Computer Engineering
Graduation Requirements

University of Washington

The graduation requirements shown below are subject to change.

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

General Education Component

Written & Oral Communication (12 credits)

- ❑ *English Composition (5)
- ❑ ENGR 231 Intro. to Technical Writing (3)
- ❑ Approved UW Writing or Composition Course (4)

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 (15)
  Calculus with Analytical Geometry
- ❑ MATH 208 (waived if 136 taken) (3)
  Matrix / Linear Algebra
- ❑ *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 (4)
  or EE 215 Intro to Electrical Engineering
- ❑ 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: (2-4)
  CSE 403, CSE/EE 474, CSE 480, or CSE 484
- ❑ 3 additional courses chosen from the (12-15)
  Computer Engineering Systems Electives list on the CSE website
- ❑ 2 additional courses from the CSE Core Courses list on the CSE website (6-10)
- ❑ 1 course from the the CSE Capstone list (5)
- ❑ Additional courses from the CSE Electives list (6-15)
  (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).

Additional CSE or Engineering credits to bring the total CSE + Engineering credits 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.

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