Requirement Area	Course	B.A.: Geoscience Education Concentration 25  Course Title	Prerequisites	Units
		First Semester (FALL)		
Recommended	EESC 133	Introduction to the Earth, Environmental and		
		Sustainability Sciences for Majors		
Major	EESC 297	Introductory Field Experience		:
1C	COMM 100	Communication	Catiafastas	3
			Satisfactory score of 78 or higher on Math	
			Proficiency Assessment or	
5A/5C	PHYS 125	General Physics I  Physical and Environmental Geology and	MATH 120.	4
LD Major	EESC 210	Geography		4
Area 2	MATH 120	Precalculus		3
			Total:	10
		Second Semester (SPRING)		
1A	ENGL 102	Second Semester (SFRING)		
3B	1.102.102			
LD Major	EESC 211	Historical Geology and Geography		-
LD Major	PHYS 126	General Physics II	PHYS 125	
- 3 - 1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Total:	1
		Third Semester (FALL)		
1B/Second Comp		<u> </u>		
5B		-		
3A				3
LD Major	CHEM 111	General Chemistry I		3
	CHEM 111L	General Chemistry I		
LD Major		Fourth Semester (SPRING)	Total:	14
Area 6 Area 4/Code 1		Fourth Semester (SPRING)	Total:	14
Area 6 Area 4/Code 1	CHEM 112	Fourth Semester (SPRING)  General Chemistry II	Total:	:
Area 6 Area 4/Code 1 LD Major	CHEM 112 GEOL 297		Total:	:
Area 6	+	General Chemistry II	Total:	:
Area 6 Area 4/Code 1 LD Major LD Major	+	General Chemistry II		3
Area 6 Area 4/Code 1 LD Major LD Major	+	General Chemistry II Introductory Field Course	Total:	
Area 6 Area 4/Code 1 LD Major LD Major Free Elective	+	General Chemistry II Introductory Field Course  Fifth Semester (FALL)		10
Area 6 Area 4/Code 1 LD Major LD Major Free Elective	+	General Chemistry II Introductory Field Course		10
Area 6 Area 4/Code 1 LD Major LD Major Free Elective	GEOL 297	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies		10
Area 6 Area 4/Code 1 LD Major LD Major Free Elective	+	General Chemistry II Introductory Field Course  Fifth Semester (FALL)	Total:  CHEM 112 and EESC 210.	10
Area 6 Area 4/Code 1  LD Major  LD Major  Free Elective  UWR  Area 4/Code 2  UD Major	GEOL 297	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography	Total:  CHEM 112 and EESC 210. Department	10
Area 6 Area 4/Code 1  LD Major  LD Major  Free Elective  UWR  Area 4/Code 2  UD Major	GEOL 297	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab	Total:  CHEM 112 and EESC 210.	10
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major  UD Major	GEOL 297	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography	Total:  CHEM 112 and EESC 210. Department	10
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major  UD Major	GEOL 297  GEOL 360  SCI 308	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography  HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences	Total:  CHEM 112 and EESC 210. Department	1
Area 6 Area 4/Code 1  LD Major  LD Major Free Elective  UWR Area 4/Code 2  UD Major  UD Major  UD Major	GEOL 297  GEOL 360  SCI 308	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental	Total:  CHEM 112 and EESC 210. Department consent.	1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major UD Major UD Major UD Major UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)	Total:  CHEM 112 and EESC 210. Department consent.  Total:	10
Area 6 Area 4/Code 1  LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major  UD Major  UD Major  UD-Area 3/Overlay UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)	Total:  CHEM 112 and EESC 210. Department consent.  Total:	1
Area 6 Area 4/Code 1  LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)	Total:  CHEM 112 and EESC 210. Department consent.  Total:	1.
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)	Total:  CHEM 112 and EESC 210. Department consent.  Total:	1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major Free Elective	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361.	
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361.  Total:	
Area 6 Area 4/Code 1  LD Major  LD Major  Free Elective  UWR  Area 4/Code 2  UD Major  How Major  UD Major  How Major  UD Major  How Major  UD Major  How Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361.	1-
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361.  Total:	1-
Area 6 Area 4/Code 1  LD Major  LD Major  Free Elective  UWR  Area 4/Code 2  UD Major  How Major  UD Major  How Major  UD Major  How Major  UD Major  How Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)	Total:  CHEM 112 and EESC 210.  Department consent.  Total:  GEOL 360.  GEOL 360.  GEOL 360.	1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361.  Total:	1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major Free Elective  UD-Area 4/Overlay UD Major UD-Area 5/Overlay UD Major UD-Area 5/Overlay UD Major	GEOL 360 SCI 308 EESC 360 GEOL 361 GEOL 371 GEOL 381 GEOL 342	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology Eighth Semester (SPRING)	Total:  CHEM 112 and EESC 210.  Department consent.  Total:  GEOL 360.  GEOL 360.  GEOL 360.	1 1 1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology	Total:  CHEM 112 and EESC 210.  Department consent.  Total:  GEOL 360.  GEOL 360.  GEOL 360.	1 1 1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2  UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371  GEOL 381  GEOL 342	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology Eighth Semester (SPRING)  Atmospheric Science General Oceanography Capstone Seminar in Earth, Environmental	Total:  CHEM 112 and EESC 210.  Department consent.  Total:  GEOL 360.  GEOL 361.  Total:  GEOL 360.  GEOL 360.	1-
Area 6 Area 4/Code 1  LD Major  LD Major  Free Elective  UWR  Area 4/Code 2  UD Major  UD Major	GEOL 360 SCI 308 EESC 360  GEOL 361 GEOL 371  GEOL 371  GEOL 342  GEOL 343 GEOL 341	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology Eighth Semester (SPRING)  Atmospheric Science General Oceanography	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361. Total:  GEOL 360.  GEOL 360.  GEOL 360.  GEOL 360.  GEOL 360.	1.
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major	GEOL 297  GEOL 360  SCI 308  EESC 360  GEOL 361  GEOL 371  GEOL 381  GEOL 342	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology Eighth Semester (SPRING)  Atmospheric Science General Oceanography Capstone Seminar in Earth, Environmental	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361.  Total:  GEOL 360.  EESC 210. Total:  GEOL 360.  Junior or	1 1 1 1 1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major	GEOL 360 SCI 308 EESC 360  GEOL 361 GEOL 371  GEOL 371  GEOL 342  GEOL 343 GEOL 341	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology Eighth Semester (SPRING)  Atmospheric Science General Oceanography Capstone Seminar in Earth, Environmental	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361. Total:  GEOL 360.  GEOL 360.  GEOL 360.  GEOL 360.  GEOL 360.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Area 6 Area 4/Code 1 LD Major LD Major Free Elective  UWR Area 4/Code 2 UD Major	GEOL 360 SCI 308 EESC 360  GEOL 361 GEOL 371  GEOL 371  GEOL 342  GEOL 343 GEOL 341	General Chemistry II Introductory Field Course  Fifth Semester (FALL) Ethnic Studies  Mineralogy and Optical Crystallography HOST Lab Introduction to GIS in Earth, Environmental and Sustainability Sciences  Sixth Semester (SPRING)  Ig Met Petrology Sedimentary Geology and Stratigraphy  Seventh Semester (FALL)  Structural Geology Planetary Geology Eighth Semester (SPRING)  Atmospheric Science General Oceanography Capstone Seminar in Earth, Environmental	Total:  CHEM 112 and EESC 210. Department consent.  Total:  GEOL 360. GEOL 361. Total:  GEOL 360.  GEOL 360.  GEOL 360.  GEOL 360.  GEOL 360.	1 1 1 1 1

