

Requirements for the Minor in Environmental Engineering Science

Administered by the Department of Energy, Environmental and Chemical Engineering

The Minor in Environmental Engineering Science requires the completion of 21 units of environmental engineering and allied courses selected from the following menus. The committee that oversees the minor is comprised of Daniel Giammar (coordinator, EECE), Kristen Wyckoff (EECE), and Brent Williams (EECE).

Introduction¹ (3 units)

- EECE 101 – Introduction to Energy, Environmental & Chemical Engineering (3 units - Fall)
- EECE 210 – Introduction to Environmental Engineering (3 units - Spring)

Environmental Chemistry² (3 units)

- EECE 505 – Aquatic Chemistry (3 units – Fall)
- EECE 531 – Environmental Organic Chemistry (3 units – Fall)

Environmental Engineering Electives² (9 units)

- EECE 309 – Environmental Engineering Fate and Transport (3 units – Fall)
- EECE 311 – Green Engineering (3 units - Fall)
- EECE 314 – Air Quality Engineering with Lab (4 units – Fall)
- EECE 407 – Environmental Biotechnology (3 units – Fall)
- EECE 425 – Environmental Engineering Laboratory (3 units - Spring)
- EECE 504 – Aerosol Science and Technology (3 units - Fall)
- EECE 514 – Atmospheric Science and Climate (3 units – Spring)
- EECE 533 – Physical and Chemical Processes for Water Treatment (3 units – Spring)

Natural Science (3 units)

- Bio 381 – Introduction to Ecology (3 units - Spring)
- EPSc 323 – Biogeochemistry (3 units - Spring)
- EPSc 386 – The Earth's Climate System (3 units – Fall most years)
- EPSc 413 – Introduction to Soil Science (3 units - Fall)
- EPSc 428 – Hydrology (3 units – Fall most years)
- EPSc 442 – Aqueous Geochemistry (3 units – Fall even years)

Environmental Policy and Social Science (3 units)

- EnSt 310 – Ecological Economics (3 units – Fall)
- EnSt 346 – Environmental Justice (3 units – Spring)
- EnSt 347 – Sustainable Cities (3 units – Spring)
- EnSt 357 – Multiparty Environmental Decision Making (3 units – Spring)
- Econ 451 – Environmental Policy (3 units - Fall)
- EnSt 452 – International Climate Negotiation Seminar (3 units – Fall)
- EnSt 461 – Intro to Environmental Law (3 units – Fall)
- EnSt 539 – Interdisciplinary Environmental Clinic (3 units maximum – Fall/Spring)

¹ Freshmen potentially interested in majoring in Chemical Engineering should take EECE 101; all other students working towards the Minor in Environmental Engineering Science should take EECE 210.

² Students taking both environmental chemistry courses can count one of them toward the Environmental Engineering Electives.