

Typical Schedule:
M.S. in Environmental Engg. or M.S. in Environmental Engineering Science,
with a focus on air quality science and engineering,
for students advised by R. Honrath

Requirements

- Coursework credits: 20–22 (5000-level ≥ 12).
- Research and thesis (register for at least 10 research credits).

Each final schedule and thesis topic is agreed upon by the student and advisor.

Coursework

1. Mass balance, reactor analysis, kinetics, and mass transfer
CE5501 Environmental Process Engineering (fall) (3)
2. Environmental chemistry
CE4501 Environmental Engineering Chemical Processes (fall) (3)
3. Data analysis and statistics
CE5243 Probabilistic Analysis and Reliability (fall) (3), or
MA3730 Statistical methods (3)
4. Numerical methods; transport modeling
GE5800 Mathematical Modeling of Earth Systems (spring) (3)
- 5–6. Atmospheric Science and Engineering CE5505 Atmospheric Chemistry (spring) (3), and
One of:
PH4640 Atmospheric Physics (fall) (3), or
CE5xxx Atmospheric Boundary Layer Meteorology (spring) (3)
7. Non-atmospheric Environmental Engineering course: at least one of the following.
CE5509/CH5509 Environmental Organic Chemistry
CE5508 Biogeochemical Processes
CE5504 Surface Water Quality Modeling
CE5507 Sorption and Biological Processes
CE5502 Biological Treatment Processes
8. Seminars
CE599x Environmental Engineering seminar (register once, attend always)
UN4000 Remote Sensing Seminar (1)

Courses for students who have taken some of the above, and for doctoral students

CH4210 Instrumental Analysis
MA4710 Regression Analysis
CE4504 Air Quality Engineering and Science (fall) (3)
GE4250 Remote Sensing Fundamentals (spring) (3)
FW4540 Remote sensing of the environment (fall) (3)