# Suggested Course Plan for a UC Riverside Major in Environmental Engineering

## FALL QUARTER
- **CEE 010**: Intro to Chem. & Envir. Engineering (1 unit)
- **CHEM 001A & CHEM 011A**: General Chemistry & Lab (5 units)
- **ENGL 001A**: Beginning Composition (4 units)
- **MATH 009A**: First Year Calculus (5 units)

## WINTER QUARTER
- **CHEM 001B & CHEM 011B**: General Chemistry & Lab (5 units)
- **ENGL 001B**: Intermediate Composition (4 units)
- **MATH 009B**: First Year Calculus (4 units)
- **PHYS 040A**: Physics Mechanics (5 units)

## SPRING QUARTER
- **CHEM 001C & CHEM 011C**: General Chemistry & Lab (5 units)
- **ENGL 001C or Alternate***: Applied Intermediate Composition (4 units)
- **MATH 009C**: First Year Calculus (4 units)
- **PHYS 040B**: Physics Heat/Waves/Sound (5 units)

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## SECOND YEAR
- **CHEM 008A & CHEM 08LA**: Organic Chemistry (4 units)
- **ENVE 171**: Fundamentals of Environmental Engr. (4 units)
- **MATH 046**: Differential Equations (4 units)
- **PHYS 040C**: Physics Electricity/Magnetism (5 units)

## THIRD YEAR
- **BIOL 005A & BIOL 051A**: Cell & Molecular Biology & Lab (5 units)
- **CHE 114**: Applied Fluid Mechanics (4 units)
- **ENGR 118**: Engineering Modeling & Analysis (5 units)
- **Breadth**: Humanities/Social Sciences (4 units)

## FOURTH YEAR
- **ENSC/SWSC 100**: Intro to Soil Science (4 units)
- **ENVE 120**: Unit Operations and Processes (4 units)
- **ENVE 160B**: Environmental Engineering Lab (3 units)
- **Technical Elective**: Humanities/Social Sciences (4 units)

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**BREADTH REQUIREMENTS**

- Humanities: (3 courses)
  - A. World History: 
  - B. Fine Arts, Lit., Phil., Rlst: 
  - C. Human Persp. on Science: 
- Social Sciences: (3 courses)
  - A. Econ. or Posc.: 
  - B. Anth., Psyc, or Soc.: 
  - C. General Social Science: 
- Ethnicity: (1 course)
  - 1. 
- Upper Division: (2 courses)
  - 1. 
  - 2. 

**TECHNICAL ELECTIVES**

- ENSC/SWSC 100: Intro to Soil Science (4 units)
- ENVE 120: Unit Operations and Processes (4 units)
- ENVE 160B: Environmental Engineering Lab (3 units)
- Technical Elective: Humanities/Social Sciences (4 units)

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*Course Plan is subject to change.*

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To earn a B.S., you must complete all College and University requirements. For a full list of requirements, go to www.catalog.ucr.edu.

**ENGLISH COMPOSITION***

A C or better is required in all English Composition courses to satisfy the graduation requirement. Please consult with your Academic Advisor for ENGL 1C alternatives.

**BREADTH REQUIREMENTS**

For an approved list of Breadth courses, go to http://student.engr.ucr.edu/policies/requirements/breadth.html.

**TECHNICAL ELECTIVES**

Please note that Technical Electives may be offered throughout the Academic Year. Consult with your Faculty Mentor about potential offerings. See approved technical electives on back.

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Total Units: 193
Maximum units: 232
Environmental Engineering-Technical Electives

You must select one option below and complete 3 courses (at least 12 units) from that option. Units are listed in (). Select from the list below:

**Air Pollution Control Technology Option:**
- *CHE 116* Heat Transfer (4)
- *ENVE 134* Technology of Air Pollution Control (4)
- *Choose one from:*  
  - CEE 125 Analytical Methods for Chemical and Environmental Engineers (4)  
  - CEE 132 Green Engineering (4)  
  - CHE 102** Catalytic Reaction Engineering (4)  
  - ENSC/ENTX/CHEM 135 Chemistry of the Clean and Polluted Atmosphere (4)  
  - ENVE 138 Combustion Engineering (4)  
  - ENVE/ENSC 144 Solid Waste Management (4)  
  - ENVE 145 Hazardous Waste Management (4)

**Water Pollution Control Technology Option:**
- *Choose one from:*  
  - CHE 124** Biochemical Engineering Principles (4)  
  - ENVE 121 Biological Unit Processes (4)
- *Choose one from:*  
  - CEE 125 Analytical Methods for Chemical and Environmental Engineers (4)  
  - CHE 116 Heat Transfer (4)  
  - ENSC 136 Chemistry of Natural Waters (4)  
  - ENSC 163 Hydrology (4)
- *Choose one from:*  
  - CEE 132 Green Engineering (4)  
  - ENVE/ENSC 144 Solid Waste Management (4)  
  - ENVE 145 Hazardous Waste Management (4)

*Required for the option selected

**Course requires prerequisites not accounted for in curriculum. Please check with the undergraduate faculty advisor about the ability to take this course.