# Computer Science in Coeur d'Alene

## Are you interested in:

- Artificial intelligence and robotics
- Developing cybersecurity programs
- Building complex wireless mobile devices
- Creating social networking platforms
- Designing video games and virtual environments

Computer science graduates are in high demand. In this program, you will learn how to design, develop and test computing systems for a wide variety of purposes. You will become proficient in various operating systems, programming languages and techniques, and computer architecture, with many opportunities to practice your software development skills on real-world projects through our local community business partners.

Students have the flexibility to specialize in an area that best supports their interests and career goals. For example, you may focus on computer networking, cybersecurity, robotics, artificial intelligence, computer graphics, gaming and virtual environments, bioinformatics, software development and many other areas.

**For the UI Coeur d'Alene Computer Science program the first two years of coursework is delivered at North Idaho College (NIC). Upper level classes are taught by UI faculty. Students planning on transferring to U ot I are encouraged to complete an associate of science degree at NIC.**

## Regional Employers

- Avista
- The Boeing Company
- Esterline
- Kochava
- Idaho National Laboratory
- Schweitzer Engineering Laboratories
- Pacific Northwest National Laboratory
- Quest Aircraft
- Itron
- Micron
- Kootenai Health

## Skills Needed

- Interest and aptitude in math and science
- Comfortable working with computers and other technology
- Creative problem solver
- Generally interested in how things work
- Personal initiative; willingness to work hard

## Potential Careers

- Cybersecurity professional
- Developer/designer of games and virtual environments
- Software developer
- Operating systems and network administrator
- Bioinformatics specialist
- Embedded and real-time operating systems implementor
- Robotics applications designer

## For More Information

**Program Director/Student Advisor**
Bob Rinker | rinker@uidaho.edu

**Department Manager**
Nicole Preece | npreece@uidaho.edu

## Engineer like a Vandal

Learn more about the College of Engineering and what it means to Engineer Like a Vandal at **uidaho.edu/engr.**

University of Idaho
Department of Computer Science
Coeur d'Alene

# COMPUTER SCIENCE

an education that prepares you for success

**4 Year Plan | 2018/2019**

## FRESHMAN

### FALL

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Computer Science I | CS 120* | CS 150* | 4 |
| College Writing & Rhetoric | ENGL 102 | ENGL 102 | 3 |
| Discrete Math | MATH 176* | MATH 187* | 4 |
| Elective | Humanities / Social Science | GEM 5/6/7 | 3 |
| Free Elective | | GEM or other | 3 |

*Minimum grade of C required in all 100-level CS courses, and Math 176/187 for entrance into 200-level courses.

**TOTAL 17**

### SPRING

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Computer Science II | CS 121* | CS 151* | 4 |
| Computer Organization & Architecture | CS 150* | CS 155* | 3 |
| Fundamentals of Public Speaking | COMM 101 | COMM 101 | 3 |
| Elective | Humanities / Social Science | GEM 5/6/7 | 3 |
| Elective | Science Elective w/Lab | GEM 4 | 3 |

**TOTAL 16**

## SOPHOMORE

### FALL

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Programming Languages | CS 210* | CS 210* | 3 |
| System Software | CS 270* | CS 270* | 3 |
| Analytic Geometry & Calculus I | MATH 170 | MATH 170 | 3 |
| Elective | Humanities / Social Science | GEM 5/6/7 | 3 |
| Elective | Science Elective w/Lab | GEM 4 | 4 |

**TOTAL 16**

### SPRING

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Computer Operating Systems | CS 240* | CS 241* | 3 |
| Analytic Geometry & Calculus II | MATH 175* | MATH 175* | 4 |
| Elective | Humanities / Social Science | GEM 5/6/7 | 3 |
| Elective | Science Elective w/Lab | GEM 4 | 3 |

*Minimum grade of C required in all 200-level CS courses, and Math 170, 175 for entrance into upper division courses.

**TOTAL 13**

## JUNIOR

### FALL

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Theory of Computation | CS 385 | | 3 |
| Probability & Statistics | STAT 301 | MATH 253* | 3 |
| Linear Algebra | MATH 330 | MATH 335* | 3 |
| Technical Writing | ENGL 317 | ENGL 202* | 3 |
| Elective | CS Technical Elective | | 3 |

*NIC classes will not count towards UI upper division credits.

**TOTAL 15**

### SPRING

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Software Engineering | CS 383 | | 3 |
| Analysis of Algorithms | CS 395 | | 3 |
| Elective | Humanities / Social Science | GEM 5/6/7 | 3 |
| Elective | CS Technical Elective | | 3 |
| Elective | Free Elective | GEM or other | 3 |

**TOTAL 15**

## SENIOR

### FALL

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Contemporary Issues in Computer Science | CS 400 | | 1 |
| Compiler Design | CS 445 | | 4 |
| Senior Capstone Design I | CS 480 | | 3 |
| Math Elective | Upper Division Math or MATH 275 | MATH 275 | 3 |
| Elective | CS Technical Elective | | 3 |

**TOTAL 14**

### SPRING

| REQUIRED COURSE | UI COURSE | NIC COURSE | CREDITS |
|---|---|---|---|
| Senior Capstone Design II | CS 481 | | 3 |
| Elective | CS Technical Elective | | 3 |
| Elective | Free Elective | | 8 |

**TOTAL 14**

- This academic plan is intended as a guideline only and does not replace academic advising.
- See course catalog and department website for complete degree requirements and additional information.
- A CS technical elective is defined as a CS 300+ course that isn't otherwise required.
- 120 credits minimum are required for a B.S. in computer sceince.
- Minimum of 40 credits of upper division required to graduate.
- A 5-year academic plan is an option see department website for additional information.

North Idaho College

University of Idaho
College of Engineering