Gianforte School of Computing

A computer science degree is highly marketable. Between 2021 and 2031, the number of jobs is projected to grow by 21%, much faster than the average job growth overall. Consequently, students who graduate with a bachelor's degree in CS are in high demand. The average starting salary is $71,000.

Our curriculum is designed with considerable flexibility, due to the numerous types of computer science jobs that exist. The bachelor's degree provides every student with a strong fundamental understanding of the field. Students may then select from exciting computer science electives such as artificial intelligence, computational biology, computer networks, databases, machine learning, robotics, operating systems, software engineering, web design and special topics courses. Students who complete a bachelor's degree will find themselves both highly marketable and well-prepared for graduate school.

We also offer graduate programs leading to the M.S. and Ph.D. degrees.

The bachelor's degree is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org/.

Professional Option B.S.

The professional option allows a student to delve more deeply into both computer science and related technical areas. The compilers course, CSCI 468, serves as the capstone for this option.

Interdisciplinary Option B.S

Many opportunities and challenges lie at the intersection of technology and other fields. The interdisciplinary option allows a student to pursue a minor of choice such as Entrepreneurship or Japanese Studies. During a student's senior year, the minor area is connected back to computer science through a senior project. CSCI 482R and CSCI 483R serve as the capstone for this option.

Bachelor of Arts

The computer Science Bachelor of Arts degree serves students who want to couple knowledge of computing with knowledge from the Arts, Humanities, Business or other non-STEM (Science, Technology, Engineering, Mathematics) areas. Students have more opportunity to pursue non-STEM coursework because in comparison to the B.S. options, fewer math and science courses are required. ESOF 423 (http://catalog.montana.edu/coursedescriptions/esof/) serves as the capstone for this option.

Data Science Bachelor of Science

This 120-credit B.S. in Data Science (http://catalog.montana.edu/undergraduate/engineering/computer-science/data-science-bachelor-of-science/) at Montana State University includes coursework from Computer Science, Statistics, Mathematics, Business, English and the MSU Library. Data Science is an interdisciplinary field that extracts knowledge and insights from diverse data. The major is be administered by MSU's School of Computing in close collaboration with the Department of Mathematical Sciences.

Accelerated B.S. / MS Option

The Accelerated BS/MS Program allows Computer Science students to earn both the Bachelor of Science (BS) and Master of Science (MS) degrees in five years. Student in this program may reserve up to 12 credits of coursework towards their MS degree during their first four years at MSU. In their fifth year, students complete the remaining graduate work on either the MS courses-only or thesis track.

Undergraduate Programs

- Professional Option B.S. (http://catalog.montana.edu/undergraduate/engineering/computer-science/professional-option/)
- Interdisciplinary Option B.S (http://catalog.montana.edu/undergraduate/engineering/computer-science/interdisciplinary-option/)
- Bachelor of Arts (http://catalog.montana.edu/undergraduate/engineering/computer-science/bachelor-of-arts/)
- Data Science B.S. (http://catalog.montana.edu/undergraduate/engineering/computer-science/data-science-bachelor-of-science/)
- Accelerated BS/MS in Computer Science (http://catalog.montana.edu/seamlessbs-ms-computerscience/)

Undergraduate Minors

- Computer Science Minor (Non-Teaching) (http://catalog.montana.edu/undergraduate/engineering/computer-science/computer-science-minor-nonteaching/)
- Computer Science Teaching Minor (http://catalog.montana.edu/undergraduate/engineering/computer-science/computer-science-minor-teaching/)
- Data Science Minor (http://catalog.montana.edu/undergraduate/engineering/computer-science/datascienceminor/)

Graduate Programs

- M.S. in Computer Science (http://catalog.montana.edu/graduate/engineering/computer-science/ms-computer-science/)
- M.S. in Cybersecurity (http://catalog.montana.edu/graduate/engineering/computer-science/ms-cybersecurity/)
- Ph.D. in Computer Science (http://catalog.montana.edu/graduate/engineering/computer-science/phd-computer-science/)

M.S. Degree Programs

A Bachelor's degree in Computer Science or a closely related field is recommended. Students with non-computer science degrees at the Bachelor's level or above are also encouraged to apply; such students will generally be required to take appropriate courses while enrolled at MSU to make up computer science and related subject matter deficiencies prior to full acceptance into the computer science Master's program. Factors that the department uses in its admissions process include GPA, TOEFL scores (for non-native English speakers), three reference letters, and previous coursework. For more information, please refer to https://www.cs.montana.edu/masters/.

Details about applying can be found at www.montana.edu/gradschool/admissions/apply.html (http://www.montana.edu/gradschool/admissions/apply.html)

Ph.D. Degree Program

The degree is generally intended for students who have a B.S. or M.S. degree in Computer Science and who want to pursue a research and/or college-level teaching career. The program requires coursework, research, exams and the writing of a dissertation.

Admission to the doctoral program follows the requirements of The Graduate School. Factors that the department uses in its admissions process include GPA, TOEFL scores (for non-native English speakers), three reference letters, and previous coursework. For more information, please refer to www.cs.montana.edu/future-students-phd.html (http://www.cs.montana.edu/future-students-phd.html)

Details about applying can be found at www.montana.edu/gradschool/admissions/apply.html (http://www.montana.edu/gradschool/admissions/apply.html).