# ENVIRONMENTAL FOCUS AREA:

**Environmental**

Department of Civil and Environmental Engineering

## General Education (19 sh)

- **ALL** RHET:1030 Rhetoric
- **F/S** Diversity & Inclusion
- **AL** Approved Gen Ed Course
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## Math & Basic Science Core (24 sh)

- MATH:1550 MATH I: Single Variable Calculus (P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9) (4 sh)
- MATH 1560 Math II: Multivariable Calculus (P: MATH:1550) (4 sh)
- MATH:2550 MATH III: Matrix Algebra (P: MATH:1550) (2 sh)
- MATH:2560 MATH IV: Differential Equations (P: MATH:1560 & MATH:2550) (3 sh)
- **ALL** MATH:2560 Math IV:  Differential Equations (P: MATH:1560 & MATH:2550) (3 sh)
- **ALL** PHYS:1611 Introductory Physics I / Lab (C: MATH:1550) (4 sh)

## Engineering Core (7 sh)

- **F** ENGR:1000 Engineering Success for First-Year Students (First semester standing) (1 sh)
- **F** ENGR:1100 Intro to Engineering Problem Solving (3 sh)
- **F/S** ENGR:1300 Intro to Engineering Computing (C: MATH:1550) (3 sh)

## EnvE Requirements (58 sh)

- **ALL** BIOL:1411 Foundations of Biology (P: CHEM:1110) (4 sh)
- **ALL** CHEM:1120 Principles of Chemistry II (P: CHEM:1110 with a minimum grade of C-) (4 sh)
- **ALL** CHEM:2210 Organic Chemistry I (no lab required) (3 sh)
- **ENGR:2110 Statics** (P: MATH:1550; C: MATH:1560 & PHYS:1611) (2 sh)
- **ENGR:2130 Thermodynamics** (P: CHEM:1110 & PHYS:1611; C: MATH:1560) (3 sh)
- **F/S** ENGR:2510 Fluid Mechanics (P: MATH:2560 & ENGR:2710; C: ENGR:2130) (4 sh)
- **ALL** ENGR:2710 Dynamics (P: MATH:2560 & CHEM:1110) (3 sh)
- **ALL** ENGR:2720 Materials Science (P: CHEM:1110; C: MATH:1550) (3 sh)
- **ALL** CEE:1030 Intro to Earth Science (no lab required) (3 sh)
- **S** CEE:3155 Principles of Environmental Engineering (with Lab) (P: CHEM:1110) (4 sh)
- **F** CEE:3371 Principles of Hydraulics and Hydrology (P: ENGR:2550) (3 sh)
- **S** CEE:3430 Water Treatment (with Lab) (P: ENGR:2510 & CEE:3155) (4 sh)
- **F** CEE:4102 Groundwater (3 sh)
- **F** CEE:4150 Environmental Chemistry (P: CHEM:1120) (3 sh)
- **F** CEE:4157 Environmental Engineering Design (P: CEE:3155) (3 sh)
- **F** CEE:4158 Solid and Hazardous Wastes (3 sh)
- **S** CEE:4159 Air Pollution Control Technology (3 sh)
- **F** CEE:4374 Water Resources Design (P: CEE:3155) (3 sh)

## CEE Capstone Design Courses (3 sh)

- **F/S** CEE:4850 Project Design & Management in CEE (P: final semester; C: CEE:3003) (3 sh)

## CEE Professional Skills (4 sh)

- **S** CEE:1010 Introduction to Careers in Envr. Engineering (3 sh)
- **S** CEE:2010 Professional Practice and Ethics (1 sh)
- **S** CEE:3001 Leadership Skills for Engineers (junior standing) (1 sh)
- **S** CEE:3002 Technical Communication in CEE (sophomore standing) (1 sh)
- **F** CEE:3003 Project Management Skills (senior standing) (1 sh)

## Electives: Environmental (15 sh)

- **S** CEE:4107 Sustainable Systems (3 sh)
- **F** CEE:4119 Hydrology (P: ENGR:2510) (3 sh)
- **S** CEE:4371 Water Resources Engineering (C: CEE:3371) (3 sh)

- **Electives: Focus Area, Minor, Certificate, etc.**

  - **sh**
  - **F** CEE:3001 Leadership Skills for Engineers (junior standing) (1 sh)
  - **S** CEE:3002 Technical Communication in CEE (sophomore standing) (1 sh)

## Total Semester Hours Requirements:

Total Semester Hours Requirements: 130