

ENVIRONMENTAL ENGINEERING (BSE)

Bachelor of Science in Engineering

The Environmental Engineering major requires a total of 128 credits.

Environmental Engineering majors are required to complete the following:

Course	Title	Credits
CE 2110	Applied Mechanics I	3
CE 2211	Engineering Economics I	1
CE 2251	Probability and Statistics in Civil and Environmental Engineering	3
CHEM 1128Q or CHEM 1148Q	General Chemistry II Honors General Chemistry II	4
CHEG 2111	Chemical Engineering Thermodynamics I	3
ENGR 1166	Foundations of Engineering	3
MATH 2110Q & MATH 2410Q	Multivariable Calculus and Elementary Differential Equations	7
ENVE 1000E	Environmental Sustainability	3
ENVE 2310E	Environmental Engineering Fundamentals	3
CE/ENVE 2411	Introduction to Computer Aided Design	1
ENVE 3120 or CHEG 3123	Fluid Mechanics Fluid Mechanics	4
ENVE 3201	Environmental Engineering Laboratory I	1
ENVE 3202	Environmental Engineering Laboratory II	1
ENVE 3220	Water Quality Engineering	3
ENVE 3230	Air Pollution Control	3
ENVE 4210	Environmental Engineering Chemistry	3
ENVE 4310	Environmental Modeling	3
ENVE 4320	Ecological Principles and Engineering	3
ENVE 4530 or ENVE 4540	Geoenvironmental Engineering Design of Groundwater Systems	3
ENVE 4810	Engineering Hydrology	3
ENVE 4910W	Environmental Engineering Design I	2
ENVE 4920W	Environmental Engineering Design II	2
Biological Science (p. 1) requirement		19
Earth Science (p. 1) requirement		19
Professional Requirements (p. 1) courses		12
Elective Courses (as needed to reach 128 credits)		13
Total Credits		125

Earth Science Requirement

The Earth Science requirement may be fulfilled by:

Course	Title	Credits
Select one of the following:		
ERTH 1051	Earth's Dynamic Environment (Lecture)	3
ERTH 3710/ CE 3530/ENVE 3530	Engineering and Environmental Geology	3
MARN 1002E	Introduction to Oceanography	3
NRE 3145	Meteorology	3

NRE 3146 or NRE 4135	Climatology Introduction to Ground Water Hydrology	3
SPSS 2120	Environmental Soil Science	3
SPSS 3420 or SPSS 4420	Soil Chemistry Components	4

Or other appropriate courses by petition

Total Credits 19

Biological Science Requirement

The Biological Science requirement may be fulfilled by:

Course	Title	Credits
BIOL 1108	Principles of Biology II	4
EEB 2100E	Global Change Ecology	3
ENVE 3270	Environmental Microbiology	3
NRE 3105	Wetlands Biology and Conservation	3
NRE 3265	Sustainable Urban Ecosystems	3
NRE 4205	Stream Ecology	3
NRE 4340	Ecotoxicology	3

Or other appropriate courses by petition

Total Credits 22

Professional Requirements

Professional Requirements include:

Course	Title	Credits
Select at least three credits in the area of Management and Policy from the following:		
AH 3275	HAZWOPER	3
ARE 2434E	Environmental and Resource Policy	
ARE 4462E	Environmental and Resource Economics	
EEB 3205E	Current Issues in Environmental Science	
ENVE 3100	Climate Resilience and Adaptation: Municipal Policy and Planning	
ENVE 4850		
GEOG 3320W	Environmental Evaluation and Assessment	
GEOG 3340	Environmental Planning and Management	
LAND 3230WE	Sustainable Environmental Planning and Landscape Design	
MEM 2221		
NRE 3245E	Environmental Law	
OPIM 3603	Project Management and Planning	
Select at least three credits from any CE 3000 level (or higher) or ENVE courses		
Select at least six credits from the following:		
Any 3000 level or higher courses in engineering or science (BIOL, CHEM, EEB, GEOG, EARTH, LAND, MARN, MATH, MCB, NRE, PHYS, SOIL, TURF)		
CE 2500	Introduction to Geographic Information Systems	3
CHEM 2241	Organic Chemistry	
CHEM 2443	Organic Chemistry	

Total Credits 12

No course that was used to meet another requirement for the Environmental Engineering Program may double count as a Professional Requirement. This includes university general education requirements and requirements for the College of Engineering. Environmental Engineering Honors students are required to take three credits of ENVE 4886 Thesis I and/or ENVE 4897 Thesis in Environmental Engineering in place of three credits of Professional Requirements.

Additional Notes

The Environmental Engineering undergraduate program educational objectives are to impart our alumni/ae with the knowledge and skills needed to: actively contribute to the practice and profession of engineering, including management and administration, in the public, private or academic sectors in the technical area of environmental engineering; follow a path towards leadership in the profession that can include becoming licensed professional engineers, assessing the impact of human activities on the environment, designing and constructing solutions to minimize and mitigate such impacts, and tending to the natural environment as our life support system; and practice lifelong learning through post-graduate and professional education.

The Environmental Engineering program is accredited by the Engineering Accreditation Commission of ABET, www.abet.org (<http://www.abet.org>).

University General Education Requirements

Every student must meet a set of core requirements to earn a baccalaureate degree, in addition to those required by the student's major course of study and other requirements set by the student's school or college. For more information about these requirements, please see General Education Requirements (<https://catalog.uconn.edu/undergraduate/gen-ed-requirements/>).

College of Engineering Degree Requirements

Students must meet a set of requirements established by the college in addition to the University's General Education requirements. For more information, see the College of Engineering (<https://catalog.uconn.edu/undergraduate/engineering/#requirementstext>) section of this catalog.