



## 2022 – 2023 Bachelor of Science in Computational Science

Not an Official Record – Official Records from Office of Registrar

<b>General Education Requirements</b>	<b>Credits</b>
ENGL B101 or B105 ( <i>Composition &amp; Rhetoric</i> )	3
ENGL B102 or B106 ( <i>Composition &amp; Literature</i> )	3
COMM B140 or B201	3
Liberal Arts Elective <sup>1</sup>	3
HIST B101, B102, B111, B112, B115, or B116	3
Fine Arts <sup>2</sup>	3
Social/Behavioral Science <sup>3</sup>	3
Natural Science with Lab	4
Additional Natural Science (Lab optional)	3
Foreign Language (2 courses in the same language)	6
Global Citizenship & Multicultural Understanding <sup>4</sup>	3
REACH Act “Founding Documents” ( <i>HIST B111, B430, B442, B469, or POLI B201</i> )	0-3
<b>Program Requirements</b>	
CSCI B104 ( <i>Computer Programming Techniques, Practices, &amp; Tools</i> )	3
CSCI B150 ( <i>Introduction to Computer Science</i> )	3
CSCI B145 ( <i>Object-Oriented Programming I</i> )	4
CSCI B146 ( <i>Object-Oriented Programming II</i> )	4
CSCI B240 ( <i>Introduction to Software Engineering</i> )	
MATH B240 ( <i>Calculus III</i> )	4
CSCI B280/MATH B280 or MATH B230 and B242	4-6
ENGL B262 or B462 ( <i>Introduction to Technical Writing or Technical Writing</i> )	3
STAT B240 ( <i>Fundamentals of Probability &amp; Statistics</i> ) or STAT B340 ( <i>Introduction to Probability and Statistics</i> )	3
<b>Major Requirements</b>	
CSCI B320 ( <i>Database Management Systems I</i> )	3
CSCI B350 ( <i>Introduction to Data Structures and Algorithms</i> )	3
CSCI B365 ( <i>Computer Graphics</i> )	3
CSCI B416 ( <i>Introduction to Computer Networks</i> )	3
CSCI B422 ( <i>Introduction to Data Mining</i> )	3
CSCI B450 ( <i>Modeling and Simulation</i> )	3
CSCI B466 ( <i>Data Visualization</i> )	3
CSCI B469 ( <i>High Performance Computing</i> )	3
CSCI B470 ( <i>Software System Process and Management</i> )	3
<b>Cognate Requirements</b>	
The cognate is a minimum of 12 hours in advanced-level courses related to, but outside, the major. It is intended to support the course work in the major. Cognate courses may be drawn from one or more departments, depending on the individual interests and requirements of the student as judged by the departmental advisor. A cognate differs from a minor in that the courses must be above prerequisite level and may be distributed over more than one subject area.	

### **Minimum Credit Hours Required for Graduation: 120 Credits**

<sup>1</sup>Courses from the following disciplines: AFAM, ANTH, ARTS, ECON, ENGL, FREN, GEOG, GERM, HIST, MUSC, PHIL, POLI, PSYC, RELG, SOCY, SPAN, COMM, THEA. IDST B260 may be used to fulfill this requirement. One-hour credits in MUSC and THEA may not be used to fulfill this requirement.

<sup>2</sup>Courses from the following disciplines: ARTH, ARTS, MUSC, THEA, ENGL B180. 1-hour credits in MUSC and THEA may not be used to fulfill this requirement.

<sup>3</sup>Courses from the following disciplines: ANTH, ECON, GEOG, GLST, LING, POLI, PSYC, SOCY.

<sup>4</sup>The following courses fulfill this requirement: ANTH B102, ANTH B312, ANTH B317, ANTH B351, ANTH B352, ANTH B452, COMM B450, EDCI B322, ENGL B270, ENGL B291, ENGL B441, GEOG B121, GLST B301, GLST, B398, HIST B109, HIST B115, HIST B116, HRTM B360, NURS B330, PSYC B380, PUBH B300, RELG B203, SOCY B315, SPAN B380.