



# Bachelor of Science in Computer Science (BSCS)

## *Study of Computer Programming and Organization*

Computer Science involves the design, development and analysis of computer programs and applications. Computer scientists have expertise in programming, cloud computing, Artificial Intelligence, security, networking, algorithms, digital logic, and software engineering. Computer scientists work with a wide variety of products and services. Put simply, any device with a processor (i.e., a smart device) requires a computer scientist to program it. They work in multi-disciplinary teams on computer systems, security, Artificial Intelligence, gaming, robotics, automation, banking, healthcare, and in many other areas.

Computer science students at Clark College have the opportunity to develop projects by applying their classroom knowledge to solve real-world problems. Projects involve developing concepts, creating algorithms, programming, and presenting the results. Upon completion of this program of study, students obtain a Bachelor of Science in Computer Science (BSCS) and would be qualified for a wide range of computer software development opportunities.

Students successfully completing year one and two courses are awarded an Associate – Computer Science Concentration degree and become eligible to apply to the Bachelor of Science in Computer Science degree program. Students accepted to the BSCS program who successfully complete year three and four courses are awarded a Bachelor of Science in Computer Science.

Clark College’s Computer Science faculty bring their extensive industry and teaching experience to the classroom. Faculty maintain close ties with students and employers to ensure Clark students are prepared to succeed in their career.

All students interested in Computer Science should contact a Computer Science faculty advisor in order to develop an education plan as soon as possible. Advising schedules are available at <https://www.engrcs.com/schedule>.

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## Year One

### Fall Term

- MATH 111 College Algebra..... 5
- CSE 120 Introduction to Computing ..... 5
- ENGL& 101 English Composition I ..... 5
- CSE 101 Computer Science Orientation..... 1

### Winter Term

- MATH 103 College Trigonometry ..... 5
- CSE 121 Introduction to C..... 5
- CMST& 230 Small Group Communication ..... 5

### Spring Term

- MATH& 146 Statistics..... 5
- CSE 250 Digital Logic Design ..... 5
- ECON& 202 Macroeconomics ..... 5

## Year Two

### Fall Term

- MATH& 151 Calculus I..... 5
- CHEM& 121 Intro to Chemistry..... 5
- CSE 224 Programming Tools..... 5

### Winter Term

- MATH& 152 Calculus II..... 5
- CSE 215 Discrete Structure..... 5
- CSE 222 Introduction to Data Structure ..... 5

### Spring Term

- MATH 215 Linear Algebra ..... 5
- BIOL& 100 General Biology ..... 5
- CSE 223 Advanced Data Structure..... 5

## Year Three

### Fall Term

<input type="checkbox"/> CSE 310 Software Engineering.....	4
<input type="checkbox"/> CSE 315 Programming Language Design .....	4
<input type="checkbox"/> ENGL& 235 Technical Writing.....	5
<input type="checkbox"/> Specialization .....	4

### Winter Term

<input type="checkbox"/> CSE 320 Design & Analysis of Algorithms .....	4
<input type="checkbox"/> CSE 325 Software Design & Development.....	4
<input type="checkbox"/> CSE 370 Computer Organization & Architecture .....	4
<input type="checkbox"/> Specialization .....	4

### Spring Term

<input type="checkbox"/> CSE 330 Computer Networks .....	4
<input type="checkbox"/> CSE 340 Introduction to Database Systems.....	4
<input type="checkbox"/> CSE 345 System Programming.....	4
<input type="checkbox"/> Specialization .....	4

**Specialization Areas:** Artificial Intelligence, Data Science, Cloud Computing, Cybersecurity, embedded systems.

**Minimum 181 units required, view the [Clark College Catalog](#) for additional program information**

## Approximate Costs Each Term

Tuition\* \$1477 for 15 credits per term plus books, supplies, and miscellaneous fees. \*Tuition based on Washington resident rates. View [residency classifications](#) on our website.

## Customize with Advising

Faculty advisors are available to develop individualized education plans. Visit <https://www.engrccs.com/schedule> to start. No Appointment required.

## Support Services

At Clark College, we know that everyone who walks through our doors is a unique person with diverse, interesting and sometimes challenging circumstances. We are committed to ensuring each and every student can succeed at Clark, and are committed to serving systemically non-dominant communities, including (but not limited to) people of color, those who identify as LGBTQIA2S+ and people with disabilities. We have resource centers, clubs, programs and activities for all students.

Visit our [Student Support page](#) for more information.

## Funding Options at Clark

There are many resources available to help students cover the costs to attend college—tuition, books, fees, tools, transportation, childcare, etc.—so you can focus on completing your degree or certificate.

**Grants** Based on need. You do not need to pay back grants.

**Scholarships** Similar to grants, and there are different criteria; Clark College awards hundreds of thousands of

## Year Four

### Fall Term

<input type="checkbox"/> CSE 410 Project & Program Management.....	4
<input type="checkbox"/> CSE 490 Capstone Project I .....	4
<input type="checkbox"/> Specialization .....	6

### Winter Term

<input type="checkbox"/> PHIL 420 Ethics in Management.....	5
<input type="checkbox"/> CSE 491 Capstone Project II .....	4
<input type="checkbox"/> Specialization .....	8

### Spring Term

<input type="checkbox"/> CSE 420 Human Machine Interface.....	4
<input type="checkbox"/> CSE 492 Capstone Project III .....	4
<input type="checkbox"/> Specialization .....	8

## How to Enroll

Visit Clark College’s Welcome Center in Gaiser Hall room 127 or the [Get Started webpage](#) for information on becoming a new student. Email [start@clark.edu](mailto:start@clark.edu) or call 360-992-2078.

All students interested in Computer Science should contact a Computer Science faculty advisor for advising as soon as possible. Advising schedules are available at <https://www.engrccs.com/schedule>.

[Apply for Admission](#)

dollars to students each year. We encourage everyone to apply!

**Student Employment & Work Study** Money you earn through working part-time; this helps to reduce your reliance on loans, and build your skills and resume.

**Loans** If you do need to borrow additional funds to pay for

college-related expenses, you can consider loans. It is money you borrowed and will pay back with interest.

**Specific Assistance** for veterans, worker retraining, DREAMers, students receiving DSHS benefits, and more.

**For more information, visit our [paying for college website](#) or visit the **Office of Financial Aid** in Gaiser Hall room 101.**

## Career Opportunities

Career exploration and planning is an essential step to establishing your academic journey at Clark College and beyond. Career Services connects you with resources and strategies for career planning in six areas: knowing self; career awareness; relationship building and networking; work-based learning; job-search skills; and career readiness competencies. You are encouraged to participate in MyPlan, a comprehensive and interactive guide with activities to support your career, academic, and financial wellness planning. **Visit [Career Services](#) in the Penguin Union Building room 002.**

Career exploration information established by Clark Faculty and Staff.



*Clark College does not discriminate on the basis of race, color, national origin, age, perceived or actual physical or mental disability, pregnancy, genetic information, sex, sexual orientation, gender identity, marital status, creed, religion, honorably discharged veteran or military status, or use of a trained guide dog or service animal in its programs and activities, in accordance with state and federal laws. The responsibility for and the protection of this commitment extends to students, faculty, administration, staff, contractors and those who develop or participate in college programs. It encompasses every aspect of employment and every student and community activity. The following person has been designated to handle inquiries regarding non-discrimination policies: Vice President of Diversity, Equity, and Inclusion, Gaiser Hall (GHL) 220, 360-992-2757, or 360-991-0901 (video phone).*

*Alternate format of this document is available upon request. Please contact Disability Support Services at 360-992-2314, or 360-991-0901 (video phone).*

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