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
Communications (two courses required)		
COMM 101	Fundamentals of Oral Communication	3
ENGL 317	Technical Writing II	3
Computer Science First Year (three courses required)		
CS 120	Computer Science I	4
CS 121	Computer Science II	3
CS 150	Computer Organization and Architecture	3
Computer Science and Cybersecurity Second Year (four courses required)		
CS 210	Programming Languages	3
CS 240	Computer Operating Systems	3
CS 270	System Software	3
CYB 220	Secure Coding and Analysis	3
Computer Science Third Year (four courses required)		
CS 360	Database Systems	4
CS 383	Software Engineering	4
CS 385	Theory of Computation	3
CS 395	Analysis of Algorithms	3
Computer Science Fourth Year (four courses required)		
CS 445	Compiler Design	4
CS 480	CS Senior Capstone Design I	3
CS 481	CS Senior Capstone Design II	3
Upper-division Technical Elective Courses (four courses required, usually completed during third and fourth year)		**12**
Complete any CS-300-level or CS-400-level or CYB-300-level or CYB-400-level course EXCEPT CS 398, CS 400, CS 401, CS 431, CS 499, CYB 400, CYB 401, CYB 480, CYB 481, CYB 498, CYB 499 for a total of 12 credits.		
Mathematics (four courses required, usually completed during first and second year)		
MATH 170	Calculus I	4
MATH 175	Calculus II	4
MATH 176	Discrete Mathematics	3
MATH 330	Linear Algebra	3
Statistics (one course required, usually completed during second or third year). Complete one of the following:		**3**
STAT 251	Statistical Methods	
STAT 301	Probability and Statistics	
Natural Science with Lab for Science and Engineering Majors (two courses plus their respective labs required, usually completed during second, third, or fourth year). Complete two courses including their accompanying labs and from two different disciplines by choosing from the following list:		**8**
Biology		
BIOL 114	Organisms and Environments	
BIOL 115 & 115L	Cells and the Evolution of Life and Cells and the Evolution of Life Laboratory	
BIOL 227	Anatomy and Physiology I	
BIOL 250 & BIOL 255	General Microbiology and General Microbiology Lab	
Botany		
PLSC 205	General Botany	
REM 341	Systematic Botany	
Chemistry		
CHEM 111 & 111L	General Chemistry I and General Chemistry I Laboratory	
CHEM 112 & 112L	General Chemistry II and General Chemistry II Laboratory	
Environmental Science		
ENVS 101 & ENVS 102	Introduction to Environmental Science and Field Activities in Environmental Sciences	
Geography		
GEOG 100 & 100L	Introduction to Planet Earth and Introduction to Planet Earth Lab	
Geology		
GEOL 101 & 101L	Physical Geology and Physical Geology Lab	
GEOL 102 & 102L	Historical Geology and Historical Geology Lab	
Physics		
PHYS 211 & 211L	Engineering Physics I and Laboratory Physics I	
PHYS 212 & 212L	Engineering Physics II and Laboratory Physics II	
Soils		
SOIL 205 & SOIL 206	The Soil Ecosystem and The Soil Ecosystem Lab	
Total Hours		**89**

Courses to total 120 credits for this degree, not counting ENGL 101**,** MATH 143**, and other courses that might be required to remove 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 must consult with their advisors when selecting electives within the curriculum to help ensure that their career objectives are met.

Fall Term 1		**Hours**
COMM 101	Fundamentals of Oral Communication	3
CS 120	Computer Science I	4
ENGL 101	Writing and Rhetoric I	3
MATH 143	College Algebra	3
MATH 144	Analytic Trigonometry	1
Humanistic and Artistic Ways of Knowing Course		3
	Hours	**17**
Spring Term 1		
ENGL 102	Writing and Rhetoric II	3
CS 121	Computer Science II	3
CS 150	Computer Organization and Architecture	3
MATH 170	Calculus I	4
MATH 176	Discrete Mathematics	3
	Hours	**16**
Fall Term 2		
CS 210	Programming Languages	3
MATH 175	Calculus II	4
Science with Lab Course (from approved list above)		4
Elective Course(s)		1
	Hours	**12**
Spring Term 2		
CS 240	Computer Operating Systems	3
CS 270	System Software	3
CYB 220	Secure Coding and Analysis	3
STAT 301 or STAT 251	Probability and Statistics or Statistical Methods	3
Science with Lab Course (from approved list above)		4
	Hours	**16**
Fall Term 3		
CS 383	Software Engineering	4
CS 385	Theory of Computation	3
MATH 330	Linear Algebra	3
Major Technical Elective Course (UPDV Computer Science or Cybersecurity)		3
Social and Behavioral Ways of Knowing Course		3
	Hours	**16**
Spring Term 3		
CS 360	Database Systems	4
CS 395	Analysis of Algorithms	3
ENGL 317	Technical Writing II	3
Major Technical Elective Course (UPDV Computer Science or Cybersecurity)		3
Humanistic and Artistic Ways of Knowing Course		3
	Hours	**16**
Fall Term 4		
CS 445	Compiler Design	4
CS 480	CS Senior Capstone Design I	3
Elective Course(s)		1
American Diversity Course		3
	Hours	**11**
Spring Term 4		
CS 481	CS Senior Capstone Design II	3
Major Technical Elective Course (UPDV Computer Science or Cybersecurity)		3
Major Technical Elective Course (UPDV Computer Science or Cybersecurity)		3
International Course		3
Social and Behavioral Ways of Knowing Course		3
	Hours	**15**
	Total Hours	**119**

The degree map is a guide for the timely completion of your curricular requirements. Your academic advisor or department may be contacted for assistance in interpreting this map. This map is not reflective of your academic history or transcript and it is not official notification of completion of degree or certificate requirements. Please contact the Registrar's Office regarding your official degree/certificate completion status.

1. 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.
6. Graduates of the program will be able to apply computer science theory and software development fundamentals to produce computing-based solutions.