



**Civil Engineering  
Degree Requirements**  
<http://ce.washington.edu>  
[ceadvice@uw.edu](mailto:ceadvice@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 (24-28cr)**

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

MATH 207 - Intro to Differential Equations (4cr)  
[pr: MATH 125] OR AMATH 351 (3cr) [pr: MATH 125]

MATH 208 - Matrix Algebra with Applications (4cr)  
OR AMATH 352 (3cr) [pr: MATH 126]

One course from the following:

IND E 315 (3cr), STAT 390 (4cr), Q SCI 381 (5cr)

**Sciences (28-30cr)**

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

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

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

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

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

Basic Science Elective (3-5cr) - Visit department website for a [list of approved courses](#).

**General Education Requirements (29-41cr)**

**Written and Oral Communication:**

◆ **English Composition (5cr)**

Writing from the University list (7cr) (may overlap with Areas of Inquiry or DIV)

**Areas of Inquiry:**

Arts & Humanities - A&H (10cr)

Social Sciences - SSc (10cr)

Additional A&H or SSc (4cr)

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

**Economics (4-5cr)**

ECON 200 - Microeconomics (5cr) (SSc)

OR IND E 250 - Fund of Engr Economy (4cr)

OR ESRM 235/ ECON 235/ ENVIR 235 (SSc) (5cr)

**Engineering Fundamentals (16cr)**

One course from the following:

★ **AMATH 301 - Beginning Scientific Computing (4cr)**  
[pr: MATH 125 or Q SCI 292]

★ **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)**

A A 210 - Engineering Statics (4cr)

[pr: MATH 126; PHYS 121]

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

**Engineering Fundamentals (cont'd)**

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

M E 230 - Kinematics and Dynamics (4cr)  
[pr: AA 210]

**Major Core Requirements (40cr)**

CEE 307 - Construction Engineering (5cr)

CEE 317 - GeoSurveying (5cr)

CEE 327 - Transportation Engineering (5cr)

CEE 337 - Construction Materials (5cr)

CEE 347 - Intro to Fluid Mechanics (5cr)

CEE 357 - Environmental Engineering (5cr)

CEE 367 - Geotechnical Engineering (5cr)

CEE 377 - Intro to Structural Design (5cr)

**Professional Practice (2cr)**

CEE 440 - Professional Practice Studio (2cr)

**Capstone (5cr)**

One of the following Capstone Design Projects:

CEE 441 - Transportation and Construction

CEE 442 - Structural Geotechnical (W)

CEE 444 - Water Resources and Hydraulic Engineering

CEE 445 - Environmental Engineering

**Civil Engineering Technical Electives (15cr)**

Visit the department website for a [list of approved 400-level courses](#); this includes at least one course from three separate areas of concentration:

Construction

Structural & Mechanics

Geotechnical

Transportation

Hydrology

Hydrodynamics

Environmental

**Engineering and Science Electives (12-14cr)**

Choice of additional CEE 400-level courses. Visit the department website for a [list of approved courses](#). Maximum of 3 credits for CEE 499.

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

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

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

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

# Civil Engineering

**Questions: Contact ENGRUD Advising**

Email: engradv@uw.edu

Office: IEB 307

Phone: (206) 543-1770

This is a sample four-year plan for Civil Engineering to provide ENGRUDs a framework to create their 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; choose one: AMATH 301, CHEM 152, CSE 122, ME 123, MSE 170, PHYS 122, PHYS 123.**

<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	◆ PHYS 121 - Mechanics	5
◆ E-FIG: ENGR 101 & GEN ST 199	2	SSc	5	◆ English Composition	5
A&H	5		5		5
Qtr. Total:	17	Qtr. Total:	15	Qtr. Total:	15

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
MATH 208 - Matrix Algebra	4	MATH 207 - Differential Equations	4	AMATH 301 - Beg. Sci Computing	4
PHYS 122 - Electromagnetism	5	PHYS 123 - Waves	5	OR CSE 122 OR CSE 160	
AA 210 - Engineering Statics	4	CEE 220 - Intro to Mechanics of Materials	4	IND E 315 - Prob and Stats for Engineers	3
IND E 250 - Fund of Engineering Econ	4			ME 230 - Kinematics and Dynamics	4
				SSc and DIV	5
Qtr. Total:	17	Qtr. Total:	13	Qtr. Total:	16

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
CEE 317 - GeoSurveying	5	CEE 307 - Construction Engineering	5	CEE 327 - Transportation Engineering	5
CEE 337 - Construction Materials	5	CEE 347 - Intro to Fluid Mechanics	5	CEE 367 - Geotechnical Engineering	5
CEE 377 - Intro to Structural Design	5	CEE 357 - Environmental Engineering	5	CEE 440 - Design Practicum	2
				CEE Technical Elective	3
Qtr. Total:	15	Qtr. Total:	15	Qtr. Total:	15

<u>Autumn Quarter</u>	<u>cr</u>	<u>Winter Quarter</u>	<u>cr</u>	<u>Spring Quarter</u>	<u>cr</u>
CEE Technical Elective	3	Upper Division Engineering & Science Elective	3	CEE Capstone	5
CEE Technical Elective	3	CEE Technical Elective	3	Upper Division Engineering & Science Elective	3
CEE Technical Elective	3	Basic Science Elective	4	Upper Division Engineering & Science Elective	3
Upper Division Engineering & Science Elective	3	A&H/ SSc (with Writing)	4	A&H (with Writing)	5
Qtr. Total:	12	Qtr. Total:	14	Qtr. Total:	16

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Updated June 2025