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

| Student name | | Student# | |
|-----------------|--------------------------------|----------|--|
| Major | Chemistry | Minor | |
| Concentration _ | Professional (Materials Track) | E-mail | |

Instructions: For students graduating in Fall 2018 or later, One (1) copy signed by major advisor and minor advisor (if applicable) should be filed with the Graduation Analyst in DSB 120 three semesters prior to graduation. An Intent to Graduate form must accompany this form.

| General Education | Course | Semes ter | Grade | Notes | Credit Hours |
|--|----------------|-----------|-------|--|-----------------|
| | ENGL 1010 | | | | 3 |
| COMMUNICATION (9 hours) | ENGL 1020 | | | | 3 |
| | COMM 2200 | | | | 3 |
| HISTORY (6 hours) | | | | | 3 |
| Choose two: HIST 2010, HIST 2020, HIST 2030 | | | | | 3 |
| HUMANITIES AND/OR FINE ARTS (9 hours) | | | | | 3 |
| Choose one: ENGL 2020 or 2030 or HUM 2610 Choose two (different rubrics): ANTH 2210, ART 1030, ART 1920, | | | | | 3 |
| DANC 1000, HIST 1010, HIST 1020, HIST 1110, HIST 1120, MUS 1030, PHIL 1030, THEA 1030 | | | | | 3 |
| MATHEMATICS (3 hours) * MATH 1730 (if exempt take MATH 1910) | | | | | 3 or 4* |
| NATURAL COUNTY (CL. 11) | BIOL 1110/1111 | | | Preq: MATH 1710 with C- or better or MATH ACT of 19 or higher | 4 |
| NATURAL SCIENCES (8 hours) | CHEM 1110/1111 | | | Course is also considered part of the major | 4 |
| SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two (different rubrics): AAS 2100, ANTH 2010, ECON 2410, ECON | | | | | 3 |
| 2420, GEOG 2000, GS 2010, HLTH 1530/1531, JOUR/EMC/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 | Seme ster | Grade | Notes | Credit Hours |
|---|----------------|--------------|-------|--|-----------------|
| General Chemistry I | CHEM 1110/1111 | | | Credits counted in General Education | (4) |
| General Chemistry II | CHEM 1120/1121 | | | Preq: CHEM 1110/1111 with a C- or better | 4 |
| Quantitative Analysis | CHEM 2230 | | | Preq: CHEM 1120/1121 with grade of C- (or equivalent course) | 3 |
| Quantitative Analysis Lab | CHEM 2231 | | | Preq: CHEM 1120/1121 with grade of C- or better. Coreq: CHEM 2230 recommended | 2 |
| Careers in Chemistry and Biochemistry | CHEM 3000 | | | Preq: 2030 or CHEM 3010 | 1 |
| Organic Chemistry I | CHEM 3010/3011 | | | Preq: CHEM 1120/1121 or equivalent | 4 |
| Organic Chemistry II | CHEM 3020/3021 | | | Preq: CHEM 3010/3011 | 4 |
| Physical Chemistry Fundamentals I | CHEM 4330/4331 | | | Preq: MATH 1910; PHYS 2020/2021 | 4 |
| In-Depth Physical Chemistry | CHEM 4360/4361 | | | Preq: CHEM 4330/4331; MATH 1920 | 5 |
| Foundations in Inorganic Chemistry Aq (4400) or Foundations in Inorganic Chemistry B (4410) | CHEM | | | Preq for CHEM 4400: CHEM 1120/1121 or equivalent; CHEM 3010/3011 recommended. Preq for CHEM 4410: CHEM 3010/3011 and CHEM 4400 | 3 |
| Principles of Biochemistry | CHEM 3530/3531 | | | Preq: CHEM 3010/3011 | 4 |
| Complete at least 2 hours from CHEM 3880, 3970, 4780 | CHEM | | | Preq: Permission of instructor; CHEM 2230 recommended or: CHEM 3020/3021 | 2 |
| Complete 3-4 hours from CHEM 4000, 4100, 4230/4231, 4450, 4460, 4600, 4610, 4700 | CHEM | | | | 3-4 |
| | • | | | Hours Required | 39-40 |

| Supporting and Elective Courses | | | | | |
|---|----------|-------|--|-----------------|--|
| Course | Semester | Grade | Notes | Credit Hours | |
| BIOL 1120/1121 | | | Preq: BIOL 1110/1111 | 4 | |
| PHYS 2010/2011 or PHYS 2110/2111 | | | Preq: MATH 1710 w/minimum grade of C or MATH 1730. MATH 1910 is a Preq for PHYS 2110/2111 | 4 | |
| PHYS 2020/2021 or PHYS 2120/2121 | | | Preq: PHYS 2010/2011. PHYS 2110/2111 and MATH 1920 are Preq for PHYS 2120/2121 | 4 | |
| MATH 1730 | | | Preq: MATH 1710 or successful completion of high school precalculus course | 1 | |
| MATH 1910 | | | Preq: MATH 1730 with a grade of C or better or Math ACT of 26 or better or Calculus placement test score of 73 or better | 4 | |
| MATH 1920 | | | Preq: MATH 1910 | 4 | |
| CSCI 1150 or approved CSCI course | | | | 3 | |
| Electives | | | | 4 | |
| Upper Division Electives (taken at 3000/4000 level) | | | | 12 | |
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| | | | Hours Required | 40 | |

| Optional Minor | | | | | | |
|----------------|---------------|----------------------|--|--|-----------------|---|
| | Course | Semester Grade Notes | | | Credit Hours | |
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| Hours Required | | | | | | |
| Signed: | | | | | | |
| | Minor Advisor | | | | | е |

| Signed: | | |
|---------|---------------|------|
| | Major 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.