

# 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.

Program Website ([https://www.nic.edu/programs/viewprogram.aspx?program\\_id=21](https://www.nic.edu/programs/viewprogram.aspx?program_id=21))

## Program Requirements

| Code                                  | Title   | Credits |
|---------------------------------------|---|---------|
| <b>General Education Requirements</b> |   |         |
| GEM 1                                 | Written Communication   | 6       |
| GEM 2                                 | Oral Communication  | 3       |
| GEM 3                                 | Mathematical Ways of Knowing <sup>1</sup>   | 0       |
| GEM 4                                 | Scientific Ways of Knowing <sup>2</sup>   | 4       |
| GEM 5                                 | Humanistic and Artistic Ways of Knowing   | 6       |
| GEM 6                                 | Social and Behavioral Ways of Knowing   | 6       |
| GEM 7                                 | Institutionally Designated  | 4-6     |
| <b>Program Requirements</b>           |   |         |
| CS-150                                | Computer Science I  | 4       |
| CS-151                                | Computer Science II   | 4       |
| CS-155                                | Computer Organization and Assembly Language   | 3       |
| CS-210                                | Programming Languages   | 3       |
| CS-241                                | Computer Operating Systems  | 3       |
| CS-270                                | System Software   | 3       |
| MATH-170                              | Analytic Geometry and Calculus I             | 4       |
| MATH-175                              | Analytic Geometry and Calculus II   | 4       |
| MATH-187                              | Discrete Mathematics  | 4       |
| Select one of the following:          |   | 4-5     |
| BIOL-115                              | Introduction to Life Sciences     |         |
| ZOOL-202                              | General Zoology                              |         |
| CHEM-111                              | Principles of General College Chemistry I    |         |
| PHYS-211                              | Engineering Physics I     |         |
| Total Credits                         |   | 65-68   |

<sup>1</sup> This General Education Requirement is met by the Program Requirements.

<sup>2</sup> This General Education Requirement is partially met by the Program Requirements.

### Course Key



GEM



WCHE



AAS  
Institutionally  
Designated



Gateway



Milestone

## Program Outcomes

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

- Demonstrate the ability to use current techniques, skills, and tools necessary for computing practice.
- Demonstrate the ability to analyze the local and global impact of computing on individuals, organizations, and society.
- Demonstrate an understanding of professional, ethical, legal, security, and social issues and responsibilities.
- Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- Apply knowledge of computing and mathematics appropriate to the discipline.
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- 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.