Marlan and Rosemary Bourns College of Engineering

Suggested Course Plan for a UC Riverside Major in

ENVIRONMENTAL ENGINEERING

Catalog Year: 2022

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

Total Units: 197

Maximum units: 236

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)
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.