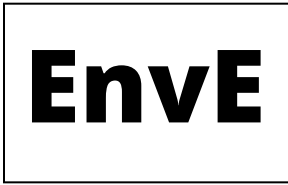


This resource is for ENGRUD students who entered the UW in AUT20 or later.



**Environmental Engineering
Graduation Requirements**
University of Washington
<http://ce.washington.edu>

ENGRUD Requirement Sheet – Key;

◆ = Placement Requirements;

★ = Pick **one** to satisfy placement requirements

Placement 1 = July 1 at the end of the first year

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

Mathematics (24cr)

◆ **MATH 124, 125, 126 - Calc w/ Analytic Geom I-III (15cr)**

AMATH 351 - Intro to Differential Equations and Apps (3cr)
[pr: MATH 125] OR MATH 307

AMATH 352 - Appl Linear Algebra and Numerical Analysis (3cr)
[pr: MATH 126] OR MATH 308

IND E 315 - Probability & Statistics for Engineers (3cr)
[pr: either MATH 136, MATH 307, or AMATH 351]
OR STAT 390 - Statistical Methods in Engr. & Science (4cr)

Sciences (35cr)

BIOL 180 - Introductory Biology (5cr)

◆ **CHEM 142 - General Chemistry (5cr)**

★ **CHEM 152 - General Chemistry (5cr)**
[pr: CHEM 142, 143, or CHEM 145]

★ **CHEM 162 - General Chemistry (5cr)**
[pr: CHEM 152]

◆ **PHYS 121 - Mechanics (5cr)**
[pr: MATH 124 or MATH 134]

★ **PHYS 122 - Electromagnetism (5cr)**
[pr: MATH 125 or MATH 134; PHYS 121]

★ **PHYS 123 - Waves (5cr)**
[pr: MATH 126 or MATH 134; PHYS 122]

Engineering General Education Requirements (36cr)

Written and Oral Communication:

◆ **English Composition (5cr)**

ENGR 231 - Introduction to Technical Communication (3cr)
Additional Writing or Composition (4cr)

Areas of knowledge:

Visual, Literary & Performing Arts - VLPA (10cr)

Individuals & Society - I&S (10cr)

VLPA or I&S (10cr)

Diversity - DIV (3cr) - (may overlap with VLPA / I&S)

Engineering Fundamentals (16-17cr)

A A 210 - Engineering Statics (4cr)
[pr: MATH 126; PHYS 121]

CEE 220 - Introduction to Mechanics of Materials (4cr)
[pr: A A 210]

A A 260 - Thermodynamics (4cr)
[pr: CHEM 142; MATH 126; PHYS 121]

★ **AMATH 301 - Beginning Scientific Computing (4cr)**
[pr: MATH 125]
OR CSE 142 OR CSE 160 (AMATH preferred)

Economics (4-5cr)

ECON 200 - Microeconomics (5cr) (can satisfy I&S)
OR IND E 250 (4cr)

EnvE Core (30cr)

CEE 347 - Introduction to Fluid Mechanics (5cr)

CEE 348 - Hydrology and Environmental Fluid Methods (4cr)

CEE 349 - Case Studies in Environmental Engineering (3cr)

CEE 350 - Mass and Energy Bal in Environmental Engr. (4cr)

CEE 352 - Intro to Microbial Prin. in Environmental Engr. (5cr)

CEE 354 - Intro to Chemical Prin. in Environmental Engr. (5cr)

CEE 356 - Quant. and Conceptual Tools for Sustainability (4cr)

Professional Practice & Capstone (7cr)

CEE 440 - Professional Practice Studio (2cr)
AND

Capstone (one from): CEE 444, 445 (5cr)

Technical Electives (15cr)

Select courses from the Technical Electives: Core Courses list on the CEE website. Thematic areas: Engineered Systems and Processes, Natural Systems and Processes, and Hydrology and Hydrodynamics.

Upper-Division Engineering and Science (13cr)

See department for a list of approved courses. Must include one science course from: ATM S 211, ATM S 212, ESRM 210, ESS 201, ESS 210, ESS 211, ESS 212, OCEAN 200/201.

Total credits required for graduation: 180cr

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

Updated October 2020

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



**Environmental Engineering
Sample Curriculum**
University of Washington
<http://ce.washington.edu>

Civil & Environmental Engineering Advising
Office: 201 More Hall, Box 352700
Seattle, WA 98195-2700
Phone: (206) 543-5092
Email: ceadvice@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 interested in EnvE should choose one of the following: AMATH 301, CHEM 152, CHEM 162, CSE 142, CSE 160, PHYS 122, PHYS 123.**

First Year

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
◆ MATH 124 - Calc w Analytic Geom I	5	◆ MATH 125 - Calc w Analytic Geom II	5	◆ MATH 126 - Calc w Analytic Geom III	5
◆ CHEM 142 - General Chemistry	5	★ CHEM 152 - General Chemistry	5	★ CHEM 162 - General Chemistry	5
VLPA / I&S	4	◆ English Composition	5	◆ PHYS 121 - Mechanics	5
◆ E-FIG: ENGR 101 & GEN ST 199	2				
Qtr. Total:	16	Qtr. Total:	15	Qtr. Total:	15

Second Year

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
AMATH 351 - Appl. Differential Equations	3	AMATH 352 - Linear Alg & Num. Analysis	3	AMATH 301 - Beg. Sci. Computing	4
PHYS 122 - Electromagnetism	5	PHYS 123 - Waves	5	BIOL 180 - Intro Biology I	5
AA 210 - Engineering Statics	4	CEE 220 - Mechanics of Materials	4	AA 260 - Thermodynamics	4
VLPA / I&S	5	VLPA / I&S	5		
Qtr. Total:	17	Qtr. Total:	15	Qtr. Total:	13

Third Year

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
CEE 349 - Case Studies in EnvE	3	CEE 347 - Intro to Fluid Mechanics	5	CEE 348 - Hydrology & Environmental Fluid Methods	4
CEE 350 - Mass & Energy Bal in EnvE	4	CEE 354 - Intro to Chemical Principles in Environmental Engineering	5	CEE 356 - Quantitative & Conceptual Tools for Sustainability	4
CEE 352 - Intro to Microbial Principles in Environmental Engineering	5	ENGR 231 - Intro to Technical Comm	3	IND E 250 - Engineering Economy	4
IND E 315 - Prob and Stat for Engineers	3	Additional Writing	4	Technical Elective	3
Qtr. Total:	15	Qtr. Total:	17	Qtr. Total:	15

Fourth Year

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
Technical Elective	3	CEE 440 - Professional Practice Studio	2	CEE 444/445 - Capstone Design	5
Technical Elective	3	Technical Elective	3	Technical Elective	3
UD Elective	3	UD Elective	4	UD Elective	3
VLPA / I&S / DIV	5	VLPA / I&S	5	UD Elective	3
Qtr. Total:	14	Qtr. Total:	14	Qtr. Total:	14

◆ = Placement Requirements

★ = Pick **one** to satisfy placement requirements

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

Updated October 2020