Degree: Environmental Science, B.S. 22-23				
Requirement Area	**Course**	**Course Title**	**Prerequisites**	**Units**
First Semester (FALL)				
E	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B1/LD Major	CHEM 111	General Chemistry I		3
B3/LD Major	CHEM 111L	General Chemistry Lab I		2
LD Major	ENSC 280	General Environmental Science		3
B4	MATH 130	Calculus I	One from the following: Satisfactory score of 78 or higher on Mathematics Placement Exam, MATH 120 or MATH 125 (either course with grade C- or better).	4
			Total:	16
Second Semester (SPRING)				
E	GS 101B	Foundations of Success II		1
A2	ENGL 102	English Composition		3
Add'l C1 or C2	open			3
D1	open	Social Science GE elective		3
LD Major	CHEM 112	General Chemistry II	CHEM 111 with grade C- or better.	5
			Total:	15
Third Semester (FALL)				
A3	PHIL 100	Workshop in Critical Thinking		3
B2/LD Major	ENSC 240	Environmental Biology		3
C1	open	Fine Arts Elective		3
LD Major	PHYS 125	Principles of Physics I	Satisfactory score of 78 or higher on Math Proficiency Assessment or MATH 120.	4
LD Major	ENSC 241	Environmental Biology laboratory		1
			Total:	14
Fourth Semester (SPRING)				
Second Composition	ENGL 200 or PHYS 230			3
E				1
C2	open	Humanities Elective		3
Code 1/D2	open	American History elective		3
LD Major	PHYS 126	Principles of Physics II	PHYS 125.	4
LD Major	ENSC 297	Disciplinary Field course		1
			Total:	15
Fifth Semester (FALL)				
F		Ethnic Studies		3
UD-B	open	UD Science GE elective		3
LD Elective	ENSC 260	Introduction to GIS		3
LD Major	GEOL 210	Physical and Environmental Geology		4
UD Major	ENSC	Disciplinary breadth/depth elective		3
			Total:	16
Sixth Semester (SPRING)				
Code 2	open	California History elective		3
UD Major	ENSC 350/GEOL 432	Env Hydrology or Hydrogeology	Either CHEM 100 or CHEM 111, and either MATH 120 or MATH 130, and either PHYS 115 or PHYS 125.	4
UD Major	STAT 303	UD Statistics	Completion of GE area B4.	3
UD Major	BIOL 350	Ecology	MATH 115, STAT 303, and either BIOL 140B or ENSC 280.	4
			Total:	14
Seventh Semester (FALL)				
UD-C/Overlay	open	UD Arts/Humanities GE elective		3
UD-D/Overlay	open	UD Social Science GE elective		3
UD Major	ENSC 420/ENSC 414/ENSC 497	Global Change (or other UD Systems course)		3
UD Major	open, e.g. ENVT 330	UD Environmental Policy or Ethics elective		3
UD Major	ENSC	Disciplinary breadth/depth elective		3
			Total:	15
Eighth Semester (SPRING)				
UD Major	GEOL	Disciplinary breadth/depth elective		4
UD Major	ENVT 410	Environmental Impact Analysis	ENVT 310	3
UD Major	ENVT	Disciplinary breadth/depth elective		3
UD Major	ENSC 397	Advanced Field Experience	GEOL/ENSC 297 and junior or senior standing.	2
UD Major	ENSC 499	Capstone Seminar	Junior or senior standing.	3
			Total:	15
Total Units:				120

Note: No changes to, or from, the credit/no credit pattern are permitted after the Grade Type Change period. There are no exceptions to this rule. Courses in a student's major department, regardless of course prefix, may not be taken "CR/NC," unless that is the only grading pattern in the course.

