

# Computer Engineering 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](http://www.cs.washington.edu/education/ugrad/current/degree_requirements.html)

## General Education Component

### Written & Oral Communication (12 credits)

- \*English Composition (5)
- TC 231 Intro. to Technical Writing (3)
- TC 333 Adv. Tech. Writing & Oral Pres. (4)

### Areas of Knowledge (30 credits)

- Visual, Literary, and Performing Arts (10-20)
- Individuals and Societies (10-20)

## 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 Sciences (20 credits)

- \*Phys 121 Mechanics (5)
- \*Phys 122 Electromagnetism &  
Oscillatory Motion (5)
- 10 additional credits from the list (10)  
of approved natural science courses in the  
CS&E Handbook

\* 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.

% Denotes an update to the curriculum that is currently pending.

## Computer Engineering Component

### Required (47 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)
- EE 215 Intro to Electrical Engineering (4)
- CSE 451 Operating Systems (4)
- CSE 461 Intro to Networks (4)

Students must complete either the hardware or the software specialization.

### Hardware Specialization (24 credits)

- EE 233 Circuit Theory (5)
- CSE 466 Software for Embedded Systems (4)
- CSE 467 Advanced Digital Design (4)
- CSE 477 Hardware Design Capstone (5)
- Select at least (%)6 credits from courses on (6)  
the approved senior elective course list in the  
CS&E Handbook

### Software Specialization (22-24 credits)

- CSE 403 Software Engineering (4)
- Two from CSE 401, 421, 444, %466, or 471 (6-8)
- Software Design Capstone (5)
- Select at least (%)7 credits from courses on the (7)  
approved senior elective course list in the CS&E  
Handbook

### Free Electives to bring total credits up to the 180 required for graduation (25-30 credits)

The minimum acceptable grade for any required or elective CSE course is 2.0. A student's overall GPA must not fall below a 2.0.