This resource is for ENGRUD students who entered the UW in AUT23 or later.

**Electrical and Computer Engineering**

**Graduation Requirements**

University of Washington

[https://ece.uw.edu](https://ece.uw.edu)

**ENGRUD Requirement Sheet - Key:**

♦ = Placement Requirements
★ = Pick one to satisfy placement requirements

**Placement:** July 1 at the end of the first year

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**E-FIG: ENGR 101 and GEN ST 199 (2cr)**

**Mathematics (21cr)**

♦ MATH 124, 125, 126 - Calc w/ Analytic Geom I-III (15cr)
  
  Math 207 - Intro. to Differential Equations (3cr)  
  [pr: MATH 125]
  
  MATH 208 - Matrix Algebra w/Applications (3cr)  
  [pr: MATH 126]

**Statistics (3-4cr)**

One of the following: IND E 315 (3cr); STAT 390 (4cr)

**Sciences (15cr min.)**

♦ CHEM 142 - General Chemistry (5cr)
  
  ♦ PHYS 121 - Mechanics (5cr)  
  [pr: MATH 124 or MATH 134]
  
  ★ PHYS 122 - Electromagnetism (5cr)  
  [pr: MATH 125 or MATH 134]
  
  ★ PHYS 123 - Waves (5cr)  
  [pr: MATH 126 or MATH 134; PHYS 122] OR Other Natural Science (NSc) (5cr)

**Engineering General Education Requirements (69cr)**

**Written and Oral Communication (12cr):**

♦ English Composition (5cr)
  
  ENGR 231 - Introduction to Technical Communication (3cr)  
  [pr: ENGL Composition]
  
  E E 393 - Adv Tech Comm (4cr) or Dept. alternative  
  [pr: ENGR 231]

**Areas of Inquiry:**

Arts & Humanities - A&H (10cr)
  
  Social Sciences - SSc (10cr)
  
  Additional A&H or SSc (4cr)
  
  Diversity - DIV (5cr) - (may overlap with A&H or SSc)
  
  Additional NSc (to reach 45cr, if needed)
  
  Must complete one course from the following: BIOL 130, BIOL 220, MATH 224, PHYS 123 (or PHYS 143)

**Computer Programming (4-5cr)**

★ CSE 123 - Computer Programming III (4cr)  
  [pr: Recommended: CSE 122 or completion of Paul G. Allen School's Guided Self-Placement]
  
  OR
  
  ★ CSE 143 - Computer Programming II (5cr) [pr: CSE 142]

**Departmental Core (21-23cr)**

E E 201 – Computer Hardware Skills (1cr)  
  [pr: CSE 122, CSE 123, CSE 142, or CSE 143, any of which may be taken concurrently]
  
  E E 215 – Fundamentals of Electrical Engineering (4cr)  
  [pr: MATH 126; MATH 207, may be concurrent; PHYS 122]
  
  One of the following: E E 241 – Programming for Signal & Info. Processing App. (2cr) or CSE 163 – Intermediate Data Programming (4cr)  
  [pr: either CSE 122, CSE 123, CSE 142, CSE 143, or CSE 160]
  
  E E 242 – Signals, Systems, and Data I (5cr)  
  [pr: MATH 136 or MATH 207 or AMATH 351; E E 241 (may be concurrent) and either E E 241, which may be taken concurrently, or CSE 163]
  
  E E 271 – Digital Circuits & Systems (5cr)  
  [pr: Either CSE 121, CSE 122, CSE 123, CSE 142, or CSE 143]
  
  E E 280 – Exploring Devices (4cr)  
  [pr: PHYS 122]

**Advanced Elec. & Comp. Engr. Electives (36cr)**

**Professional Issues (1-5cr)**

See adviser for list of approved courses.

**Capstone (4-8cr)**

See adviser for list of approved courses.

**Additional 300 & 400 level EE Courses (to reach 36cr)**

Minimum of 20cr at the 400 level

Optional Suggested Pathways:

These are groupings of courses within specified areas that students are encouraged to view as guides rather than strict requirements. Contact dept for list of current pathways.

**Free Electives (to reach 180 total credits)**

Additional coursework in any subject area not used elsewhere in degree.

**Total credits required for graduation: 180cr**

Honors or accelerated sequences of chemistry, math and physics will satisfy the placement requirements. AMATH 351/352 may be alternatives to MATH 207/208, work with the department to confirm.

Updated September 2023
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Electrical and Computer Engineering
Sample Curriculum
University of Washington
https://ece.uw.edu

Electrical & Computer Engineering Advising
Office: AE 100R, Paul Allen Center, Box 352500
Seattle, WA 98195-2500
Phone: (206) 221-5270
Email: undergraduatece@uw.edu

This is a sample four-year plan for ENGRUD students. It is intended to provide a framework for ENGRUD students to reference as they create their own individual academic plan.

Courses required to request placement for ENGRUD students: ENGR 101; MATH 124, MATH 125, MATH 126; CHEM 142, PHYS 121; English Composition; ENGRUD students who are interested in ECE should choose one of the following: CSE 121, CSE 122, CSE 123, PHYS 122, PHYS 123.

First Year

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<tr>
<th>Quarter</th>
<th>Autumn Quarter</th>
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<tbody>
<tr>
<td></td>
<td>♦ MATH 124 - Calc w Analytic Geom I</td>
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<td>♦ MATH 126 - Calc w Analytic Geom III</td>
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<td>CSE 12X - Comp Programming</td>
<td>♦ PHYS 121 - Mechanics</td>
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