Civil and Environmental Engineering Graduation Requirements

www.ce.washington.edu

Requirement Sheet Key

◆ = Upper-Division Admission Requirements

Mathematics (24 Credits)
◆ Math 124 (5cr) – Calculus I
◆ Math 125 (5cr) – Calculus II
◆ Math 126 (5cr) – Calculus III
Math 307(3cr) – Differential Equations [pr: Math 125]
◆ Math 308 (3cr) – Matrix Algebra [pr: Math 126]

One course from the following:
IND E 250 (preferred) or Math/Stat 390
(AMATH 351/352 may substitute for Math 307/308)

Sciences (25 Credits)
◆ Chem 142 (5cr) – General Chemistry with lab
Chem 152 (5cr) – General Chemistry with lab
◆ Phys 121 (5cr) – Mechanics with lab [pr: Math 124]
◆ Phys 122 (5cr) – Electro/Oscillatory with lab [pr: Math 125]
Phys 123 (5cr) – Waves with lab [pr: Math 126]

Written & Oral Communications (12 Credits)
◆ English Comp (5cr) – English Composition
HCDE 231 (3cr) – Intro to Technical Writing [pr: Engl. Comp]
Additional Writing or Composition (4cr)

Visual, Literary & Performing Arts/Individuals & Society (VLPA/I&S) (24 Credits)
Minimum 10 credits in VLPA required.
Minimum 10 credits in I&S required.
Remaining 4 credits can be either VLPA or I&S.
(Econ 200/201 count toward both I&S and the Economics requirement below.)
Minimum 3 credits in Diversity (DIV) required (can overlap with VLPA/I&S credits).

Economics (CEE topic requirement) (4-5 Credits)
Econ 200 (5cr) or Econ 201 (5cr) or Ind E 250 (4cr)
*IndE 250 also counts toward Engineering Fundamentals.

Engineering Fundamentals (20 Credits)
◆ AA 210 (4cr) – Engineering Statics [pr: Math 126, Phys 121]
◆ ME 230 (4cr) – Kinematics & Dynamics [pr: AA 210]
◆ AMATH 301(4cr) – Beg. Scientific Computing (Preferred),
or CSE 142 (4 cr) – Computer Programming I
One course from the following list:
ME 123 (4cr), MSE 170 (4cr), EE 215 (4cr), IND E 250 (4cr),
AA 260 (4cr)

CEE 300-level Courses (40 Credits)
CEE 307 (5cr) – Construction Engineering
CEE 317 (5cr) – GeoSurveying
CEE 327 (5cr) – Transportation Engineering
CEE 337 (5cr) – Construction Materials
CEE 347 (5cr) – Introduction to Fluid Mechanics
CEE 357 (5cr) – Environmental Engineering
CEE 367 (5cr) – Geotechnical Engineering
CEE 377 (5cr) – Introduction to Structural Design

Professional Practice and Capstone (7 Credits)
CEE 440 (2cr) – Professional Practice Studio
Capstone Design Course (5cr)
*Choice of CEE 441, 442, 444, or 445.

Civil Engineering Technical Electives (15 Credits)
Three “core” courses, each one selected from a different category of departmental emphasis. See “Core Courses” list on the CEE website. Complete additional 400-level CEE courses, not used to fulfill other requirements, for a total of 15 credits.

Upper-Division Engineering & Science Electives (12 Credits)
Any 400-level CEE courses not used elsewhere. Additionally, courses from outside the department may also apply if listed on the pre-approved Upper-Division course list (available on CEE website), or if approved by petition.

Total Credits Required for Graduation (180 Credits)

Early Admission Requirements
1. Early Admission is an option for Autumn Quarter Only.
2. Students must be enrolled at UW-Seattle.
3. Math 124, 125 & 126 or equivalent.
4. 10 credits of physical sciences courses plus the accompanying lab at the level of Chem 142, 152; Phys 121, 122, 123.
5. 5 credits of English Composition.
6. 15 credits must have been completed at UW.

Application Deadlines
Both early and upper division applications are due July 1st.

Last revised September 2014
## Civil and Environmental Engineering Sample Curriculum

### University of Washington

[www.ce.washington.edu](http://www.ce.washington.edu)

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### Freshman – Autumn Quarter
- **Math 124** – Calculus I 5
- **Chem 142** – Chem & Lab I 5
- **Engl 131** – English Composition 5

**Quarter Total**: 15

### Freshman – Winter Quarter
- **Math 125** – Calculus II 5
- **Chem 152**^ – Chem & Lab II 5
- **VLPA/I&S** 5
- **CEE 100** – Introduction to CEE 1

**Quarter Total**: 16

### Freshman – Spring Quarter
- **Math 126** – Calculus III 5
- **Phys 121** – Mechanics & Lab I 5
- **VLPA/I&S** 5

**Quarter Total**: 15

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### Sophomore – Autumn Quarter
- **AA 210** – Statics 4
- **Phys 122** – Electro & Lab I 5
- **HCDE 231** –Technical Writing 3
- **Math 308** – Matrix Algebra 3

**Quarter Total**: 15

### Sophomore – Winter Quarter
- **Math 307** – Diff. Equations 3
- **CEE 220** – Mech. of Materials 4
- **Phys 123** – Waves & Lab I 5
- **IND E 250** – Engr Economics 4

**Quarter Total**: 16

### Sophomore – Spring Quarter
- **ME 230** – Kinematics/Dynamics 4
- **INDE 315** – Engineering Stats 3
- **AMATH 301** – Sci. Computing 4
- **VLPA/I&S** 4

**Quarter Total**: 15

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### Junior – Autumn Quarter
- **CEE 317** – GeoSurveying 5
- **CEE 337** – Construction Materials 5
- **CEE 377** – Intro to Structural Design 5

**Quarter Total**: 15

### Junior – Winter Quarter
- **CEE 307** – Construction Engr. 5
- **CEE 347** – Intro to Fluid Mechanics 5
- **CEE 357** – Environmental Engr. 5

**Quarter Total**: 15

### Junior – Spring Quarter
- **CEE 327** – Transportation Engr. 5
- **CEE 367** – Geotechnical Engr. 5
- **CEE 4xx** or grad requirement or other elective. 5

**Quarter Total**: 15

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### Senior – Autumn Quarter
- **CEE Technical Elective** 3
- **CEE Technical Elective** 3
- **CEE Technical Elective** 3
- **Upper Div. ENGR & SCI Elective** 3
- **Elective** 2

**Quarter Total**: 14

### Senior – Winter Quarter
- **CEE 440** – Design Practicum 2
- **CEE Technical Elective** 3
- **CEE Technical Elective** 3
- **VLPA/I&S** 5
- **Elective** 2

**Quarter Total**: 15

### Senior – Spring Quarter
- **CEE Capstone** 5
- **Upper Div. ENGR & SCI Elective** 3
- **Upper Div. ENGR & SCI Elective** 3
- **Elective** 3

**Quarter Total**: 14

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**Bold face** courses are required for upper-division admission.

^Chem 152 Recommended for students considering multiple engineering programs

See CEE Website for list of Technical Electives.

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### For more information contact: Engineering Advising
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**or**

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