## College of Basic and Applied Sciences Upper Division Form 2019-2020 Catalog

| Student name  |                   | Student # |            |
|---------------|-------------------|-----------|------------|
| Major         | ACTUARIAL SCIENCE | Minor     | (Optional) |
| Concentration |                   | 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. The 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<br>Hours |
|---|-----------|----------|-------|--|-----------------|
|   | ENGL 1010 |          |       | Must earn a grade of C- or better  | 3               |
| COMMUNICATION (9 hours)   | 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               |
| Citoose (wo. nis) 2010, nis) 2020,nis) 2030   |           |          |       |  | 3               |
| HUMANITIES AND/OR FINE ARTS (9 hours) Choose one: ENGL 2020, 2030, HUM 2610. Choose two different   |           |          |       |  | 3               |
| s u b j e c t s : ANTH 2210, ART 1030 or 1920, DANC 1000, HIST<br>1010, 1020, 1110, 1120, MUS 1030, PHIL 1030, THEA 1030  |           |          |       |  | 3               |
| 1010, 1020, 1110, 1120, WOS 1030, PAIL 1030, TAEA 1030  |           |          |       |  | 3               |
| MATHEMATICS (3 hours) Choose one:<br>MATH 1010, 1530, 1630, 1710,1720, 1730, 1810, <b>1910</b>  | MATH 1910 |          |       | Pre-req: MATH 1730 with a C(2.0) or higher,<br>ACT MATH of 26, or Calculus Placement test<br>with satisfactory score; must earn a grade of<br>C(2.0) or higher | 3 of 4          |
| NATURAL SCIENCES (8 hours) Choose two different subjects: ASTR 1030/1031, BIOL 1030/1031, BIOL 1110/1111,BIOL 2010/2011,BIOL 2020/2021, CHEM                      |           |          |       |  | 4               |
| 1010/1011,CHEM 1030/1031,CHEM 1110/1111, GEOL<br>1030/1031,GEOL 1040/1041, PGEO 1030, PHYS 1110, PHYS<br>2010/2011,PHYS 2110/2111, PSCI 1030/1031, PSCI 1130/1131 |           |          |       |  | 4               |
| SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose one: AAS 2100, ANTH 2010, GEOG 2000,GS 2010, HLTH   | ECON 2410 |          |       | Must earn a grade of C(2.0) or higher  | 3               |
| 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 - Grade of C (2.0) or better required in each course        | Course    | Semester | Grade | Prerequisites/Notes  | Credit<br>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. 3 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(2.0) or higher   | 4               |
| Calculus III  | MATH 3110 |          |       | MATH 1920  | 4               |
| STAT 3150 (3 hrs) (Fall only)   | STAT 3150 |          |       | MATH 1920  | 3               |
| Mathematical Foundations of Actuarial Science (Spring only)               | ACSI 4140 |          |       | MATH 3020 (or MATH 3110) and STAT 3150   | 3               |
| Intro to Math of Investment (Fall only)                                   | ACSI 4200 |          |       | MATH 1920  | 3               |
| Mathematics of Pricing Theory (Spring only)                               | ACSI 4220 |          |       | ACSI 4200/MATH 4200 and<br>ECON 2410, ECON 2420  | 3               |
| Mathematics of Compound Interest (Fall only)                              | ACSI 4230 |          |       | ACSI 4200/MATH 4200  | 3               |
| Actuarial Mathematics I (Spring only)                                     | ACSI 4330 |          |       | ACSI 4230 and STAT 4190  | 3               |
| Choose 2 from: ACSI 4240, 4340, 4630, 4640; STAT 4200                     |           |          |       | See online catalog for prerequisites   |                 |
| (See department schedule of course offerings; course in BOLD recommended) |           |          |       | See online catalog for prerequisites   | 6               |
|   |           |          |       | Hours Required   | 33 (36)         |

| Course  | Semester | Grade | Prerequisites/Notes  | Credit<br>Hours |
|---|----------|-------|--|-----------------|
| ACTG 3000   |          |       | College level math course, ENGL 1010, & sophomore standing   | 3               |
| CSCI 1170   |          |       | MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score. | 4               |
| CSCI / INFS Elective                                    |          |       |  | 3               |
| ECON 2410   |          |       | Credits counted in general education   | 0               |
| ECON 2420   |          |       |  | 3               |
| FIN 3050  |          |       | Junior standing and admission to College of Business   | 3               |
| MATH 1910   |          |       | Credits counted in general education   | 0               |
| MATH 4990 – Seminar in Mathematics                      |          |       | Should be taken in final semester  | 3               |
| STAT 4190 (Spring only)                                 |          |       | STAT 3150  | 3               |
| STAT 4320 (See department schedule of course offerings) |          |       | STAT 3150 or MATH 2050   | 3               |
|   |          |       | Hours Required   | 25              |

| Elective Courses (MATH 2010, ACSI 4600 recommended) |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Course Semester Grade Notes                         |  |  |  |  |  |  |
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|   |  |  |  |  |  |  |
| Hours Required                                      |  |  |  |  |  |  |

| Minor -Optional |                             |     |   |  |  |                 |  |
|-----------------|-----------------------------|-----|---|--|--|-----------------|--|
|                 | Course Semester Grade Notes |     |   |  |  | Credit<br>Hours |  |
|                 |                             |     |   |  |  |                 |  |
|                 |                             |     |   |  |  |                 |  |
|                 |                             |     |   |  |  |                 |  |
|                 |                             |     |   |  |  |                 |  |
|                 |                             |     |   |  |  |                 |  |
|                 |                             |     |   |  |  |                 |  |
| Hours Required  |                             |     |   |  |  |                 |  |
| Signed:         |                             |     |   |  |  |                 |  |
|                 |                             | Dat | е |  |  |                 |  |

| Signed: |               |      |
|---------|---------------|------|
|         | Major 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 count toward the 120-hour requirement and the overall GPA.