

Environmental Engineering

(ABET Accredited)
Class of 2010

Mathematics & Basic Science Requirements (8 Courses)

(Engineering School Requirements)

CHM 201 or 207 MAT 103, 104 COS 126
PHY 103, 104 MAT 201, 202, or 203, 204

Engineering Science Requirements (10 Courses)

(Core Courses)

CEE 205 CEE 306 CEE 364 or CEE 365 MAE 305
CEE 263 CEE 308 ORF 245
CEE 303 CEE 361 MAE 222

Engineering Design Requirements (4 Courses)

CEE 471 CEE 477 CEE 478 – Senior Thesis (Counts as two courses)

<i>Freshman Year</i>	
Fall	Spring
1. CHM 201 or 207	1. COS 126
2. MAT 104	2. MAT 201
3. PHY 103	3. PHY 104
4. _____	4. _____
5. _____	5. _____

<i>Sophomore Year</i>	
Fall	Spring
1. CEE 205	1. CEE 303
2. ORF 245	2. MAE 222
3. MAT 202	3. MAE 305
4. _____	4. _____
5. _____	5. _____

<i>Junior Year</i>	
Fall	Spring
1. CEE 361	1. CEE 306
2. _____	2. CEE 308
3. _____	3. CEE 364*
4. _____	4. _____
5. _____	5. _____

<i>Senior Year</i>	
Fall	Spring
1. CEE 471	1. CEE 478 (thesis)
2. CEE 477	2. _____
3. CEE 478 (thesis)	3. _____
4. _____	4. _____
5. _____	5. _____

Program Electives (4 or more)	
1. _____	6. _____
2. _____	
3. _____	
4. _____	
5. _____	

Humanities Electives (7 or more)	
1. _____	6. _____
2. _____	7. _____
3. _____	8. _____
4. _____	9. _____
5. _____	

Notes:

*CEE 364 and 365 will be offered each calendar year in alternation

Recommended Program Electives

Four or more Program Electives must be chosen from the list below. Three courses must provide a coherent sequence in the student's area of interest. Only one 200-level course may be chosen as a Program Elective. Any course listed under Engineering Science Requirements not used to fulfill that requirement may be used as a Program Elective. The single bullet (●) indicates course that are highly recommended.

Civil and Environmental Engineering

- CEE 262 Structures and the Urban Environment
- CEE 263 Rivers and the Regional Environment
- CEE 362 Structural Dynamics and Earthquake Engineering
- CEE 366 Design of Reinforced concrete Structures
- CEE 375/376 Independent Research Project
- CEE 460 Risk Assessment and Management
- CEE 461 Design of Large-Scale Structures: Buildings
- CEE 472 Hydrometeorology and Remote Sensing

Chemistry/Geology

- CHM 301 Organic Chemistry I
- CHM 303 Organic Chemistry I – Biological Focus
- CHM 304 Organic Chemistry II
- CHM 333 Chemistry and the Environment
- CHE 246 Thermodynamics or CHM 306 Physical Chemistry
- GEO 235 The Physical Earth
- GEO 322/ENV 322 Biogeochemical Cycles and global Change
- GEO 331 Introduction to Geochemistry
- GEO 336 Environmental Isotope Geochemistry
- GEO 339 Climate Change: Scientific Basic, Policy Implications
- GEO 399 Environmental Decision Making
- GEO 417 Environmental Microbiology
- GEO 418 Environmental Aqueous Geochemistry
- GEO 427 Introduction to Terrestrial and Planetary Atmospheres
- GEO 470 Environmental Chemistry of solids
- GEO 499 Investigating Natural Hazards

Biology/Ecology

- EEB 221 The Biology of Organisms
- MOL 214 Introduction to Cellular and Molecular Biology (or EEB 210 Evolutionary Ecology)
- EEB 308 Biogeography and Conservation Biology
- EEB 321 Introduction to Population and Community Ecology
- EEB 324 Theoretical Biology
- EEB 417 Ecosystems and Global Change

Energy and Environment

- MAE 221 Thermodynamics
- MAE 328 Energy for a Greenhouse-Constrained World
- MAE 427 Fossil Fuel Energy Conversion: Mobile Power Plants

Finance

- ORF 335 Introduction to Financial Engineering

- Highly recommended