## COMPUTER SCIENCE (B.S.C.S.)

Required course work includes the university requirements (see regulation J-3 (https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees/)) and:

Code	Title	Hours	
COMM 101	Fundamentals of Oral Communication	2	
ENGL 317	Technical Writing	3	
CS 120	Computer Science I	4	
CS 121	Computer Science II	3	
CS 150	Computer Organization and Architecture	3	
CS 210	Programming Languages	3	
CS 240	Computer Operating Systems	3	
CS 270	System Software	3	
CS 360	Database Systems	3	
CS 383	Software Engineering	4	
CS 385	Theory of Computation	3	
CS 395	Analysis of Algorithms	3	
CS 401	Contemporary Issues in Computer Science	1	
CS 445	Compiler Design	4	
CS 480	CS Senior Capstone Design I	3	
CS 481	CS Senior Capstone Design II	3	
MATH 170	Calculus I	4	
MATH 175	Calculus II	4	
MATH 176	Discrete Mathematics	3	
MATH 330	Linear Algebra	3	
STAT 301	Probability and Statistics	3	
Natural Science wi different discipline	th Lab for Science and Engineering Majors from two s	)	
Complete two cou following list:	rses including their accompanying labs from the	8	
BIOL 114	Organisms and Environments		
CHEM 111	General Chemistry I		
&111L	and General Chemistry I Laboratory		
ENVS 101 & ENVS 102	Introduction to Environmental Science and Field Activities in Environmental Sciences		
GEOG 100 & 100L	Physical Geography and Physical Geography Lab		
GEOL 102 & 102L	Historical Geology and Historical Geology Lab		
PHYS 211 & 211L	Engineering Physics I and Laboratory Physics I		
SOIL 205 & SOIL 206	The Soil Ecosystem and The Soil Ecosystem Lab		
Upper-division Com	nputer Science courses	12	
Except CS 398 CS 400 CS 401 CS 431 CS 499			

## **Total Hours**

Courses to total 120 credits for this degree, not counting ENGL 101, MATH 143, and other courses that might be required to remove

85

## deficiencies. A minimum grade of 'C' is required in the following courses in order to graduate:

Code	Title	Hours
CS 120	Computer Science I	4
CS 121	Computer Science II	3
CS 150	Computer Organization and Architecture	3
CS 210	Programming Languages	3
CS 240	Computer Operating Systems	3
CS 270	System Software	3
MATH 170	Calculus I	4
MATH 176	Discrete Mathematics	3
MATH 175	Calculus II	4

Students majoring in computer science must earn a grade of C or better in CS 120, CS 121, and CS 150 and a C or better in MATH 176 before registration is permitted in 200 level CS courses. Students majoring in computer science must earn a grade of C or better in CS 210, CS 240, CS 270, and MATH 170 and MATH 175 before registration is permitted in upper-division CS courses.

Students must consult with their advisors when selecting electives within the curriculum to insure that their career objectives are met.

- Graduates of the program will be able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- 2. Graduates of the program will able to communicate effectively in a variety of professional contexts.
- 3. Graduates of the program will be able to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
- 4. Graduates of the program will be able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- 5. Graduates of the program will be able to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Graduates of the program will be able to apply computer science theory and software development fundamentals to produce computing-based solutions.