



Environmental Engineering Graduation Requirements

University of Washington

<https://ce.washington.edu>

Requirement Sheet Key

- ◆ = Admission Requirements

Mathematics (24 Credits)

- ◆ MATH 124 (5cr) - Calculus I
- ◆ MATH 125 (5cr) - Calculus II
- ◆ MATH 126 (5cr) - Calculus III
- ◆ AMATH 351 (3cr) - Applied Diff. Equations
- AMATH 352 (3cr) - Matrix Algebra
(MATH 307/308 may substitute for AMATH 351/352)
- IND E 315 (3cr) - Probability & Statistics for Engineers

Natural Sciences (35 Credits)

- ◆ BIOL 180 (5cr) - Intro Biology
- ◆ CHEM 142 (5cr) - General Chem I with Lab
- ◆ CHEM 152 (5cr) - General Chem II with Lab
- ◆ CHEM 162 (5cr) - General Chem III with Lab
- ◆ PHYS 121 (5cr) - Mechanics with Lab
- ◆ PHYS 122 (5cr) - Electro/Oscillatory with Lab
- ◆ PHYS 123 (5cr) - Waves with Lab

Written & Oral Communications (12 Credits)

- ◆ English Comp (5cr) - English Composition
- ENGR 231 (3cr) - Intro to Technical Writing
- Additional Composition or Writing (4cr)

Visual, Literary & Performing Arts/ Individuals & Society (VLPA/I&S) (24 Credits)

10 credits of VLPA
10 credits of I&S
4 credits of VLPA or I&S
3 credits of Diversity (DIV)
(DIV can overlap with VLPA or I&S)

Engineering Fundamentals (16 Credits)

- ◆ AMATH 301 (4cr) - Beg. Scientific Computing
- OR-
- CSE 142 (4cr) - Computer Programming I
(Note: AMATH 301 preferred)
- ◆ AA 210 (4cr) - Statics
- ◆ CEE 220 (4cr) - Mechanics of Materials
- ◆ AA 260 (4cr) - Thermodynamics

Economics (4-5 Credits)

IND E 250 (4cr) - Engineering Econ.
-OR-
ECON 200 (5cr) - Micro.

EnvE Core Courses (29 Credits)

- CEE 347 (5cr) - Intro to Fluid Mechanics
- CEE 348 (4cr) - Hydrology & Envr. Fluid Mechanics
- CEE 349 (3cr) - Case Studies in Envr. Engineering
- CEE 350 (4cr) - Mass and Energy Balances Envr
- CEE 352 (4cr) - Intro Envr. Chem. & Microbiology
- CEE 354 (5cr) - Envr. Engineering Applications
- CEE 356 (4cr) - Quantitative & Conceptual Tools for Sustainability

EnvE/CEE Senior Courses (7 Credits)

- CEE 440 (2cr) - Professional Practice
- CEE 444/445 (5cr) - Capstone Design Course

Technical Electives (15 Credits)

Select courses from Technical Electives: Core Courses List. Thematic areas are shown to help guide selection: Engineered Systems and Processes, Natural Systems and Processes, and Hydrology and Hydrodynamics. The list of courses can be found on the CEE website.

Upper-Division Engineering and Science (13 Credits)

Select courses from within CEE or from approved list of non-CEE courses. A list of courses that are pre-approved is available from the advisors. Students may petition to have courses added to the list.

Free Electives (varies)

Additional credits to meet the 180 total required for the baccalaureate degree.

Total Credits Required for Graduation (180 Credits)

Admission Requirements

The BS EnvE is currently a minimum requirement admission major. Students may declare the major upon successful completion of admission requirements. A minimum GPA of 2.5 in each class and cumulative prerequisite GPA of 3.0 are required.

Note: We expect the BS EnvE to become capacity constrained as early as 2018.



Environmental Engineering Sample Curriculum

University of Washington

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

<u>Freshman - Autumn Quarter</u>		<u>Freshman – Winter Quarter</u>		<u>Freshman – Spring Quarter</u>	
◆ Math 124 - Calculus I	5	◆ Math 125 - Calculus II	5	◆ Math 126 - Calculus III	5
◆ Chem 142 - Chem & Lab I	5	◆ Chem 152 - Chem & Lab II	5	◆ Chem 162 - Chem & Lab III	5
◆ English Composition	5	VLPA/I&S	5	◆ Phys 121 - Mechanics & Lab	5
Quarter Total	15	Quarter Total	15	Quarter Total	15

<u>Sophomore - Autumn Quarter</u>		<u>Sophomore - Winter Quarter</u>		<u>Sophomore - Spring Quarter</u>	
◆ AMATH 351 - Diff. Equations	3	◆ AMATH 352 - Linear Algebra	5	◆ AMATH 301 - Scientific Computing*	4
◆ PHYS 122 - Electro & Lab II	5	◆ PHYS 123 - Waves & Lab III	5	-or- CSE 142 + BIOEN 498: MatLab Fundamentals	
◆ A A 210 - Engineering Statics	4	◆ CEE 220 - Mech. of Materials	4	◆ BIOL 180 - Intro Biology I	5
VLPA/I&S	3-5	VLPA/I&S	3-5	◆ A A 260 - Thermodynamics	4
Quarter Total	15-17	Quarter Total	15-17	Quarter Total	13

<u>Junior - Autumn Quarter</u>		<u>Junior - Winter Quarter</u>		<u>Junior - Spring Quarter</u>	
CEE 349 - Case Studies in Envr. Engr.	3	CEE 347 - Intro to Fluid Mechanics	5	CEE 348 - Hydrology & Envr. Fluid Mech.	5
CEE 350 - Mass & Energy Balances	4	CEE 354 - Envr. Engr. Applications	5	CEE 356 - Quant. & Conceptual Tools	3
CEE 352 - Envr. Chem. & Microbio.	4	ENGR 231 - Intro to Technical Writing	3	IND E 250 - Engineering Economy	4
IND E 315 - Stats. for Engineers	3			Technical Elective	3
Quarter Total	14	Quarter Total	13	Quarter Total	16

<u>Senior - Autumn Quarter</u>		<u>Senior - Winter Quarter</u>		<u>Senior - Spring Quarter</u>	
Technical Elective	3	CEE 440 - Prof. 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	5	VLPA/I&S	5	UD Elective	3
Quarter Total	14	Quarter Total	14	Quarter Total	14

Bold face courses are required for admission. A minimum grade of 2.5 is required in each class. A cumulative prerequisite GPA of 3.0 is required.

Currently, students may declare the major upon successful completion of admission requirements. Students who do not meet minimum admission requirements may petition for admission by writing to ceadvice@uw.edu. (Attention: the CEE Undergraduate Committee). We expect the BS EnvE to become capacity constrained as early as 2018.

For more information, contact:

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