

## College of Basic and Applied Sciences Upper Division Form 2020-2021 Catalog

Student name \_\_\_\_\_ Student # \_\_\_\_\_  
 Major Computer Science Minor \_\_\_\_\_  
 Concentration Professional Computer Science E-mail \_\_\_\_\_

**Instructions: For students graduating in Summer 2020 or later. One (1) copy signed by major and minor advisors should be filed with the Graduation Analyst in DSB 120 three semesters prior to graduation. An Intent to Graduate form must be submitted with this form.**

| General Education   | Course    | Semester | Grade | Prerequisites   | Credit Hours |
|---|-----------|----------|-------|---|--------------|
| <b>COMMUNICATION</b> (9 hours)  | ENGL 1010 |          |       | Must earn C- or higher  | 3            |
|   | ENGL 1020 |          |       | Must earn C- or higher  | 3            |
|   | COMM 2200 |          |       | Must earn C (2.0) or higher   | 3            |
| <b>HISTORY</b> (6 hours)<br>Choose two: HIST 2010, HIST 2020, HIST 2030   |           |          |       |   | 3            |
|   |           |          |       |   | 3            |
| <b>HUMANITIES AND/OR FINE ARTS</b> (9 hours)<br>Choose one: ENGL 2020, 2030 or HUM 2610.<br>Choose two different subjects: ANTH 2210, ART 1030, or 1920, DANC 1000, HIST 1010, 1020, 1110 or 1120, MUS 1030, PHIL 1030, THEA 1030   |           |          |       | Literature: ENGL 1010, ENGL 1020  | 3            |
|   |           |          |       |   | 3            |
|   |           |          |       |   | 3            |
| <b>MATHEMATICS</b> (3 hours) Choose one:<br>MATH 1010, 1530, 1630, 1710, 1720, 1730, 1810, <b>1910</b>  |           |          |       | <b>MATH 1910 is required for major</b>  | 3            |
| <b>* NATURAL SCIENCES</b> (8 hours) Choose two different subjects: ASTR 1030/1031, BIOL 1030/1031, <b>BIOL 1110/1111</b> , BIOL 2010/2011, BIOL 2020/2021, <b>CHEM 1010/1011</b> , CHEM 1030/1031, <b>CHEM 1110/1111</b> , GEOL 1030/1031, GEOL 1040/1041, PGEO 1030, PHYS 1110, <b>PHYS 2010/2011</b> , <b>PHYS 2110/2111</b> , PSCI 1030/1031, PSCI 1130/1131 |           |          |       | Note: Choose two different subjects; a year-long sequence will be continued in supporting courses; subjects in bold are only sciences accepted for accreditation/graduation | 4            |
|   |           |          |       |   | 4            |
| <b>SOCIAL/BEHAVIORAL SCIENCES</b> (6 hours)<br>Choose two different subjects: AAS 2100, ANTH 2010, ECON 2410, ECON 2420, GEOG 2000, GS 2010, HLTH 1530/1531, PS 1010 or PS 1005, PSY 1410, RS 2030, SOC 1010 or 2010, WGST 2100, EMC/JOUR/RIM 1020  |           |          |       |   | 3            |
|   |           |          |       |   | 3            |
| <b>Hours Required</b>   |           |          |       |   | 41           |

\* See your advisor for Natural Sciences options

| Major Courses - ** Must have a C (2.0) or better in all major courses | Course    | Semester | **Grade | Prerequisites/Notes  | Credit Hours |
|---|-----------|----------|---------|--|--------------|
| Computer Science Colloquium   | CSCI 1010 |          |         |  | 1            |
| Computer Science I  | CSCI 1170 |          |         | MATH 1730 or 1810 with a C (2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score | 4            |
| Computer Science II   | CSCI 2170 |          |         | CSCI 1170 and eligibility for MATH 1910  | 4            |
| Discrete Structures   | CSCI 3080 |          |         | CSCI 1170, MATH 1910   | 3            |
| Algorithms & Data Structures  | CSCI 3110 |          |         | CSCI 2170; co-req CSCI 3080  | 3            |
| Assembly & Computer Organization                                      | CSCI 3130 |          |         | CSCI 2170  | 4            |
| Theory of Programming Languages                                       | CSCI 3210 |          |         | CSCI 3110, COMM 2200; Spring only  | 3            |
| Introduction to Computer Systems                                      | CSCI 3240 |          |         | CSCI 3130  | 4            |
| Compiler Design and Software Development                              | CSCI 4160 |          |         | CSCI 3080, CSCI 3110, CSCI 3130; Fall only   | 3            |
| Software Engineering  | CSCI 4700 |          |         | CSCI 3080, CSCI 3110, COMM 2200  | 3            |
| CSCI High-Level Language  |           |          |         | CSCI 3110 or consent of instructor   | 3            |
| Upper-Division CSCI Elective  |           |          |         | See undergraduate catalog  | 3            |
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| Upper-Division CSCI Elective  |           |          |         | See undergraduate catalog  | 3            |
| <b>Hours Required</b>   |           |          |         |  | 44           |

| Supporting and Elective Courses   |          |       |   |              |
|---|----------|-------|---|--------------|
| Course  | Semester | Grade | Prerequisites/Notes   | Credit Hours |
| 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 C(2.0) or higher; 3 credits count in general education | 0-4          |
| Math 1920   |          |       | Pre-req: MATH 1910 with a C(2.0) or higher  | 4            |
| Math 2050   |          |       | Pre-req: MATH 1910 with a C(2.0) or higher  | 3            |
| Math elective (4 hours required):   |          |       | Must be a math course for math majors.  | 3-4          |
| Math elective:  |          |       | Must be a math for math majors; take only if first math elective is a 3 hour course   | 0-1          |
| Science: (can choose from BIOL 1120/1121, CHEM 1020/1021, CHEM 1120/1121, PHYS 2020/2021, or PHYS 2120/2121)                                    |          |       | Complete a two-part, year-long sequence started in general education natural sciences area. CHEM 1120 requires a C- or better in CHEM 1110  | 4            |
| PHIL 3170 Ethics and Computing Technology   |          |       |   | 3            |
| <b>Elective Courses - 16 additional credits needed to reach 120 required for graduation; 36 total credits must be earned at 3000/4000 level</b> |          |       |   |              |
|   |          |       |   |              |
|   |          |       |   |              |
|   |          |       |   |              |
|   |          |       |   |              |
|   |          |       |   |              |
|   |          |       |   |              |
| <b>Hours Required</b>   |          |       |   | <b>35</b>    |

| Minor (optional)      |          |       |       |              |
|-----------------------|----------|-------|-------|--------------|
| Course                | Semester | Grade | Notes | Credit Hours |
|                       |          |       |       |              |
|                       |          |       |       |              |
|                       |          |       |       |              |
|                       |          |       |       |              |
|                       |          |       |       |              |
|                       |          |       |       |              |
|                       |          |       |       |              |
| <b>Hours Required</b> |          |       |       |              |

1. Degrees require a minimum of 120 semester hours completed with a cumulative and major GPA of 2.0 or higher. Minimum of 36 upper-division hours (3000/4000 level) and a minimum of 50 senior college hours (earned at four-year University) also required.
2. A minimum of 12 credits must be earned at the 3000/4000 level in each major

|                |                      |             |
|----------------|----------------------|-------------|
| <b>Signed:</b> |                      |             |
|                | <b>Major Advisor</b> | <b>Date</b> |