

COMPUTER SCIENCE (AS)

Associate of Science

Transfer Program Interest Areas: Science, Tech., Engr. and Math

This program leads to career opportunities in a wide variety of computer science areas such as operating systems, expert systems, graphics, databases, software engineering, compilers, numerical analysis, etc. This program requires strong math skills.

Completion of the following courses results in an associate degree and meets the general core requirements at all Idaho public universities. The suggested coursework normally fulfills the first half of a baccalaureate degree requirements in Computer Science. Course selection should be tailored to match requirements defined by intended transfer institutions.

Contact Information:

Math, Computer Science and Engineering Division Seiter Hall, Room 214 Phone: (208) 665-4521 Program Website (https://www.nic.edu/cs/)

Program Requirements

Code	Title	Credits			
General Education Requirements					
GEM 1 - Written Communication					
GEM 2 - Oral Communication					
GEM 3 - Mathematical Ways of Knowing ¹					
GEM 4 - Scientific Ways of Knowing ¹					
GEM 5 - Humanistic and Artistic Ways of Knowing					
GEM 6 - Social and Behavioral Ways of Knowing					
GEM 7W - Wellness					
Select one of the following:					
GEM 7F - First	Year Experience				
GEM 7I - Institu	itionally Designated				
Program Requirements					
CS-150	Computer Science I	4			
CS-151	Computer Science II	4			
CS-155	Computer Organization and Assembly Language	у З			
CS-210	Programming Languages	3			
CS-241	Computer Operating Systems	3			
CS-270	System Software	3			
MATH-170	Calculus I 🕸 🔤	4			
MATH-175	Analytic Geometry and Calculus II	4			
MATH-187	Discrete Mathematics	4			
Select one of the following:					
BACT-250	General Microbiology 🕀 🔤				
BIOL-115	Introduction to Life Sciences \oplus 🔤				
BIOL-227	Human Anatomy and Physiology I \oplus ${ ilde {f A}}$	AS			

Total Credits		65-69
ZOOL-202	General Zoology 🏵 🔤	
PHYS-211	Engineering Physics I 🏵 🔤	
GEOL-102	Historical Geology 🕀 🛤	
GEOL-101	Physical Geology 🕀 🔤	
GEOG-100	Physical Geography 🏵 🔤	
ENSI-119	Introduction to Environmental Science �	
CHEM-112	Principles of General College Chemistry II �	
CHEM-111	General Chemistry I 🕀 🔤	
BTNY-241	Systematic Botany 🏵 🔤	
BTNY-203	General Botany 🏵 🔤	

Total Credits

¹ This General Education Requirement is met by the Program Requirements.

Course Key

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GEM	AAS Institutionally	Gateway	Milestone
	Designated		

Program Outcomes

Upon completion of the program, students will be able to:

- 1. Demonstrate the ability to use current techniques, skills, and tools necessary for computing practice.
- 2. Demonstrate the ability to analyze the local and global impact of computing on individuals, organizations, and society.
- 3. Demonstrate an understanding of professional, ethical, legal, security, and social issues and responsibilities.
- 4. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- 5. Apply knowledge of computing and mathematics appropriate to the discipline.
- 6. Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- 7. Communicate effectively with a range of audiences and function effectively on a team to accomplish a common goal.

In addition to the program outcomes, students will meet the North Idaho College General Education (GEM) Requirements.