# Bachelor of Science in Environmental Sample Curriculum

<table>
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<th>Units</th>
<th>Fall</th>
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### First Year
- **Physics I (Physics 191)** (3 units)  
- **Physics I Laboratory (Physics 191L)** (1 unit)  
- **General Chemistry I or Introductory General Chemistry I (Chem 111A or Chem 105)** (3 units)  
  *(111A Recommended)*  
- **General Chemistry Laboratory I, II (Chem 151, 152)** (2 units)  
- **Calculus II, III (Math 132, 233)** (3 units)  
- **Introduction to Energy, Environmental and Chemical Engineering (EECE 101)** (3 units)  
- **Physics II (Physics 192)** (3 units)  
- **Physics II Laboratory (Physics 192L)** (1 unit)  
- **General Chemistry II (Chem 112A) or Introductory General Chemistry II (Chem 106)** (3 units)  
  *(112A Recommended)*  
- **Introduction to Computer Science (CSE 131)** (3 units)  
  *(with MATLAB extension)*

**Total:** 15 units

### Second Year
- **Process Analysis and Thermodynamics (EECE 205)** (4 units)  
- **Organic Chemistry I with Lab (Chem 261)** (4 units)  
- **Differential Equations (Math 217)** (3 units)  
- **Humanities/social sciences elective** (3 units)  
- **Environmental humanities and social sciences elective** (3 units)  
- **Engineering Mathematics A (ESE 318)** (3 units)  
- **Computational Modeling in Energy, Environmental and Chemical Engineering (EECE 202)** (3 units)  
- **Thermodynamics II in EECE (EECE 204)** (3 units)  
- **Introduction to Environmental Engineering (EECE 210)** (3 units)  
- **Transport Phenomena I: Basics and Fluid Mechanics (EECE 301)** (3 units)

**Total:** 17 units

### Third Year
- **Environmental Engineering Fate and Transport (EECE 309)** (3 units)  
- **Green Engineering (EECE 311)** (3 units)  
- **Air Quality Engineering with Lab (EECE 314)** (4 units)  
- **Probability and Statistics for Engineering (ESE 326)** (3 units)  
- **Humanities/social sciences elective** (3 units)  
- **Environmental Engineering Laboratory (EECE 425)** (3 units)  
- **Technical Writing (Engr 310)** (3 units)  
- **Principles of Biology I (Biol 2960)** (4 units)  
- **Physical and Chemical Processes for Water Treatment (EECE 533)** (3 units)  
- **Environmental engineering elective** (3 units)

**Total:** 16 units

### Fourth Year
- **Process Design, Economics and Simulation (EECE 409)** (2 units)  
- **Environmental Biotechnology (EECE 407)** (3 units)  
- **Engineering Ethics and Sustainability (Engr 4501)** (1 unit)  
- **Engineering Leadership and Team Building (Engr 4502)** (1 unit)  
- **Aquatic Chemistry or Environmental Organic Chemistry (EECE 505 or EECE 531)** (Environmental chemistry elective)  
- **Environmental engineering elective** (3 units)  
- **Humanities/social sciences elective** (3 units)  
- **Natural science elective** (3 units)  
- **Conflict Management and Negotiation (Engr 4503)** (1 unit)  
- **Environmental Engineering Capstone (EECE 404)** (3 units)

**Total:** 16 units