI 1130/1131	PHYS 2110/2111 (Fall only)			MATH 1910 with a grade of C (2.0 GPA) or better (Must earn a grade of C or better in PHYS 2110/2111)	4
					4
SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two: AAS 2100, ANTH 2010, ECON 2410, ECON 2420, GEOG 2000, GS 2010, HLTH 1530/1531, EMC/JOUR/RIM 1020, PS 1010, PS 1005, PSY 1410, RS 2030, SOC 1010, SOC 2010, WGST 2100					3
					3
Hours Required					41

Major Courses - Grade of C (2.0) or better required in each course	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
Calculus I	MATH 1910			MATH 1730 with a grade of C or better, Math ACT of 26 or better, or Calculus placement test score of 73 or better (Three hours counted in Gen. Ed. All 4 hours are also considered part of the major.)	1 (+3)
Calculus II	MATH 1920			MATH 1910 with a grade of C or better	4
Elements of Linear Algebra	MATH 2010			MATH 1910	3
Calculus III	MATH 3110			MATH 1920	4
Differential Equations I	MATH 3120			MATH 1920 with a grade of C or better	3
STAT 3150 – Mathematical Stat. I or MATH 2050 – Prob. & Stat. (STAT 3150 is offered in the Fall only)				STAT 3150: MATH 1920 MATH 2050: MATH 1910	3
Differential Equations II (Spring only)	MATH 3260			MATH 3120	3
Foundations of Higher Mathematics	MATH 3460			MATH 1920	3
Theory of Calculus (Fall only)	MATH 4250			MATH 3110 and MATH 3460	3
Numerical Analysis I (See dept. schedule of course offerings)	MATH 4310			CSCI 1170 and MATH 2010	3
Advisor approved Math elective				See online catalog for prerequisites	3
Hours Required					33 (36)

Supporting and Elective Courses - Grade of C (2.0) or better required in each course				
Course	Semester	Grade	Prerequisites/Notes	Credit Hours
PHYS 2120/2121 (recommended; offered in the Spring only)			PHYS 2110/2111 and MATH 1920 with a grade of C (2.0 GPA) or better	4
MATH 4990 Seminar in Mathematics			Should be taken in final semester	3
Complete 9 hours from : MATH 4230, 4270, 4320, 4601, 4700; STAT 4190 (See department schedule of course offerings)			See online catalog for prerequisites	3
			See online catalog for prerequisites	3
			See online catalog for prerequisites	3
CSCI 1170 (can be counted toward CSCI minor)			MATH 1730 with a grade of C or better, Math ACT of 26 or better, or Calculus placement test score of 73 or better	4
CSCI 2170 (can be counted toward CSCI minor)			CSCI 1170 with a grade of C or better	4
Hours Required				24

Electives (at least 8 must be earned at the 3000/4000 level)				
Course	Semester	Grade	Notes	Credit Hours
Hours Required				22

Minor (optional)				
Course	Semester	Grade	Notes	Credit Hours
Hours Required				
Signed:				
	Minor Advisor			Date

1. Degrees require a minimum of 120 semester hours (12 of the last 18 at MTSU) with a 2.0 GPA, a minimum of 42 upper-division hours (30 at MTSU) with a 2.0 GPA, and a minimum of 60 senior college hours.
2. Learning Support courses do not count toward the 120-hour requirement or cumulative degree GPA.

Signed:			
	Major Advisor		
	Date		