College of Basic and Applied Sciences Upper Division Form Fall 2015-2016 Catalog

| Student name | | Student # |
|---------------|--------------------------------------|-----------|
| Major | MATHEMATICS | Minor |
| Concentration | PROFESSIONAL MATH - INDUSTRIAL TRACK | E-mail |

Instructions: For students graduating in Fall 2015or later. One (1) copy signed by major and minor advisors should be filed in KUC 322 three semesters before anticipated graduation. An Intent to Graduate form should also be filed in KUC 322 at the time of Upper Division Form submission.

| General Education | Course | Semester | Grade | Notes | Credit Hours |
|--|-------------------|----------|-------|--|-----------------|
| | ENGL 1010 | | | | 3 |
| COMMUNICATION (9 hours) | ENGL 1020 | | | | 3 |
| | COMM 2200 | | | | 3 |
| HISTORY (6 hours) Choose two: HIST 2010, HIST 2020, HIST 2030 | | | | | 3 |
| HUMANITIES AND/OR FINE ARTS (9 hours) | | | | | 3 |
| Choose one: ENGL 2020, 2030, HUM 2610. Choose two (different rubrics): ANTH 2210, ART 1030 or 1920, DANC 1000, HIST | | | | | 3 |
| 1010, 1020, 1110, 1120, MUS 1030, PHIL 1030, THEA 1030 | | | | | 3 |
| MATHEMATICS (3 hours) | MATH 1910 | | | Will need 1730 Pre-Calculus first if do not have a 26 Math subscore on ACT. Also considered part of the major. | 3 of 4 |
| NATURAL SCIENCES (8 hours) Choose one: ASTR 1030/1031, BIOL 1030/1031, BIOL | PHYS 2110/2111 | | | | 4 |
| 1110/1111,BIOL 2010/2011,BIOL 2020/2021, CHEM 1010/1011, CHEM 1030/1031,CHEM 1110/1111, GEOL 1030/1031,GEOL 1040/1041, PSCI 1030/1031,PSCI 1130/1131 | | | | | 4 |
| SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two: AAS 2100, ANTH 2010, ECON 2410, GEOG 2000,GS | | | | | 3 |
| 2010, HLTH 1530/1531, EMC/JOUR/RIM 1020, PS 1010, PS 1005, PSY 1410, RS 2030, SOC 1010, SOC 2010, WGST 2100 | | | | | 3 |
| | | | | Hours Required | 41 |

| Major Courses (2.0 GPA required) | Course | Semester | Grade | Notes | Credit Hours |
|---|-----------|----------|-------|--|-----------------|
| Calculus I | MATH 1910 | | | Three hours counted in Gen. Ed. All 4 hours are also considered part of the major. | 1 (+3) |
| Calculus II | MATH 1920 | | | | 4 |
| Elements of Linear Algebra | MATH 2010 | | | | 3 |
| Calculus III | MATH 3110 | | | | 4 |
| Differential Equations I | MATH 3120 | | | | 3 |
| STAT 3150 – Mathematical Stat. I or MATH 2050 – Prob. & Stat. | | | | | 3 |
| Differential Equations II | MATH 3260 | | | | 3 |
| Foundations of Higher Mathematics | MATH 3460 | | | | 3 |
| Theory of Calculus | MATH 4250 | | | | 3 |
| Numerical Analysis I | MATH 4310 | | | | 3 |
| Advisor approved Math elective | | | | | 3 |
| | _ | _ | | Hours Required | 33 (36) |

| Supporting and Elective Courses (Grade of C or better required for Supporting Courses) | | | | | |
|--|----------|-------|----------------|-----------------|--|
| Course | Semester | Grade | Notes | Credit Hours | |
| PHYS 2120/2121 (recommended) | | | | 4 | |
| MATH 4990 Seminar in Mathematics | | | | 3 | |
| | | | | 3 | |
| Complete 9 hours from : MATH 4230, 4270, 4320, 4601, 4700; STAT 4190 | | | | 3 | |
| 18711 1200, 1270, 1020, 1001, 1700, 01711 1170 | | | | 3 | |
| CSCI 1170 (can be counted toward CSCI minor) | | | | 4 | |
| CSCI 2170 (can be counted toward CSCI minor) | | | | 4 | |
| | | | Hours Required | 24 | |

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

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

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.
 Learning Support courses do not count toward the 120-hour requirement or cumulative degree GPA.

| Signed: | | |
|---------|---------------|------|
| | Major Advisor | Date |