CivE

Civil Engineering
Graduation Requirements
University of Washington
https://ce.washington.edu

ENGRUD Requirement Sheet – Key
◆ = Placement Requirements
★ = *Pick two to satisfy placement requirements*

Placement Periods
Placement 1 = July 1 at end of first year
Placement 2 = January 15 of second year
Placement 3 = July 1 at end of second year

Mathematics (24-25cr)	
◆ **MATH 124, 125, 126 - Calculus with Analytical Geometry I, II, III (15cr)**	☐
MATH 307 - Introduction to Differential Equations (3cr) [pr: MATH 125]	☐
MATH 308 - Matrix Algebra with Applications (3cr) [pr: MATH 126]	☐
IND E 315 - Probability & Statistics for Engineers (3cr) OR STAT 390 - Statistical Methods in Engineering & Science (4cr)	☐
Sciences (25cr)	
★ ***CHEM 142 - General Chemistry (5cr)***	☐
★ ***CHEM 152 - General Chemistry (5cr)***	☐
◆ **PHYS 121 - Mechanics (5cr) [pr: MATH 124]**	☐
★ ***PHYS 122 - Electromagnetism (5cr) [pr: MATH 125]***	☐
★ ***PHYS 123 - Waves (5cr) [pr: MATH 126]***	☐
Engineering General Education Requirements (32cr)	
Written and Oral Communication (8cr):	
◆ **English Composition (5cr)**	☐
ENGR 231 - Intro to Technical Communication (3cr)	☐
Areas of Knowledge:	
Visual, Literary & Performing Arts - VLPA (10cr)	☐
Individuals & Society - I&S (10cr)	☐
VLPA or I&S (4cr)	☐
Diversity-DIV (3cr) - (may overlap with VLPA/I&S)	☐
Engineering Fundamentals (20cr)	
AA 210 - Engineering Statics (4cr) [pr: MATH 126; PHYS 121]	☐
CEE 220 - Introduction to Mechanics of Materials (4cr) [pr: AA 210]	☐
ME 230 - Kinematics and Dynamics (4cr) [pr: AA 210]	☐
AMATH 301 - Beginning Scientific Computing (4cr) [OR CSE 142 - Computer Programming I (4cr)	☐
Choose one: ME 123 (4cr), MSE 170 (4cr), EE 215 (4cr), IND E 250 (4cr), OR AA 260 (4cr)	☐

Economics Requirement (4-5cr)	
Choose one: ECON 200 (5cr), ECON 201 (5cr), OR IND E 250 (4cr)	☐
Departmental Core (40cr)	
CEE 307 - Construction Engineering (5cr)	☐
CEE 317 - GeoSurveying (5cr)	☐
CEE 327 - Transportation Engineering (5cr)	☐
CEE 337 - Construction Materials (5cr)	☐
CEE 347 - Introduction to Fluid Mechanics (5cr)	☐
CEE 357 - Environmental Engineering (5cr)	☐
CEE 367 - Geotechnical Engineering (5cr)	☐
CEE 377 - Introduction to Structural Design (5cr)	☐
Professional Practice & Capstone (7cr)	
CEE 440 - Professional Practice Studio (2cr) Choose one: CEE 441 (5cr), CEE 442 (5cr), CEE 444 (5cr), CEE 445 (5cr)	☐
Civil Engineering Technical Electives (15cr)	
CEE 400-level coursework selected from an approved list (see adviser or department website for list), with at least one core course from three separate areas of concentration within the department.	☐
Upper-Division Engineering and Science (12cr)	
Choice of additional CEE 400-level courses or courses from an approved list from outside the department.	☐
Free Electives (3-5cr)	
Additional coursework in any subject area not used elsewhere in degree.	☐
Total credits required for graduation: 180cr-184cr	

Honors or accelerated sequences of math and chemistry can satisfy some of the above requirements, see department website for specifics. AMATH 351/352/353 are alternatives to Math 307/308/309.

Updated September 2018

CivE	**Civil Engineering Sample Curriculum** University of Washington https://ce.washington.edu	**Civil and 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. 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: **MATH 124, MATH 125, MATH 126; PHYS 121 and two additional courses from CHEM 142, CHEM 152, PHYS 122, OR PHYS 123; 5 credits of English Composition.**

	Autumn Quarter	Cr	Winter Quarter	Cr	Spring Quarter	Cr
Freshman	◆ **MATH 124 - Calculus with Analytical Geometry I**	5	◆ **MATH 125 - Calculus with Analytical Geometry II**	5	◆ **MATH 126 - Calculus with Analytical Geometry III**	5
	★ ***CHEM 142 - General Chemistry***	5	★ ***CHEM 152 - General Chemistry***	5	◆ **PHYS 121 - Mechanics**	5
	VLPA/I&S	5	CEE 100 - Introduction to CEE	1	◆ **English Composition**	5
	E-FIG; ENGR 101 & GEN ST 199	2	VLPA/I&S	5		
	Qtr. Total:	**17**	**Qtr. Total:**	**16**	**Qtr. Total:**	**15**
Sophomore	**Autumn Quarter**	**Cr**	**Winter Quarter**	**Cr**	**Spring Quarter**	**Cr**
	MATH 308 - Matrix Algebra	3	MATH 307 - Differential Equations	4	AMATH 301 - Beginning Scientific Computing	4
	★ ***PHYS 122 - Electromagnetism***	5	★ ***PHYS 123 - Waves***	3	IND E 315 - Probability and Statistics for Engineers	4
	AA 210 - Engineering Statics	4	CEE 220 - Intro to Mechanics of Materials	5	ME 230 - Kinematics and Dynamics	3
	IND E 250 - Fundamentals of Engineering Economy	4	ENGR 231 - Intro to Technical Communication	3	VLPA/I&S	4
	Qtr. Total:	**16**	**Qtr. Total:**	**15**	**Qtr. Total:**	**15**
Junior	**Autumn Quarter**	**Cr**	**Winter Quarter**	**Cr**	**Spring Quarter**	**Cr**
	CEE 317 - GeoSurveying	5	CEE 347 - Intro to Fluid Mechanics	5	CEE 327 - Transportation Engineering	5
	CEE 337 - Construction Materials	5	CEE 307 - Construction Engineering	5	CEE 367 - Geotechnical Engineering	5
	CEE 377 - Intro to Structural Design	5	CEE 357 - Environmental Engineering	5	CEE Technical Elective	3
					Upper Division Engineering & Science Elective	3
	Qtr. Total:	**15**	**Qtr. Total:**	**15**	**Qtr. Total:**	**16**
Senior	**Autumn Quarter**	**Cr**	**Winter Quarter**	**Cr**	**Spring Quarter**	**Cr**
	CEE Technical Elective	3	CEE 440 - Design practicum	2	CEE Capstone	5
	CEE Technical Elective	3	CEE Technical Elective	3	Upper Division Engineering & Science Elective	3
	Upper Division Engineering & Science Elective	3	Free Elective	2	Upper Division Engineering & Science Elective	3
	CEE Technical Elective	3	VLPA/I&S/DIV	5	VLPA/I&S	2
	VLPA/I&S	3				
	Qtr. Total:	**15**	**Qtr. Total:**	**12**	**Qtr. Total:**	**13**

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