## Upper Division Form Fall 2019-2020 Catalog

Student name
Major MATHEMATICS
Concentration PROFESSIONAL MATH - INDUSTRIAL TRACK

## Student \#

Minor
(Optional)
E-mail

Instructions: For students graduating in Summer 2019 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) <br> Choose two: HIST 2010, HIST 2020,HIST 2030 |  |  |  |  | 3 |
|  |  |  |  |  | 3 |
| HUMANITIES AND/OR FINE ARTS (9 hours) <br> 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) Choose one: MATH 1010, 1530, 1630, 1710,1720, 1730, 1810, 1910 | MATH 1910 |  |  | Pre-req: MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score; must earn a grade of $\mathrm{C}(2.0)$ or higher | 3 of 4 |
| NATURAL SCIENCES (8 hours) <br> Choose one: ASTR 1030/1031, BIOL 1030/1031, BIOL <br> 1110/1111,BIOL 2010/2011,BIOL 2020/2021, CHEM 1010/1011, CHEM 1030/1031,CHEM 1110/1111, GEOL 1030/1031,GEOL 1040/1041, PGEO 1030, PSCI 1030/1031,PSCI 1130/1131 |  |  |  | MATH 1910 with a grade of $\mathrm{C}(2.0)$ or higher. Must earn a grade of $\mathrm{C}(2.0)$ or better in PHYS 2110/2111 | 4 |
|  |  |  |  |  | 4 |
| SOCIAL/BEHAVIORAL SCIENCES (6 hours) <br> Choose two different subjects: AAS 2100, ANTH 2010, ECON 2410, ECON 2420, GEOG 2000,GS 2010, HLTH 1530/1531, <br> 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 higher required in each course | Course | Semester | Grade | Prerequisites/Notes | Credit Hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Calculus I | MATH 1910 |  |  | Pre-req: MATH 1730 with a C $(2.0)$ or higher, ACT MATH of 26 , or Calculus Placement test with satisfactory score; must earn a grade of $\mathrm{C}(2.0)$ or higher | 1(+3) |
| Calculus II | MATH 1920 |  |  | MATH 1910 with a grade of $\mathrm{C}(2.0)$ or higher | 4 |
| Calculus III | MATH 3110 |  |  | MATH 1920 | 4 |
| Elements of Linear Algebra | MATH 2010 |  |  | MATH 1910 | 3 |
| Differential Equations I | MATH 3120 |  |  | MATH 1920 with a grade of C (2.0) or higher | 3 |
| STAT 3150 - Mathematical Stat. I or M A T H 2050 - Prob. \& Stat. |  |  |  | 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) |

[^0]| Supporting Courses - Grade of C (2.0) or higher required in each course |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course | Semester | Grade | Prerequisites/Notes | Credit Hours |
| PHYS 2110/2111 |  |  | Credits count in general education | 0 |
| PHYS 2120/2121 |  |  | PHYS 2110/2111 and MATH 1920 with a grade of C (2.0) or higher | 4 |
| MATH 1910 |  |  | Credits counted in general education | 0 |
| MATH 4990 Seminar in Mathematics |  |  | Should be taken in final semester | 3 |
| Complete 9 hours from : <br> MATH 4230, 4270, 4320, 4601, 4700; STAT 4190 <br> (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 C(2.0) or higher, ACT MATH of 26 , or Calculus Placement test with satisfactory score | 4 |
| CSCI 2170 (can be counted toward CSCI minor) |  |  | CSCl 1170 with a grade of $\mathrm{C}(2.0)$ or higher | 4 |
| Hours Required |  |  |  | 24 |


| Elective Courses - at least 8 must be earned at the 3000/4000 level. |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Course | Semester | Grade |  | Credit |  |
| Hours |  |  |  |  |  | | Notes |
| :--- |
|  |



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 count toward the 120-hour requirement and the overall GPA.


[^0]:    Revised 1.28.2019

