This resource is for ENGRUD students who entered the UW in AUT20 or later.

**Human Centered Design and Engineering**
**Graduation Requirements**
University of Washington
[http://hcde.washington.edu](http://hcde.washington.edu)

**Placement Requirements:**
- = Placement Requirements;
★ = Pick one to satisfy placement requirement
**Placement:** July 1 at the end of the first year

**Human Centered Design and Engineering**
**ENGRUD Requirement Sheet – Key:**

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

**Mathematics (15cr)**
- MATH 124, 125, 126 – Calc w/ Analytical Geom. I-III (15cr)

**Sciences (15cr)**
- CHEM 142 - General Chemistry (5cr)
- PHYS 121 - Mechanics (5cr)  [pr: MATH 124 or MATH 134]
- Additional science from list below to reach 15cr

**Additional Math/Science (20cr)**
See list of qualifying courses on department website. Courses recommended by CoE for placement process include:
- **STAT 220 - Principles of Statistical Reasoning (5cr)**
- **CHEM 152 - General Chemistry (5cr)**  [pr: CHEM 142, CHEM 143, or CHEM 145]
- **CHEM 162 - General Chemistry (5cr)**  [pr: CHEM 152]
- **PHYS 122 - Electromagnetism (5cr)**  [pr: MATH 125 or MATH 134]
- **PHYS 123 - Waves (5cr)**  [pr: MATH 126 or MATH 134; PHYS 122]

**Additional Science from List Below (10cr)**
See list of qualifying courses on department website. Courses recommended by CoE for placement process include:
- **STAT 220 - Principles of Statistical Reasoning (5cr)**
- **CHEM 152 - General Chemistry (5cr)**  [pr: CHEM 142, CHEM 143, or CHEM 145]
- **CHEM 162 - General Chemistry (5cr)**  [pr: CHEM 152]
- **PHYS 122 - Electromagnetism (5cr)**  [pr: MATH 125 or MATH 134]
- **PHYS 123 - Waves (5cr)**  [pr: MATH 126 or MATH 134; PHYS 122]

**Engineering General Education Requirements (38cr)**

**Written and Oral Communication:**
- English Composition (5cr)
- HCDE 231 - Intro to Communication in HCDE (3cr)

**Areas of Knowledge:**
- Visual, Literary & Performing Arts - VLPA (10cr)
- Individuals & Society - I&S (10cr)
- Additional VLPA or I&S (10cr)
- Diversity - DIV (3cr) (may overlap with VLPA / I&S)

**Engineering Fundamentals (12cr)**
- **CSE 142 Computer Programming (4cr)**
- **CSE 160 Data Programming (4cr)**

8 credits from:
- A A 210, A A 260, CEE 220, ☆ CSE 143, E E 215, HCDE 496,
- IND E 250, I S 300, ★ ME 123, ME 230, ★ MSE 170, PHIL 120

**Departmental Core (41cr)**
- HCDE 300 - Foundations of HCDE (5cr)
- HCDE 301 - Advanced Communication in HCDE (5cr)
- HCDE 308 - Visual Communication in HCDE (5cr)
- HCDE 310 - Interactive Systems Design and Technology (5cr)
- HCDE 313 - Intro to User Research (5cr)
- HCDE 318 - Intro to User Centered Design (5cr)
- HCDE 321 - Portfolio (2cr)
- HCDE 322 - Organizational Teamwork (2cr)
- HCDE 492 - Capstone Planning (2cr)
- HCDE 493 - Senior Capstone (5cr)

**Experiential Learning (4cr)**
Any combination of the following:
- ENGR 321 - Engineering Internship (1-2cr)
- HCDE 496 - Directed Research in HCDE (1-4cr)

**Department Electives (25cr)**
Complete one option below. See department for list of approved courses.

a. Standard Option
b. HCI (Human-Computer Interaction) Option
c. Data Science Option

**Free Electives (5-9cr)**
Additional coursework in any subject are not used elsewhere in degree.

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

AMATH 351/352/353 may be alternatives to MATH 307/308/309, work with the department to confirm.
This resource is for ENGRUD students who entered the UW in AUT20 or later.

Human Centered Design and Engineering  
Graduation Requirements  
University of Washington  
http://hcde.washington.edu  

HCDE Advising  
Office: 428 Sieg Hall, Box 352315  
Seattle, WA 98195-2315  
Email: hcdehelp@uw.edu

This is a sample four-year plan for ENGRUD students that prepares them to be able to request placement at the end of the first year. 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, 125, 126; CHEM 142; PHYS 121; English Composition; ENGRUD students who are interested in HCDE should choose one of the following: CHEM 152, CHEM 162, CSE 142, CSE 143, CSE 160, ME 123, MSE 170, PHYS 122, PHYS 123, STAT 220.

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<thead>
<tr>
<th>First Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
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<tbody>
<tr>
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<td>MATH 124 - Calc w Analytic Geom I</td>
<td>MATH 125 - Calc w Analytic Geom II</td>
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<td>English Composition</td>
<td>CSE 142 or CSE 160</td>
<td>PHYS 121 - Mechanics</td>
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<td>VLPA / I&amp;S</td>
<td>CHEM 142 - General Chemistry</td>
<td>STAT 220 - Statistics</td>
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<td>E-FIG; ENGR 101 &amp; GEN ST 199</td>
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