

Environmental Engineering

Upper Division Engineering and Science Electives

Automatically counted toward Upper-Division Engineering and Science Electives will be: All 400-level CEE courses, CEE 300-level courses not already counted toward the BSEnvE degree, ME 230, and all 300- and 400- level courses from AA, CHEM E*, CSE, IND E*, ME, MSE, BSE, EES. (*See exceptions below.)

The following courses will not count toward Upper-Division Engineering and Science Electives: CHEM E 309; HCDE 231 (formerly TC 231); ENGR 301, 310, 321, 322, 468; IND E 315; and any math or statistics courses.

Course approval by petition: Outside department courses (that is not on the pre-approved list) may be petitioned for use as an Upper-Division Science and Engineering Elective by completing a Graduation Petition (downloadable from the CEE Student Resources Webpage)

Course	Title	Credit
ARCH 331	Energy and Environmental Systems	3
ARCH 431	Environmental Control Principles	3
ATM S 301	Intro Atmospheric Sciences	5
ATM S 321	The Science of Climate	3
ATM S 340	Intro Thermodynamics and Cloud Processes	3
ATM S 358	Fund Atmos Chemistry (I&S)	3
ATM S 370	Atmospheric Structure & Analysis	5
BIO 340	Genetics and Molecular Ecology	5
BIO 356	Foundations in Ecology	3
BIO 471	Plant Ecology	3
BIO 476	Conservation Biology	5
BSE 420	Bioresource Engineering I	4
CEP 470	Tools for Sustainable Cities	4
CHEM 223	Organic Chemistry, Short Program	4
CHEM 224	Organic Chemistry, Short Program	4
CHEM 237	Organic Chemistry	4
CHEM 238	Organic Chemistry	4
CHEM 239	Organic Chemistry	4
CHEM 426	Instrumental Analysis	3
CHEM 428	Bioinstrumental Analysis	3
ENGL 365	Literature and Discourse on the Environment (VLPA)	5
ENV H 405	Toxic Chem and Human Health	0-3
ENV H 445	Solid Waste Management	3
ENV H 448	Community Air Pollution	3
ENV H 453	Industrial Health	3
ESRM 210	Introductory Soils	5
ESRM 300	Principles of Sustainability (I&S)	2
ESRM 311	Soils and Land Use	3

ESRM 315	Natural Resources Issues: Old-Growth and Forest	5
ESRM 325	Environmental Applications of Plants: Bioenergy and Bioremediation	3
ESRM 326	Introduction to Restoration Ecology	5
ESRM 371	Environmental Sociology (I&S)	5
ESRM 401	Spring Comes to the Cascades	3
ESRM 426	Wildland Hydrology	4
ESRM 430	Hyperspatial Remote Sensing in Natural Resources	5
ESRM 441	Landscape Ecology	5
ESS 210	Physical Geology	5
ESS 211	Physical Processes of the Earth	5
ESS 212	Earth Materials and Processes	5
ESS 213	Evolution of the Earth	5
FISH 330	Climate Change Impacts on Marine Ecosystems	5
FISH 323	CONSERVATION & MGMT OF AQUATIC RESOURCES	5
FISH 324	AQUATIC ANIMAL PHYSIOLOGY & REPRODUCTION	3/5
FISH 428	STREAM & WATERSHED RESTORATION	5
FISH 447	RIVER ECOLOGY & WATERSHED MANGEMENT	3
FISH 455	Fish and Wildlife Toxicology	3-5
FISH 490	Aquatic Microbiology	3-5
GEOG 230	GEOGRAPHIES OF GLOBAL INEQUALITY	5
GEOG 277	GEOGRAPHY OF CITIES (I&S, Div)	5
GEOG 301	Cultural Geography (I&S)	5
GEOG 360	PRINCIPLES OF GIS MAPPING (I&S)	5
GEOG 370	PROBLEMS IN RESOURCE MGMT	5
GEOG 435	INDUSTRIALIZATION & URBANIZATION IN CHINA	5
GEOG 461	URBAN GEOGRAPHIC INFO SYS	5
GEOG 471	METHODS OF RESOURCE ANALYSIS	5
HCDE 333	ADV TECHNICAL WRITING AND ORAL PRESENTATION	4
JSIS B 350	Environmental Norms in International Politics	5
JSIS B 433	Environmental Degradation in the Tropics	5
L ARCH 331	LANDSCAPE GRADING & DRAINAGE	4
L ARCH 341	SITE DESIGN & PLANNING	3
L ARCH 363	ECOLOGICAL DESIGN AND PLANNING	3
L ARCH 433	DESIGN IMPLEMENTATION	3
MICROM 301	GEN MICROBIOLOGY	3
MICROM 302	GEN MICROBIOLOGY, LAB	2
OCEAN 400	CHEMICAL OCEANOGRAPHY	4
OCEAN 409	Marine Pollution (I&S)	3
OCEAN 410	MARINE GEOLOGY & GEOPHYSICS	4
OCEAN 420	PHYSICAL PROCESSES IN THE OCEAN	4
OCEAN 421	SPECIAL TOPICS IN PHYSICAL OCEANOGRAPHY	3
OCEAN 450	CLIMATIC EXTREMES	4
PHYS 224	THERMAL PHYSICS	3
PHYS 225	INTRO QUANTUM MECHANICS	3
PHYS 227	ELEMENTARY MATHEMATICAL PHYSICS	4
PHYS 228	ELEMENTARY MATHEMATICAL PHYSICS	4
Q Sci 454	Ecological Modeling	5
URBDP 457	HOUSING IN DEVELOPING COUNTRIES	3
URBDP 466	INFRASTRUCTURE & COMMUNITY FACILITIES	4
URBDP 479	THE URBAN FORM	3