***Students are required to take a minimum of 40 semester units as upper division (includes 9 units upper division GE)**

CSUEB General Breadth and Graduation Requirement Checklist
Area A (9 units): Communication in the English Language & Critical Thinking (Must earn passing grade of C-/CR or better)
☐ A1. COMM 100 or 104, MLL 111
☐ A2. ENGL 101, 102, or 104
☐ A3. PHIL 100
Area B (9 units) : Scientific Inquiry & Quantitative Reasoning
☐ B1. Physical Science
☐ B2. Life Science
☐ B3. Laboratory Activity
☐ B4. Quantitative Reasoning (Must earn passing grade of C-/CR or better.)
Area C (9 units): Arts & Humanities - Minimum of three different disciplines as designated by course prefix (e.g., ART, THEA, MUS)
☐ C1. Arts
☐ C2. Humanities
☐ *Additional Lower-division Area C Course in Arts (C1) or Humanities (C2)
Area D (6 units) : Social Sciences - Minimum of three different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)
☐ D1.
☐ D2.
Area E (3 units) : Lifelong Learning and Self-Development
☐ E.
Area F (3 units): Ethnic Studies
☐ F.
Second Composition : Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.
☐ Second Composition
U.S. Code (American Institutions Requirement) - Two courses (6 units) covering three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. Constitution), and US-3 (California State & Local Government).
☐ Code 1.
☐ Code 2.
Upper Division GE Requirements (9 units): Should be taken after
☐ UD-B. Upper-division Science Inquiry and Quantitative Reasoning
☐ UD-C.Upper-division Arts OR Humanities
☐ UD-D. Upper-division Social Sciences
Overlay Requirements (9 units): Courses may be upper or lower
☐ Diversity (Div)
☐ Social Justice (SJ)
☐ Sustainability (S)
Elective Coursework
Only students NOT choosing the Environmental Health concentration
Choose one (1) course for 3 units:
GEOG 225 - Fundamentals of GIS Units: 3
ENSC 260 - Introduction to GIS in Earth and Environmental
Plus choose one (1) course for 3 units from the following:
ENSC 414 - Hazardous Waste Management Units: 3 ; G.E./G.R. Area:
ENSC 420 - Global Change Units: 3 ; G.E./G.R. Area: Sustainability
ENSC 497 - Special Topics and Issues in Environmental Sciences Units: 3
And, choose one (1) course for 3-4 units from the following:
ECON 360 - Environmental Economics Units: 3
ENGL 342 - Environmental Literature Units: 4 ; G.E./G.R. Area: UD-C; Sustainability
ENVT 330 - Environment, Sustainability, and Social Justice Units: 3 ; G. E./G.R. Area: UD-D; Sustainability
HSC 340 - Climate Change, Health, and Equity Units: 3 ; G.E./ G.R. Area: UD-D; Social Justice
POSC 344 - Environmental Law Units: 3
POSC 411 - Public Policy and the Environment Units: 3 ; G.E./G.R. Area: Sustainability
SOC 330 - Environmental Sociology Units: 4 ; G.E./G.R. Area: UD-D
Depth Electives
Choose a minimum of 9-11 units from the following depth-electives:
BIOL 433 - Microbial Ecology Units: 3
BIOL 454 - Biology of Fungi Units: 4
BIOL 469 - Conservation Biology Units: 4
CHEM 220 - Quantitative Analysis Units: 4
CHEM 331 - Organic Chemistry I Units: 5
CHEM 425 - Environmental Chemistry Units: 4
ENSC 410 - Geohealth Units: 3
GEOG 425 - Advanced GIS Units: 3
GEOL 311 - Geomorphology Units: 3
GEOL 360 - Mineralogy and Optical Crystallography Units: 4
GEOL 371 - Sedimentary Geology and Stratigraphy Units: 4
GEOL 460 - Geographic Information Systems for Earth and
HSC 300 - Environmental Health Units: 3 ; G.E./G.R. Area: UD-B;
HSC 460 - Emergency Preparedness and Response Units: 3
Other upper-division major-related courses may be used with prior
One ENSC graduate-level course may be used to satisfy one elective