

The Ohio State University
College of Engineering

Environmental Engineering Minor (ENVENG-MN)

Department of Civil, Environmental and Geodetic Engineering
470 Hitchcock Hall, 2070 Neil Ave.
Columbus, OH 43210
614-292-2771; ceg.osu.edu
CEG Undergraduate Advising: 495 Hitchcock Hall

The Environmental Engineering minor will provide a wide range of undergraduate majors with an introductory background in sustainability, pollution prevention, environmental modeling, and pollution control technologies. By completing the minor in Environmental Engineering, students should add considerably to their major program skills, and become more valuable to their future employer. Science majors will gain an understanding of engineering problem-solving methods and procedures, as well as standard pollution control technologies. Other engineering majors will become more aware of the environmental effects of technologies in their major field, and how to reduce these effects.

Prerequisites for Environmental Engineering Minor

Must be completed prior to beginning the minor program:

- Math 1151
- Chemistry 1220 General Chemistry II (*non-engineering students*) or Chemistry 1250 Chem. for Eng (*engineering students*)

Requirements of Environmental Engineering Minor:

Credit hour requirement: minimum of 15 credit hours

Required Courses All 3 courses below must be completed

- ENE 2100 Environmental Engineering Analytical Methods (3 hrs)
- ENE 3200 Fundamentals of Env End* (3 hrs)
- ENE 3210 Environmental Engineering Unit Operations (3 hrs) (POI)

Electives of Minor

Select 6 hours of coursework from the approved elective list below. Engineering students may overlap six credit hours from the minor with the elective portion of their engineering degree program.

*Civil Engineering students, who use ENE 3200 as one of the six Core Electives in the major must take an additional 3 hours of elective credit from below.

Course Number	Title	Credit Hrs	Pre-requisites
ENE 4200	Unit Operations in Environmental Eng Lab	1	ENE 2100; ENE3210; ENE5110(c)
ENE 5110	Environmental Biotechnology	3	ENE3200
ENE 5170	Sustainability and Pollution Prevention Practices	3	ENE 3200
ENE 5310	Ecological Engineering and Science	3	Rank 3+; course in one of the following: biology, ecology, engineering or geology
ENE 5410	Hazardous Waste Management	2	ENE3210
ENE 5430	Principles of Risk Assessment	3	ENE 3200
CE 5230	Transport Phenomena in Water Resources Engineering	3	Math 2173, 2177, 2255, or 2415; CE 3160
CHBE 5771	Air Pollution	3	Rank 4 in engineering
CHBE 5772	Principles of Sustainable Engineering	3	POI or CHBE 4760
EarthSci 5651	Hydrogeology	4	EarthSci 1121; Math 1152
ENR 3000 and 3001	Soil Science	3/1	Rank 2+
ENR 5273	Fate of Pollutants in Soils and Natural Waters	3	2 semesters of Chemistry

POI = student may need Permission of Instructor for enrollment if prereq is not part of major curriculum
(c) = concurrent requisite

Suggested Sequence of Course

Autumn Semester	Spring Semester
ENE 3200 (or take in SP)	ENE 3200 (or take in AU)
	ENE 3210
	ENE 2100
Electives	Electives

Environmental Engineering minor program guidelines

Required for graduation No

Credit hours required A minimum of 15 credit hrs. 1000 level courses shall not be counted in the minor. At least 6 cr hrs need to be at the 3000 level or above.

Transfer and EM Credit Hours Allowed A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination toward the minor.

Overlap with the GE A student is permitted to overlap up to 6 cr hrs between the GE and the minor

Overlap with the Major and Additional Minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minors.

Grades Required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 cr hrs of course work graded Satisfactory/Unsatisfactory may count towards the minor.

X193 Credits No more than 3 cr hrs

Minor Approval A student who completes the minor following the requirements need only file their college's minor program form with their academic advisor or college office.

Filing the Minor Program Form The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the Minor Any changes must be approved by the Department of Civil, Environmental and Geodetic Engineering.

College of Arts and Sciences
Curriculum and Assessment Services
154 Denney Hall, 164 Annie & John Glenn Ave.
<http://artsandsciences.osu.edu>

DH 8/28/12
BV12-22-15
DH 6-9-21