

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

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
free 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.**

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 (28 credits)

- EE 233 Circuit Theory (5)
- CSE 466 Software for Embedded Systems (4)
- CSE 467 Advanced Digital Design (4)
- CSE 471 Computer Design and Organization (4)
- Hardware Design Capstone from the list of approved courses in the CS&E Handbook (5)
- At least 6 credits from courses on the approved Computer Engineering senior elective course list in the CS&E Handbook (6)

Software Specialization (27 credits)

- CSE 403 Software Engineering (4)
- 18 credits from the approved Computer Engineering senior elective course list in the CS&E Handbook, including at least three courses from CSE 401, 421, 444, 466, 471, 484 (18)
- Software Design Capstone from the list of approved courses in the CS&E Handbook (5)

Free Electives to bring total credits up to the 180 required for graduation (21-25 credits)

The minimum acceptable grade for any course in the Mathematics & Science or Computer Engineering Components, or in Written & Oral Communication, is 2.0. A student's overall GPA must not fall below a 2.0.