

Computer Science Graduation Requirements

University of Washington

The graduation requirements shown below are subject to change.

For more information, see the Undergraduate Handbook, available online at http://www.cs.washington.edu/education/ugrad/current/degree_requirements.html

General Education Component

Language Skills (5-20 credits)

- *English Composition (5)
- Foreign Language through 3rd quarter (0-15)

Reasoning and Writing in Context (15 credits)

These courses may double count as Areas of Knowledge requirements.

- Quantitative/symbolic reasoning (5)
- Writing across the curriculum (W courses) and/or additional composition (10)

Areas of Knowledge (75 credits)

- Visual, Literary, and Performing Arts (20)
- Individuals and Societies (20)
- The Natural World (20)
- Additional coursework (15)

Note: Courses taken for the Math & Science Component may be used to satisfy the Natural World and additional coursework in the Areas of Knowledge requirements.

Mathematics & Science Component

Mathematics (19-22 credits)

- *Math 124, 125, 126 or 134, 135, 136 (honors) (15)
Calculus with Analytical Geometry
- Math 308 or 318 (waived if 136 taken) (3)
- Stat 390, 391, or 394&395 (4)
-extra 2 credits from 394/395 count as
CSE senior elective credits

Natural Science (10 credits)

- *Physics 121 or Chem 142 or any course from the list of approved natural science courses in the CSE Undergraduate Handbook. (5)
- Five additional credits of natural science from the approved list (5)

Computer Science Component

Required (35 credits)

- *CSE 142 Computer Programming I (4)
- *CSE 143 Computer Programming II (5)
- CSE 303 Concepts & Tools for Soft. Dev. (3)
- CSE 321 Discrete Structures (4)
- CSE 322 Intro to Formal Models (3)
- CSE 326 Data Structures (4)
- CSE 341 Programming Languages (4)
- CSE 370 Intro to Digital Design (4)
- CSE 378 Machine Org & Assembly Lang. (4)

Senior Electives (20 credits)

Select at least **20 credits** from courses on the approved senior elective course list in the CSE Handbook, including **at least four courses** from the following list.

- CSE 401 Intro to Compiler Construction (3)
- CSE 403 Software Engineering (4)
- CSE 421 Intro to Analysis of Algorithms (3)
- CSE 427 Computational Biology (3)
- CSE 431 Intro to Complexity (3)
- CSE 440 Intro to HCI (5)
- CSE 444 Intro to Database Systems (4)
- CSE 451 Intro to Operating Systems (4)
- CSE 455 Computer Vision (4)
- CSE 457 Computer Graphics (4)
- CSE 461 Computer Networks (4)
- CSE 466 Software for Embedded Systems (4)
- CSE 467 Advanced Digital Design (4)
- CSE 471 Computer Design and Org (4)
- CSE 473 Artificial Intelligence (3)
- CSE 484 Computer Security (4)

Free Electives to bring total credits up to the 180 required for graduation (23-41 credits)

The minimum grade required for math, science, language, reasoning and writing in context, CS senior electives and computer science coursework is a 2.0. A student's cumulative GPA must not fall below a 2.0.

*** Denotes prerequisites (must be fully completed before application date). Regardless of AP credit, at least one calculus or post-calculus math course and one approved natural science course must be completed prior to applying to the department.**