

ENVIRONMENTAL ENGINEERING

Fall Quarter	Units	Winter Quarter	Units	Spring Quarter	Units
FIRST YEAR					
CEE 010 <i>Intro to Chem. & Envir. Engineering</i>	1	CHEM 001B & CHEM 01LB <i>General Chemistry & Lab</i>	5	CHEM 001C & CHEM 01LC <i>General Chemistry & Lab</i>	5
CHEM 001A & CHEM 01LA <i>General Chemistry & Lab</i>	5	ENGL 001B <i>Intermediate Composition</i>	4	ENGL 001C or Alternate* <i>Applied Intermediate Composition</i>	4
ENGL 001A <i>Beginning Composition</i>	4	MATH 009B <i>First Year Calculus</i>	4	MATH 009C <i>First Year Calculus</i>	4
MATH 009A <i>First Year Calculus</i>	4	PHYS 040A <i>Physics (Mechanics)</i>	5	PHYS 040B <i>Physics (Heat/Waves/Sound)</i>	5
SECOND YEAR					
CHEM 008A & CHEM 08LA <i>Organic Chemistry</i>	4	CHE 100 <i>Engineering Thermodynamics</i>	4	CS 010A <i>C++ Programming</i>	4
ENVE 171 <i>Fundamentals of Environmental Engr.</i>	4	CHEM 008B & CHEM 08LB <i>Organic Chemistry</i>	4	ENVE/CHE 130 <i>Advanced Engr. Thermodynamics</i>	4
MATH 046 <i>Differential Equations</i>	4	MATH 010A <i>Multivariable Calculus</i>	4	MATH 010B <i>Multivariable Calculus</i>	4
PHYS 040C <i>Physics (Electricity/Magnetism)</i>	5	Breadth _____ <i>Humanities/Social Sciences</i>	4	ME 010 <i>Statics</i>	4
THIRD YEAR					
BIOL 005A & BIOL 05LA <i>Cell & Molecular Biology & Lab</i>	5	CHE 120 <i>Mass Transfer</i>	4	ENVE 146 <i>Water Quality Systems Design</i>	4
CHE 114 <i>Applied Fluid Mechanics</i>	4	ENVE 133 <i>Fund. of Air Pollution Engineering</i>	4	ENVE/CHE 160A <i>Chem. & Envir. Engineering Lab</i>	3
ENGR 118 <i>Engineering Modeling & Analysis</i>	5	ENVE 142 <i>Water Quality Engineering</i>	4	Technical Elective** _____	4
Breadth _____ <i>Humanities/Social Sciences</i>	4	Breadth _____ <i>Humanities/Social Sciences</i>	4	Breadth _____ <i>Humanities/Social Sciences</i>	4
FOURTH YEAR					
ENSC/SWSC 100 <i>Intro to Soil Science</i>	4	ENVE 135 <i>Fate & Trans. of Envir. Contaminants</i>	4	ENVE 175B <i>Senior Design Project</i>	4
ENVE 120 <i>Unit Operations and Processes</i>	4	ENVE 160C <i>Environmental Engineering Lab</i>	3	Technical Elective** _____	4
ENVE 160B <i>Environmental Engineering Lab</i>	3	ENVE 175A <i>Senior Design Project</i>	4	Technical Elective** _____	4
CEE 158 <i>Professional Development for Engr</i>	3	Breadth _____ <i>Humanities/Social Sciences</i>	4	Breadth _____ <i>Humanities/Social Sciences</i>	4

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

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 **

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.

Course Plan is subject to change.

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.