

# Computer Engineering Graduation Requirements

University of Washington

The graduation requirements shown below are subject to change.

For more information, see the [CSE Undergraduate Website](https://www.cs.washington.edu/academics/ugrad/current-students/degree), available at <https://www.cs.washington.edu/academics/ugrad/current-students/degree>

## General Education Component

### Written & Oral Communication (12 credits)

- \*English Composition (5)
- Approved UW Writing or Composition Course (7)

### Diversity Requirement (5 credits)

- UW Diversity Requirement (5)
- Note: These credits may overlap with other requirements.

### Areas of Inquiry (30 credits)

- Arts & Humanities (10-20)
- Social Sciences (10-20)

## Mathematics & Science Component

### Mathematics & Natural Sciences (41 credits)

- \*MATH 124, 125, 126 or 134, 135, 136 Calculus with Analytical Geometry (15)
- MATH 208 (waived if 136 taken) Matrix / Linear Algebra (3)
- \*PHYS 121 Mechanics (or PHYS 141) (5)
- PHYS 122 Electromagnetism (or PHYS 142) (5)
- 10 additional credits from the [list of approved natural science courses for Computer Engineering on the CSE website](#) (10)
- 3 to 6 additional credits of Math/Science (to bring the total to 41) chosen from [approved natural science courses for Computer Engineering](#) on the CSE website, as well as STAT 391, 394, MATH 207, 209, 318, 334, 335, 394, AMATH 351, 353. (3-6)

\* Denotes prerequisites that must be fully completed before applying to the major. This does not apply to direct-to-major freshmen applicants.

## Computer Engineering Component

### Fundamentals (32-33 credits)

- \*CSE 123 Intro to Computer Programming III (4)
- OR**
- \*CSE 143 Computer Programming II (5)
  - CSE 311 Foundations of Computing I (4)
  - CSE 312 Foundations of Computing II (4)
  - CSE 332 Data Structures and Parallelism (4)
  - CSE 351 The Hardware/Software Interface (4)
  - EE 205 Intro to Signal Conditioning or EE 215 Intro to Electrical Engineering (4)
  - CSE 369 Introduction to Digital Design (3)
  - CSE/EE 371 Design of Digital Circuits & Systems (5)

### Core and Electives (40 credits)

Select at least 40 additional CE credits, including at least:

- One course chosen from: CSE 403, CSE/EE 474, CSE 480, or CSE 484 (2-4)
- 3 additional courses chosen from the [Computer Engineering Systems Electives list](#) on the CSE website (12-15)
- 2 additional courses from the [CSE Core Courses list](#) on the CSE website (6-10)
- 1 course from the [CSE Capstone list](#) (5)
- Additional courses from the [CSE Electives list](#) (which can include additional courses from the [CSE Core Courses list](#)), CSE 121, or CSE 122, to bring total CSE electives to 40 credits (including CSE 121 or CSE 122 if taken). (6-15)

### Additional Requirements

**Additional CSE or Engineering credits to bring the total CSE + Engineering credits (this includes any level in the College of Engineering such as ENGR, HCDE, ECE, etc) to 40 *not including the Fundamentals section above.***

(This is needed only if courses outside of CSE and Engineering are used to meet the electives requirement above.)

**Free Electives to bring total credits up to the 180 required for graduation**

Note: A student's cumulative GPA must not fall below a 2.0.