

General Degree Requirements

31 minimum coursework credits
2 CEE 500 Seminar credits
9 Thesis credits

42 Credits Required

Thesis Master's Degree Requirements (2015) *Environmental Engineering*

Environmental Engineering offers three areas of emphasis for the master's program. Students will select an area of emphasis based on their primary interest and complete the required coursework and electives to meet degree requirements. Areas of emphasis are:

Engineering Systems for Water Quality (ESWQ)

Water Quality in Natural Systems (WQNS)

Air Quality (AQ)

Required Courses By Area Of Emphasis

ESWQ Required (25 credits)

- ☐ CEE 500 Seminar, 2 CR, to include:
1 CR CEE Dept. Seminar and 1 CR Env./Water Seminar
- ☐ CEE 540 Microbiological Process Fundamentals, 3 CR (AUT)
- ☐ CEE 543 Aquatic chemistry, 4 CR (AUT)
- ☐ CEE 541 Biological Treatment Systems, 3 CR (WIN)
- ☐ CEE 544 Physical/Chemical Treatmnt Process, 4 CR (WIN)
- ☐ CEE 545 Environmental Organic Chemistry, 3 CR (WIN)
- ☐ CEE 549 Adv. Topics in Env. Eng., Chem, and Biol, 3 CR (SPR)
One of the following:
- ☐ CEE 577 Water Quality Management, 3 CR (AUT)
- ☐ CEE 550 Environmental Chemical Modeling, 3 CR (SPR)
- ☐ CEE 599 Biol. Sys. Eng. for Enhcd. Res. Recovery, 3 CR (SPR)
- ☐ CEE 599 Environmental Analyses, 3 CR (SPR)

WQNS Required (21 credits)

- ☐ CEE 500 Seminar, 2 CR, to include:
1 CR CEE Seminar and 1 CR Env./Water Seminar
- ☐ CEE 462 Applied Limnology, 3 CR (AUT)
- ☐ CEE 540 Microbiological Process Fundamentals, 3 CR (AUT)
- ☐ CEE 543 Aquatic chemistry, 4 CR (AUT)
- ☐ CEE 551 Fate and Transport of Chemicals, 3 CR (AUT)
- ☐ CEE 545 Environmental Organic Chemistry, 3 CR (WIN)
One of the following:
- ☐ CEE 577 Water Quality Management, 3 CR (AUT)
- ☐ CEE 550 Environmental Chemical Modeling, 3 CR (SPR)
- ☐ CEE 599 Env. Analyses, 3 CR (SPR)
- ☐ CEE 599 Microbial Genetics in Env. Process, 3 CR (SPR)
- ☐ CEE 599 Adv. Remote Sensing and Earth Observation, 5 CR (WIN)

AQ Typical Coursework

- ☐ CEE 500 Seminar, 2 CR, to include:
1 CR CEE Seminar and 1 CR Env./Water Seminar
- ☐ ATMS 501 Fund of Physics & Chem of the Atmosphere, 5 CR
- ☐ ENVH 577 Risk Assessment for Env. Health Hazards, 3 CR
- ☐ CEE 480 Air Quality Modeling, 3 CR (WIN))
- ☐ ENVH 552 Env. Chemistry of Pollution, 4 CR
- ☐ CEE 490 Air Pollution Control, 4 CR (SPR)
- ☐ CEE 557 Air Resources Management, 3 CR (SPR)
- ☐ ATMS 558 Atmospheric Chemistry, 3 CR
- ☐ ENVH 448/548 Community Air Pollution, 3 CR
Also allowed:
- ☐ CEE 588 Energy, Infrastructure and the Environment, 3 CR (AUT)
- ☐ ENVH 555 Industrial Hygiene Measurement Lab, 3 CR

Electives

The remaining course requirements for the MSCE degree can be satisfied by any 5XX and 4XX level courses in the EES or H&H programs, (with approval by your faculty advisor), as well as a variety of relevant courses from other departments at the UW (e.g. departments in the College of the Environment). Students are encouraged to explore the availability of these courses and decide on an individual plan of study that balances depth and breadth, in line with the student's career goals. Some suggested electives outside CEE are shown below.

ATMS 501 Fund of Physics & Chem of the Atmosphere
ATMS 558 Atmospheric Chemistry
ENVH 548 Community Air Pollution
ENVH 552 Environ Chemistry of Pollution
FISH 473 Limnology

ENVH 577 Risk Assessment (CEE 560), Or
EPI 511 Intro to Epidemiology
ESS 424 Water in the Environment Or
ESS 426 Fluvial Geomorphology
SEFS 523 Env. Applications of Plants: Bioenergy and Bioremediation