Marlan and Rosemary Bourns College of Engineering

Suggested Course Plan for a UC Riverside Major in

ENVIRONMENTAL ENGINEERING

Catalog Year: 2024

Fall Quarter	*Units*	*Winter Quarter*	*Units*	*Spring Quarter*	*Units*
FIRST YEAR					
CEE 010 *Intro to Chem. & Envir. Engineering*	1	CHEM 001B & CHEM 01LB *General Chemistry & Lab*	5	CHEM 001C & CHEM 01LC *General Chemistry & Lab*	5
CHEM 001A & CHEM 01LA *General Chemistry & Lab*	5	ENGL 001B *Intermediate Composition*	4	ENGL 001C or Alternate* *Applied Intermediate Composition*	4
ENGL 001A *Beginning Composition*	4	MATH 009B *First Year Calculus*	4	MATH 009C *First Year Calculus*	4
MATH 009A *First Year Calculus*	4	PHYS 040A *Physics (Mechanics)*	5	PHYS 040B *Physics (Heat/Waves/Sound)*	5
SECOND YEAR					
CHEM 008A & CHEM 08LA *Organic Chemistry*	4	CHE 100 *Engineering Thermodynamics*	4	CS 009A *Intro to Programming*	4
ENVE 171 *Fundamentals of Environmental Engr.*	4	CHEM 008B & CHEM 08LB *Organic Chemistry*	4	ENVE/CHE 130 *Advanced Engr. Thermodynamics*	4
MATH 046 *Differential Equations*	4	MATH 010A *Multivariable Calculus*	4	MATH 010B *Multivariable Calculus*	4
PHYS 040C *Physics (Electricity/Magnetism)*	5	Breadth _____ *Humanities/Social Sciences*	4	ME 010 *Statics*	4
THIRD YEAR					
BIOL 005A & BIOL 05LA *Cell & Molecular Biology & Lab*	5	CHE 120 *Mass Transfer*	4	ENVE 146 *Water Quality Systems Design*	4
CHE 114 *Applied Fluid Mechanics*	4	ENVE 133 *Fund. of Air Pollution Engineering*	4	ENVE/CHE 160A *Chem. & Envir. Engineering Lab*	3
ENGR 118 *Engineering Modeling & Analysis*	4	ENVE 142 *Water Quality Engineering*	4	ENVE 134 *Technology of Air Pollution Control*	4
Breadth _____ *Humanities/Social Sciences*	4	Breadth _____ *Humanities/Social Sciences*	4	ENVE 140 *Aquatic Chemistry*	4
FOURTH YEAR					
ENSC/SWSC 100 *Intro to Soil Science*	4	ENVE 135 *Fate & Trans. of Envir. Contaminants*	4	ENVE 175B *Senior Design Project*	4
ENVE 120 *Unit Operations and Processes*	4	ENVE 160C *Environmental Engineering Lab*	3	ENVE 121 *Biological Unit Processes*	4
ENVE 160B *Environmental Engineering Lab*	3	ENVE 175A *Senior Design Project*	4	Technical Elective** _____	4
CEE 158 *Professional Development for Engr*	3	Breadth _____ *Humanities/Social Sciences*	4	Breadth _____ *Humanities/Social Sciences*	4
Breadth _____ *Humanities/Social Sciences*	4				

Total Units: 196

Maximum units: 235

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.

Environmental Engineering-Technical Electives

You must complete 4 units of Technical Elective coursework. Select from the list below:

Course	Course Title (Units)
CEE 125	Analytical Methods for Chemical and Environmental Engineers (4)
CEE 132	Green Engineering (4)
CEE 136	Aerosol Technology (4)
CHE 102*	Catalytic Reaction Engineering (4)
CHE 116	Heat Transfer (4)
CHE 124*	Biochemical Engineering Principles
ENVE 138	Combustion Engineering (4)
ENVE/ENSC 144	Solid Waste Management (4)
ENVE 145	Hazardous Waste Management (4)
ENSC/ENTX/CHEM 135	Chemistry of the Clean and Polluted Atmosphere (4)
ENSC 136*	Chemistry of Natural Waters (4)
ENSC 163*	Hydrology (4)
HNPG 199H*	Senior Honors Research (4)

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