Bachelor of Science in Environmental Engineering Requirements

Total Units Required: 126

**Physical Sciences**
- General Chemistry (Chem 111A or Chem 105, Chem 112A or Chem 106) (111A and 112A Recommended) 6
- General Chemistry Laboratory (Chem 151, Chem 152) 4
- General Physics (Physics 191, Physics 192) 6
- Physics Laboratory (Physics 191L, Physics 192L) 2
- Organic Chemistry I (Chem 261) 4

**Unit Subtotal** 22

**Biological Science**
- Principles of Biology I (Biol 2960) 4

**Unit Subtotal** 4

**Mathematics & Computing**
- Calculus II, III (Math 132, Math 233) 6
- Differential Equations (Math 217) 3
- Engineering Mathematics A (ESE 318) 3
- Introduction to Computer Science (CSE 131) 3
- Probability and Statistics for Engineering (ESE 326) 3
- Computational Modeling in Energy, Environmental and Chemical Engineering (EECE 202) 3

**Unit Subtotal** 21

**Environmental Engineering Core**
- Introduction to Energy, Environmental and Chemical Engineering (EECE 101) 3
- Process Analysis and Thermodynamics (EECE 205) 4
- Thermodynamics II in EECE (EECE 204) 3
- Introduction to Environmental Engineering (EECE 210) 3
- Environmental Engineering Fate and Transport (EECE 309) 3
- Transport Phenomena I: Basics and Fluid Mechanics (EECE 301) 3
- Green Engineering (EECE 311) 3
- Environmental Biotechnology (EECE 407) 3

**Air Quality Engineering with Lab (EECE 314) 4**
**Environmental Engineering Laboratory (EECE 425) 3**
**Environmental Chemistry Selection (EECE 505 or EECE 531) 3**
**Physical and Chemical Processes for Water Treatment (EECE 533) 3**
**Process Design, Economics and Simulation (EECE 409) 2**
**Environmental Engineering Capstone (EECE 404) 3**

**Unit Subtotal** 43

**Other**
- Environmental Engineering electives (some of these courses can be taken outside the EECE department) 12
- Natural science elective 3
- Engineering Ethics and Sustainability (Engr 4501) 1
- Engineering Leadership and Team Building (Engr 4502) 1
- Conflict Management and Negotiation (Engr 4503) 1
- Environmental humanities or social sciences elective 3
- Other humanities and social sciences electives 12
- Technical Writing (Engr 310) 3

**Unit Subtotal** 36

Total Units Required: 126