



# ENVIRONMENTAL FOCUS AREA: Student Tailored

Department of Civil and Environmental Engineering

General Education (19 sh)		sh
ALL	RHET:1030 Rhetoric	4
F/S	Diversity & Inclusion	3
ALL	Be Creative	3
ALL	Approved Gen Ed Course	3
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Math & Basic Science Core (24 sh)		sh
F/S	MATH:1550 Math I: Single Variable Calculus (P: ALEKS score $\geq$ 75 or MPT Level 3 score $\geq$ 9)	4
ALL	MATH 1560 Math II: Multivariable Calculus (P: MATH:1550)	4
ALL	MATH:2550 Math III: Matrix Algebra (P: MATH:1550)	2
ALL	MATH:2560 Math IV: Differential Equations (P: MATH:1560 & MATH:2550)	3
F/S	STAT:2020 Probability & Statistics For Engr & Phys Sci (P: MATH:1560)	3
ALL	CHEM:1110 Principles of Chemistry I (P: ALEKS score $\geq$ 55 or MPT Level 3 score $\geq$ 9)	4
ALL	PHYS:1611 Introductory Physics I / Lab (C: MATH:1550)	4

Engineering Core (7 sh)		sh
F	ENGR:1000 Engineering Success for First-Year Students (First semester standing)	1
F	ENGR:1100 Intro to Engineering Problem Solving	3
F/S	ENGR:1300 Intro to Engineering Computing (C: MATH:1550)	3

EnvE Requirements (58 sh)		sh
ALL	BIOL:1411 Foundations of Biology (P: CHEM:1110)	4
ALL	CHEM:1120 Principles of Chemistry II (P: CHEM:1110 with a minum grade of C-)	4
ALL	CHEM:2210 Organic Chemistry I (no lab required)	3
ALL	ENGR:2110 Statics (P: MATH:1550; C: MATH:1560 & PHYS:1611)	2
ALL	ENGR:2130 Thermodynamics (P: CHEM:1110 & PHYS:1611; C: MATH:1560)	3
F/S	ENGR:2510 Fluid Mechanics (P: MATH:2560 & ENGR:2710; C: ENGR:2130)	4
ALL*	ENGR:2710 Dynamics (P: ENGR:2110 & MATH:1550)	3
ALL*	ENGR:2720 Materials Science (P: CHEM:1110; C: MATH:1550)	3
ALL	EES:1080 Introduction to Environmental Science (no lab required)	3
S	CEE:3155 Principles of Environmental Engineering (with Lab) (P: CHEM:1110)	4
S	CEE:3371 Principles of Hydraulics and Hydrology (P: ENGR:2510)	3
S	CEE:3430 Water Treatment (with Lab) (P: ENGR:2510 & CEE:3155)	4
F	CEE:4102 Groundwater	3
F	CEE:4150 Environmental Chemistry (P: CHEM:1120)	3
F	CEE:4157 Environmental Engineering Design (P: CEE:3155)	3
F	CEE:4158 Solid and Hazardous Wastes	3
S	CEE:4159 Air Pollution Control Technology	3
F	CEE:4374 Water Resources Design (P: CEE:3371)	3

CEE Capstone Design Courses (3 sh)		sh
F/S	CEE:4850 Project Design & Management in CEE (P: final semester; C: CEE:3003)	3

CEE Professional Skills (4 sh)		sh
S	CEE:1010 Introduction to Careers in Env. Engineering	0
S	CEE:2010 Professional Practice and Ethics	1
F	CEE:3001 Leadership Skills for Engineers (junior standing)	1
S	CEE:3002 Technical Communication in CEE (sophomore standing)	1
F	CEE:3003 Project Management Skills (senior standing)	1
S	CEE:1010 Introduction to Careers in Env. Engineering	0
S	CEE:2010 Professional Practice and Ethics	1
F	CEE:3001 Leadership Skills for Engineers (junior standing)	1
S	CEE:3002 Technical Communication in CEE (sophomore standing)	1
F	CEE:3003 Project Management Skills (senior standing)	1

Required: Student Tailored (0 sh)		sh
None required		

Electives: Student Tailored (15 sh)		sh
Electives: Focus Area, Minor, Certificate, etc.		sh
select 5 courses (15 sh) based on the following guidelines		

- The set of courses chosen must support the student's career or life plan (which the student must explain on the Student Tailored Focus Area form). The explanation must be acceptable to the advisor and the CEE Curriculum Committee.
- A non-technical Focus Area must be completed as part of a minor in that field or as part of a certificate program, and therefore each course must be part of a sequence of an increasingly challenging curriculum.
- The set of courses chosen must demonstrate depth of learning in a particular area. An assortment of introductory courses is unacceptable.

Note that a non-technical Focus Area may require additional courses (beyond the 15 sh required for the Focus Area) to meet the requirements of a minor, or to show exposure and depth in a particular area. These courses will not count as Focus Area Elective courses, but may be used to satisfy General Education Component (GEC) requirements.

The CEE web site contains instructions for submitting a Student Tailor Focus Area for review and approval by the CEE Curriculum Committee.

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**Total Semester Hours Requirements: 130**