This resource is for ENGRUD students who entered the UW-Seattle in AUT25.

HCDE

Human Centered Design & Engineering Degree Requirements
http://hcde.washington.edu
askhcde@uw.edu

ENGRUD Requirement Key:
◆ = Placement Requirements
★ = *Pick **one** to satisfy placement requirement*
Placement: July 1 at the end of the first year

Engineering First-year Interest Group (E-FIG)
◆ **ENGR 101 (1cr)**
GEN ST 199 (1cr)

Mathematics and Statistics (15-20cr)
◆ **MATH 124, 125, 126 – Calc. w/ Analytical Geom. I-III (15cr)**

One course from the following:
★ *STAT 220 (5cr)*;* STAT 290 - AP Statistics (5cr);
  STAT 311 (5cr); Q SCI 381 (5cr)
  Visit department website for full list.

Sciences (15cr)
◆ **CHEM 142 - General Chemistry (5cr)**
  [pr: CHEM 110 or passing score on placement exam]

◆ **PHYS 121 - Mechanics (5cr)**
  [pr: MATH 124]

Additional science from list below to reach 15 credits

Additional Math/Statistics/Science (15-20cr)
Visit department website for a list of approved courses. Course options recommended for the placement process include:

★ *CHEM 152 - General Chemistry (5cr)* [pr: CHEM 142]
★ *CHEM 162 - General Chemistry (5cr)* [pr: CHEM 152]
★ *PHYS 122 - Electromagnetism (5cr)*
  [pr: MATH 125, PHYS 121]
★ *PHYS 123 - Waves, Light, and Heat (5cr)*
  [pr: MATH 126, PHYS 122]

General Education Requirements (35cr)
Written and Oral Communication:
◆ **English Composition** (5cr)
  Writing (7cr) (may overlap with Areas of Inquiry, DIV, or major requirements)

Areas of Inquiry:
  Arts & Humanities - A&H (10cr)
  Social Sciences - SSc (10cr)
  Additional A&H or SSc (10cr)

  A&H and SSc cannot overlap with HCDE major requirements

Diversity - DIV (5cr) (may overlap with Areas of Inquiry or W)

Engineering Fundamentals (12cr)
One course from the following
  ★ *CSE 121 - Intro to Computer Programming I (4cr)*
  ★ *CSE 122 - Intro to Computer Programming II (4cr)*
  ★ *CSE 123 - Intro to Computer Programming III (4cr)*
  ★ *CSE 160 - Data Programming (4cr)*

Eight additional credits from HCDE engineering fundamentals list
  Examples include: A A 210, AMATH 301, BIOEN 215, CEE 220, CSE 163, CSE 180, E E 215, ENGR 115, M E 123, M E 230, MSE 170, NME 220,
  Visit department website for full list.

Major Core Requirements (46cr)
HCDE 302 - Foundations of HCDE I (5cr)

HCDE 303 - Foundations of HCDE II (5c)

HCDE 308 - Visual Communication in HCDE (5cr)

HCDE 310 - Interactive Systems Design and Technology (5cr)

HCDE 313 - Intro to User Research (5cr) (W)

One course from:
  • HCDE 315 - Inclusive Design (5cr) (SSc, DIV)
  • HCDE 316 - Sustainable Design (5cr)

HCDE 321 - Professional Portfolio (2cr)

HCDE 322 - Organizational Teamwork (2cr)

HCDE 351 - User Experience Prototyping Techniques (5cr)

HCDE 492 - Capstone Planning (2cr)

HCDE 493 - Senior Capstone (5cr)

Experiential Learning (2cr)
Any combination of the following:
ENGR 321 - Engineering Internship Education (variable cr)
ENGR 490 - Engineering Leadership (2cr)
HCDE 496 - Directed Research in HCDE (variable cr)
HCDE 497 - Study Abroad: HCDE (variable cr)
HCDE 499 - Individual Research (variable cr)

HCDE Electives (23cr)
15 credits from HCDE engineering electives and 8 credits from the System and Society electives list. Visit department website for a list of approved courses.

Total credits required for graduation: 180cr

Honors or accelerated sequences of chemistry, math and physics will satisfy degree requirements.

Human Centered Design & Engineering

Questions? Contact ENGRUD Advising
Email: engradv@uw.edu
Office: IEB 307
Phone: (206) 543-1770

This is a sample four-year plan for Human Centered Design & Engineering to provide ENGRUDs a framework to create their individual academic plan.

Courses required to request placement for ENGRUD students: **ENGR 101; MATH 124**, **125**, **126; CHEM 142; PHYS 121; English Composition; choose one: (CSE or STAT recommended): AMATH 301, BIOEN 215, CHEM 152, CHEM 162, CSE 121, CSE 122, CSE 123, CSE 160, ENGR 115, ME 123, MSE 170, PHYS 122, PHYS 123, STAT 220.**

Autumn Quarter	cr	Winter Quarter	cr	Spring Quarter	cr
◆ **MATH 124 - Calc. w/ Analytic Geom. I**	5	◆ **MATH 125 - Calc. w/ Analytic Geom. II**	5	◆ **MATH 126 - Calc. w/ Analytic Geom. III**	
◆ **CHEM 142 - General Chemistry**	5	◆ **English Composition**	5	◆ **PHYS 121 - Mechanics**	5
◆ **E-FIG: ENGR 101 & GEN ST 199**	2	★ **STAT 220 - Statistics Reasoning**	5	★ **CSE 121 OR CSE 122 OR CSE 123**	5
A&H / SSc / DIV	3-5				4
Qtr. Total:	**15**	Qtr. Total:	**15**	Qtr.Total:	**14**

Autumn Quarter	cr	Winter Quarter	cr	Spring Quarter	cr
A&H	5	SSc	5	SSc / Writing Course	5
Approved Natural Science	5	Approved Math/Stat/Science	5	Approved Math/Stat/Science	5
Engineering Fundamentals	4	Engineering Fundamentals	4	A&H	5
Free Elective	2	A&H or SSc	2		
Qtr. Total:	**16**	Qtr. Total:	**16**	Qtr. Total:	**15**

Autumn Quarter	cr	Winter Quarter	cr	Spring Quarter	cr
HCDE 310 - Interact Sys Design & Tech	5	HCDE 303 - Foundations of HCDE II	5	HCDE 351 - User Experience Prototyping Techniques	5
HCDE 302 - Foundations of HCDE I	5	HCDE 315 - Inclusive Design & Engineering (DIV)	5	HCDE 308 - Visual Comm. in HCDE	5
HCDE 313 - Intro to User Research (W)	5	HCDE 321 - Professional Portfolio	2	HCDE 322 - Organizational Teamwork	2
		HCDE 496 - Directed Research in HCDE	2	Free Elective	3
Qtr. Total:	**15**	Qtr. Total:	**14**	Qtr. Total:	**15**

Autumn Quarter	cr	Winter Quarter	cr	Spring Quarter	cr
HCDE - Engineering Elective	5	HCDE 492 - Capstone Planning	2	HCDE 493 - Senior Capstone	5
HCDE - Systems & Society Elective	4	HCDE - Engineering Elective	5	HCDE - Systems & Society Elective	4
Approved Math/Science	5	HCDE - Engineering Elective	5	A&H / SSc	5
Free Elective	2	Free Elective	3		
Qtr. Total:	**16**	Qtr. Total:	**15**	Qtr. Total:	**14**

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