

SAMPLE Four-Year Plan

B.S. Computer Science - Comprehensive Emphasis

FALL 2023 Requirements

The curriculum in the computer science major is somewhat structures but students can move through the coursework in many ways. This four-year plan illustrates one possible path a new freshman could take to complete a degree in four years. This is not an official document and is not the only way that a computer science degree can be completed in four years. Current students should refer to their individual Academic Advising Report for specific graduation requirements. Courses in bold indicate major-based coursework that is completed in the first year.

First Year

Fall Semester	Units
English 101 Intro to College Writing and Reading	3
Math 142 College Algebra	4
Computer Science 165 Intro to Computational Thinking	3
Gened CORE 130 Individual and Society	3
Intrauniversity 104 New Student Seminar	1
PEGNRL 192 Personal Health and Fitness for Life	1
Total Credits	15

Spring Semester	Units
English 102 Intro to College Writing, Reading, Research	3
Math 151 Trigonometry	3
Computer Science 172 Intro to Java or 174 Intro to C++	3
Gened CORE 140 Global Perspectives	3
General Education Elective	3
Total Credits	15

Notes: The math and English courses you will take during your first year will depend on UW System placement exam scores. This four-year plan reflects the math and English courses most common for students in this major. All students are encourage to complete placement testing prior to attending Warhawks SOAR (Student Orientation, Advising, and Registration).

Opportunities: The Thinking In Code learning experience is a great option for first-year students with a major in computer science or considering a major in computer science. Joining a university-sponsored club and actively participating is strongly encouraged. Involvement in a club or activity will help you develop interpersonal skills, give you the opportunity to learn and practice leadership skills, and adds to your resume.

Second Year

Fall Semester	Units
Computer Science 220 Intermediate Java or 222 Int. C++	3
Math 253 Calculus and Analytic Geometry I	5
Gened CORE 110 World of the Arts	3
U.S. Racial/Ethnic Diversity Course	3
General Education Elective	3
Total Credits	17

Spring Semester	Units
Computer Science 271 Assembly Programming	3
Computer Science 223 Data Structures	3
Computer Science 215 Discrete Structures or Math 280	3
Lab Science course approved for comprehensive major	5
Total Credits	14

Notes: Students are encouraged to start thinking about selecting a minor in the second year. Common minors selected by computer science majors include: Information Technology, Media Arts and Game Development (MAGD), Mathematics, General Business, Cybersecurity, Bioinformatics, and Website Development and Administration. While these minors are common among computer science majors, you can choose from over 100 options that include Art, Japanese Studies, Philosophy and more.

Opportunities: Undergraduate research is not required as part of the computer science program but is highly recommended for students who have an interest in attending graduate school in the future. Completing a directed research project with a faculty mentor has many benefits: it develops a student's critical thinking and writing abilities, signals to graduate school programs that a student is prepared for independent research of their own, and it can provide a student with financial support since many undergraduate research opportunities are paid.



University of Wisconsin
Whitewater

College of Letters
and Sciences

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Third Year

Fall Semester	Units
Computer Science 320 Concepts of Programming Lang	3
Computer Science 366 Database Management Systems	3
Computer Science 300/400-Level Technical Elective	3
Math 355 Matrices and Linear Algebra	3
Communication 110 Intro to Human Communication	3
Total Credits	15

Spring Semester	Units
Computer Science 412 Computer Organization/System	3
Computer Science 424 Operating Systems	3
Computer Science 300/400-Level Technical Elective	3
STAT 342 Applied Statistics	3
Lab Science course approved for comprehensive major	5
Total Credits	17

Opportunities: An internship is not required for the computer science major but can be a great opportunity for practical experience. An internship is an experiential learning opportunity that provides students with hands-on experience in a potential career field, supervision and coaching from prospective employers, and the ability to learn professional norms and behaviors. In addition, completing an internship allows students to differentiate themselves in a competitive job market. Students should begin planning for an internship by the beginning of the junior year and can complete the internship in the junior or senior year. The internship course, Computer Science 493, counts as an upper-level technical elective.

Fourth Year

Fall Semester	Units
Computer Science 433 Theory of Algorithms	3
Computer Science 476 Software Engineering	3
Computer Science 300/400-Level Technical Elective	3
Gened CORE 390 World of Ideas	3
Ethics and Technology course	3
Total Credits	15

Spring Semester	Units
Computer Science 434 Theory of Computation	3
Computer Science 300/400-Level Technical Elective	3
English 370 or PWP 371 or PWP 372 Writing Requirement	3
LSINDP 399 Career Information in Letters and Sciences	1
Elective course (if needed)	3
Total Credits	13

Notes: All students must earn 120 credits to earn a bachelor's degree and many students have the opportunity to choose additional courses in the fourth year to expand skills, explore interests, or try something new.

Opportunities: LSINDP 399: Career Information in Letters and Sciences is a 1-credit course that focuses on career and graduate school opportunities; identifying skills, strengths, and work values; creating effective job search materials; developing a networking strategy; and planning to a successful post-graduation transition.

Planning for Graduation: Students are encouraged to apply for graduation one full semester prior to their intended graduation date. Information about commencement and the application for graduation are on the Registrar's Office website (<http://www.uww.edu/registrar/graduation>).

Curriculum effective date: Fall 2022



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