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.

Introduction\(^1\) (3 units)
- ChE 146A - Introduction to Energy, Environmental & Chemical Engineering (3 units - Fall)
- ChE 262 - Introduction to Environmental Engineering (3 units - Spring)

Environmental Chemistry\(^2\) (3 units)
- EECE 448 – Environmental Organic Chemistry (3 units – Fall)
- EECE 543 – Aquatic Chemistry (3 units – Fall)

Green Engineering, Environmental Management and Risk Assessment (3 units)
- ChE 345 - Pollution Abatement & Waste Minimization (3 units - Fall)
- EECE 380A – Sustainable Technologies for the Global Community (3 units - Spring)
- ChE 438 - Environmental Risk Assessment and Toxicology (3 units - Fall)
- EECE 590 - Energy and Environ. Economics & Risk Manage. Decision-Making (3 units - Spring)

Environmental Engineering Electives\(^2\) (6 units)
- ChE 408A – Environmental Engineering Laboratory (3 units - Spring)
- ChE 449 - Sustainable Air Quality (3 units - Spring)
- ChE 518 - Aerosol Science and Technology (3 units - Fall)
- EECE 401 - International Experience in Energy, Environmental and Chemical Engineering (3 units – Fall/Summer)
- EECE 534 - Environmental Nanochemistry (3 units - Spring)
- EECE 5404 – Combustion (3 units - Fall)
- EECE 547 – Atmospheric Science and Climate (3 units – Spring)
- EECE 588 – Physical and Chemical Processes for Water Treatment (3 units – Fall)
  *additional eligible courses (new courses, special offerings) will be posted on the EECE web site as they become available*

Natural Science (3 units)
- Bio 381 - Introduction to Ecology (3 units - Spring)
- EPSc 323 – Biogeochemistry (3 units - Spring)
- EPSc 413 – Introduction to Soil Science (3 units - Spring)
- EPSc 429 – Environmental Hydrogeology (3 units - Spring)
- EPSc 444 - Environmental Geochemistry (3 units – Fall even years)

Environmental Policy and Social Science (3 units)
- Econ 451 - Environmental Policy (3 units - Fall)
- EnSt 539 - Interdisciplinary Environmental Clinic (3 units maximum – Fall/Spring)
- Pol Sci 332 - Environmental and Energy Issues (3 units - Spring)

---

\(^1\) Freshmen potentially interested in majoring in Chemical Engineering should take ChE 146A; all other students working towards the Minor in Environmental Engineering Science should take ChE 262.

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