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.

CSUEB General Breadth and Graduation Requirement Checklist	_
Area 1 (9 units): English Communication	
☐ 1A - Lower Division English Composition	
☐ 1B - Lower Division Critical Thinking and Composition	
□ 1C - Lower Division Oral Communication	_
Area 2 (3 units): Mathematical Concepts and Quantitative	
Reasoning	
☐ Area 2 - Mathematical Concepts and Quantitative Reasoning  Area 3 (6 units): Arts & Humanities - Minimum of two different	
disciplines as designated by course prefix (e.g., ART, THEA, MUS)	
☐ 3A - Arts and Humanities (Arts)	
☐ 3B - Arts and Humanities (Humanities)	
Area 4 (6 units): Social and Behavioral Sciences - Minimum of two different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)	)
Area 4 - Lower Division Social and Behavioral Sciences	
☐ Area 4 - Lower Division Social and Behavioral Sciences	_
Area 5 (7 units): Physical and Biological Sciences	
☐ 5A - Lower Division Physical and Biological Sciences (Physical)	
5B - Lower Division Physical and Biological Sciences (Biological)	
☐ 5C - Lower Division Physical and Biological Sciences (Laboratory)	-
May be embedded in 5A or 5B course, as long as 7 units met for lower-division Subject Area 5.	
Area 6 (3 units): Ethnic Studies	_
☐ Area 6 - Ethnic Studies	_
Second Composition : Second Composition (Required as part of 1B for 2025-26 or later catalog)	
☐ Second Composition	_
University Writing Requirement (3-4 units)	
□ UWR	
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 completion of 1A, 1B, 1C, and Area 2 with a C- (CR)	
UD- Area 3 - Upper Division Arts or Humanities	Ī
☐ UD- Area 4 - Upper Division Social and Behavioral Sciences	_
☐ UD- Area 5 - Upper Division Science or Mathematical	_
Concepts/Quantitative Reasoning	
Overlay Requirements (9 units): Courses may be upper or lower division, and GE or major	
☐ Diversity (Div)	Ī
☐ Social Justice (SJ)	
= 30ciai fustice (31)	_

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