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| CivE | **Civil Engineering****Degree Requirements**<http://ce.washington.edu> ceadvice@uw.edu | **ENGRUD Requirement Key:**⯁ = **Placement Requirements****★** = *Pick* ***one*** *to satisfy placement requirement***Placement:** July 1 at the end of the first year |

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| **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](https://www.ce.washington.edu/current/undergrad/civil/gened).**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] | **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**](https://myplan.uw.edu/course/#/courses?states=N4Igwg9grgTgzgUwMoIIYwMYAsQC4TAA6IAZhDALYAiqALqsbkSBqhQA5RyPGJ20AbBMQA0xAJZwUGWuIgA7FOmyMSqAYjEhJASXlxaMKDPJLMWVes3EAjlAQwAnkkPj5Acx4gA5GACift6ixAAmqI7ceMwAjJYaCFoATHHWIADMKQnEACyZWgCsecQAbJkAvloG6LR%2B8iEAKuIUCJG4ANoADCIAnMUdALpabhgCUCEIAHIKAPLsCIoIMnL6jIb2Q-IjYwgASi2uMggh0rIKrWtZ2puj4wAKMA4INnB7duIPIatGl8M3CPUAI1QJ2W52%2BlSwEAA7tN5AJHLcMMhFqcVng1PEIdDYfC9LcHHAFCCzuUsVCAEIwaGIIogLCoKRocxHL7rUKSEYQRAAQRCADdUJsjmYVOirAgyiARCAoew4HgCMQoW4QtCABIIcTuLC0RgAdjSeuyWmVdWhty54lRjESHW6krKQA) **(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 ConstructionCEE 442 - Structural Geotechnical (W)CEE 444 - Water Resources and Hydraulic EngineeringCEE 445 - Environmental Engineering**Civil Engineering Technical Electives (15cr)**Visit the department website for a [list of approved 400-level courses](https://www.ce.washington.edu/current/undergrad/civil/major-coursework/technical-electives); this includes at least one course from three separate areas of concentration: ConstructionStructural & MechanicsGeotechnicalTransportationHydrologyHydrodynamicsEnvironmental**Engineering and Science Electives (12-14cr)**Choice of additional CEE 400-level courses. Visit the department website for a [list of approved courses](https://www.ce.washington.edu/current/undergrad/civil/major-coursework/engineering-science-electives). 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** |

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| Civil Engineering |   | **Questions: Contact ENGRUD Advising**Email: engradv@uw.eduOffice: 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 placementfor 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.**

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| **Autumn Quarter**⯁ **MATH 124 - Calc. w/ Analytic Geom. I**⯁ **CHEM 142 - General Chemistry**⯁ **E-FIG: ENGR 101 & GEN ST 199** A&H  | **cr**5525 | **Winter Quarter**⯁ **MATH 125 - Calc. w/ Analytic Geom. II****★ *CHEM 152* - *General Chemistry*** SSc | **cr**555 | **Spring Quarter**⯁ **MATH 126 - Calc. w/ Analytic Geom. III**⯁ **PHYS 121 - Mechanics** ⯁ **English Composition** | **cr**555 |
| Qtr. Total: | **17** | Qtr. Total: | **15** | Qtr. Total: | **15** |

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| **Autumn Quarter**MATH 208 - Matrix AlgebraPHYS 122 - ElectromagnetismAA 210 - Engineering StaticsIND E 250 - Fund of Engineering Econ | **cr**4544 | **Winter Quarter**MATH 207 - Differential EquationsPHYS 123 - WavesCEE 220 - Intro to Mechanics of Materials | **cr**454 | **Spring Quarter**AMATH 301 - Beg. Sci Computing OR CSE 122 OR CSE 160IND E 315 - Prob and Stats for EngineersME 230 - Kinematics and DynamicsSSc and DIV | **cr**4345 |
| Qtr. Total: | **17** | Qtr. Total: | **13** | Qtr. Total: | **16** |

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| **Autumn Quarter**CEE 317 - GeoSurveyingCEE 337 - Construction MaterialsCEE 377 - Intro to Structural Design  | **cr**555 | **Winter Quarter**CEE 307 - Construction EngineeringCEE 347 - Intro to Fluid MechanicsCEE 357 - Environmental Engineering | **cr**555 | **Spring Quarter**CEE 327 - Transporation EngineeringCEE 367 - Geotechnical EngineeringCEE 440 – Design Practicum CEE Technical Elective | **cr**5523 |
| Qtr. Total: | **15** | Qtr. Total: | **15** | Qtr. Total: | **15** |

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| **Autumn Quarter**CEE Technical ElectiveCEE Technical ElectiveCEE Technical ElectiveUpper Division Engineering & Science Elective | **cr**3333 | **Winter Quarter**Upper Division Engineering & Science ElectiveCEE Technical ElectiveBasic Science ElectiveA&H/ SSc (with Writing) | **cr**3344 | **Spring Quarter**CEE Capstone Upper Division Engineering & Science ElectiveUpper Division Engineering & Science ElectiveA&H (with Writing) | **cr**5335 |
| Qtr. Total:  | **12** | Qtr. Total: | **14** | Qtr. Total: | **16** |

**⯁ = Placement Requirement**

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