

BS in Environmental Engineering

Degree Requirements

The BS degree in Environmental Engineering at UIC requires the students to complete university, college, and program degree requirements. Students must complete all courses required to fulfill College of Engineering and General Education requirements, and required courses in the major. In order to graduate with a BS degree in Environmental Engineering, students must have at least a 2.00/4.00 grade point average in all work taken at UIC, in all work taken for the major, and in all work accepted by the university (transfer courses and courses taken at UIC).

Code	Title	Hours
Summary of Requirements		
Nonengineering and General Education Requirements		60
Required in the College of Engineering		53
Technical Electives		15
Total Hours		128

Nonengineering and General Education Requirements

Code	Title	Hours
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
Exploring World Cultures course ^a		3
Understanding the Creative Arts course ^a		3
Understanding the Past course ^a		3
Understanding the Individual and Society course ^a		3
Understanding U.S. Society course ^a		3
MATH 180	Calculus I	4
MATH 181	Calculus II	4
MATH 210	Calculus III	3
MATH 220	Introduction to Differential Equations	3
MATH 310	Applied Linear Algebra	3
or STAT 381	Applied Statistical Methods I	
PHYS 141	General Physics I (Mechanics) ^b	4
PHYS 142	General Physics II (Electricity and Magnetism) ^b	4
CHEM 122	Matter and Energy ^b	3
CHEM 123	Foundations of Chemical Inquiry I ^b	2
CHEM 124	Chemical Dynamics ^b	3
CHEM 125	Foundations of Chemical Inquiry II ^b	2
EAES 101	Global Environmental Change ^b	4
or EAES 111	Earth, Energy, and the Environment	
Total Hours		60

^a Students should consult the General Education section of the catalog for a list of approved courses in this category.

^b This course is approved for the Analyzing the Natural World General Education category.

Required in the College of Engineering

Code	Title	Hours
ENGR 100	Engineering Success Seminar for Freshmen ^a	1
CME 119	Introduction to Environmental Engineering and Science	3
CME 197	Introduction to Civil and Environmental Engineering	0
CME 207	Engineering Probability and Economics	3
CME 211	Fluid Mechanics and Hydraulics	3
CME 260	Properties of Materials	3
CME 297	Civil and Environmental Engineering Drawing and Design	3
CME 311	Water Resources Engineering	3
CME 322	Environmental Engineering	3
CME 396	Civil Engineering Systems Design	2
CME 403	Hydraulic Design	3
CME 411	Chemistry for Environmental Professionals	3
CME 421	Water Treatment Design	3
CME 422	Wastewater Treatment Design	3
CME 427	Engineering Hydrology	3
CME 497	Capstone Design	2
CS 109	Programming for Engineers with MatLab	3
CHE 210	Material and Energy Balances ^b	4
ME 205	Introduction to Thermodynamics	3
ME 450	Air Pollution Engineering	3
Total Hours		53

^a ENGR is a one-hour course, but the hour does not count toward the total hours required for graduation.

^b For the prerequisites for CHE 210, ME 205 is accepted as a substitute for CHE 201 and CHE 205 is waived for Environmental Engineering majors.

Technical Electives

Code	Title	Hours
Courses		
Select five technical elective courses from the offered 400-level CME Technical Electives or from 400-level courses offered by other programs in the College of Engineering or other STEM programs at UIC with the approval of the academic faculty advisor. ^a		15
Total Hours		15

^a Students (and their faculty advisors) must separately petition to substitute CME 493, CME 496, or CME 494 for a technical elective course, and also receive approval from the director of undergraduate studies or the department head prior to the student's enrollment in those courses.

Sample Course Schedule

Course	Title	Hours
Freshman Year		
First Semester		
ENGR 100	Engineering Success Seminar for Freshmen	1
CHEM 122 & CHEM 123	Matter and Energy and Foundations of Chemical Inquiry I ^a	5
CME 119	Introduction to Environmental Engineering and Science	3
ENGL 160	Academic Writing I: Writing in Academic and Public Contexts	3
MATH 180	Calculus I	4
Hours		15
Second Semester		
CME 197	Introduction to Civil and Environmental Engineering	0
CHEM 124	Chemical Dynamics	3
CS 109	Programming for Engineers with MatLab	3
ENGL 161	Academic Writing II: Writing for Inquiry and Research	3
MATH 181	Calculus II	4
PHYS 141	General Physics I (Mechanics)	4
Hours		17
Sophomore Year		
First Semester		
CME 211	Fluid Mechanics and Hydraulics	3
CME 297	Civil and Environmental Engineering Drawing and Design	3
CHEM 125	Foundations of Chemical Inquiry II	2
MATH 210	Calculus III	3
ME 205	Introduction to Thermodynamics	3
PHYS 142	General Physics II (Electricity and Magnetism)	4
Hours		18
Second Semester		
CHE 210	Material and Energy Balances	4
CME 207	Engineering Probability and Economics	3
CME 260	Properties of Materials	3
CME 322	Environmental Engineering	3
MATH 220	Introduction to Differential Equations	3
Hours		16
Junior Year		
First Semester		
CME 311	Water Resources Engineering	3
CME 411	Chemistry for Environmental Professionals	3
CME 421	Water Treatment Design	3
ME 450	Air Pollution Engineering	3
STAT 381 or MATH 310	Applied Statistical Methods I or Applied Linear Algebra	3
General Education Requirement course		3
Hours		18
Second Semester		
CME 403	Hydraulic Design	3
CME 422	Wastewater Treatment Design	3
EAES 101 or EAES 111	Global Environmental Change or Earth, Energy, and the Environment	4
Technical Elective I		3
General Education Requirement course		3
Hours		16
Senior Year		
First Semester		
CME 396	Civil Engineering Systems Design	2
CME 427	Engineering Hydrology	3
Technical Elective II		3
Technical Elective III		3

General Education Requirement course		3
Hours		14
Second Semester		
CME 497	Capstone Design	2
Technical Elective IV		3
Technical Elective V		3
General Education Requirement course		3
General Education Requirement course		3
Hours		14
Total Hours		128