

# BACHELOR OF SCIENCE IN GEOLOGY (IMPACTED)

## Major Requirements Worksheet

### 2017-2018 Catalog

Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

**NOTE:** This checklist is not intended to replace advising from the major department. Students should consult with the major advisor to determine the appropriate sequence of courses. This checklist is to inform students of major requirements and course prerequisites only. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification. **Pre-Earth Science majors must complete their GE Foundation courses, and the highlighted† areas below all with a “C” or better and a cumulative GPA of 2.5, by 60 units to be considered for the major.**

The bachelor of science degree program provides training in the geological sciences for those planning to pursue professional careers in industry or enter a graduate degree program. Students explore fundamental geological processes, cultivate skills in integrative three-dimensional geological thinking, and engage in laboratory and field experience, and pursue interests in the many subdisciplines of the geological sciences.

Must complete three of the four courses to declare: MATH 112, MATH 123, CHEM 111A, and CHEM 112B.

Semester	Grade	Course #	Course Title	Prerequisites
		MATH 122†	Calculus I (4)	Appropriate MDPT placement; or MATH 111 and 113
		MATH 123†	Calculus II (4)	MATH 122
		CHEM 111A†	General Chemistry (5)	A passing score on the CPT. <i>Corequisite:</i> MATH 109 or higher
		CHEM 111B†	General Chemistry (5)	CHEM 111A and MATH 113 or 115 or 119A or 122
		PHYS 151	Mechanics and Heat (4)	<i>Pre/corequisite:</i> MATH 122
		PHYS 152	Electricity and Magnetism (4)	PHYS 151; <i>Pre/corequisite:</i> MATH 123
		GEOL 102	General Geology (3)	<i>Pre/Corequisite:</i> course that fulfills the A1 GE and High School Math*
		GEOL 104	Geology Laboratory (1)	<i>Pre/Corequisite:</i> course that fulfills the A1 GE, HS math*, concurrent or prior enrollment in GEOL 102
Fall		GEOL 240	Historical Geology (4)	GEOL 106 or <i>both</i> GEOL 102, 104
Spring		GEOL 250	Introduction to Field Petrology and Geological Field Techniques (3)	GEOL 102 with 104 or 105; or GEOL 106; <i>Corequisite:</i> GEOL 240

\*See catalog for more detail

## UPPER DIVISION COURSES (See major faculty advisor)

### Take ALL of the following courses:

*GEOL 322 and GEOL 326 must be taken concurrently unless the undergraduate advisor approves otherwise. GEOL 426 and GEOL 428 must be taken concurrently unless the undergraduate advisor approves otherwise.*

Semester	Grade	Course #	Course Title	Prerequisites
Fall		GEOL 322	Crystallography and Mineralogy (3)	GEOL 250; CHEM 101 or 111A.
Fall		GEOL 326	Optical Mineralogy (2)	GEOL 250; passing score on the CPT or CHEM 111A; <i>Pre/Corequisite</i> : GEOL 322.
Fall		GEOL 341	Paleontology and Biostratigraphy (4)	GEOL 240 and GE Life Science B1a.
Spring		GEOL 350	Spring Field Geology (2)	GEOL 250 and 443. <i>Pre/Corequisite</i> : GEOL 433
Spring		GEOL 420	Geological Writing (3)	GE Foundation completed, upper division standing, GEOL 102, 104, 240, 250; and at least 6 units of Geology courses at 300-level or above. Additional GEAR requirements
Spring		GEOL 426	Igneous Metamorphic Petrography Laboratory (1)	GEOL 322 and GEOL 326.
Spring		GEOL 428	Igneous and Metamorphic Petrology and Petrography (3)	GEOL 322; CHEM 111A, 111B. See also
Spring		GEOL 433	Structural Geology (4)	GEOL 250, 322; PHYS 151
Fall		GEOL 443	Stratigraphy/Sedimentology (4)	GEOL 240, 322
Summer		GEOL 450	Summer Field Geology (4)	GEOL 350, 428, 433, 443
Spring		GEOL 460	Introduction to Geophysics (3)	PHYS 151, 152; and MATH 123
Fall		GEOL 461	Introduction to Geochemistry (3)	CHEM 111A,B and MATH 123

### Choose 9 units of electives (normally at upper division):

Must be approved in advance by the undergraduate advisor.

Semester	Grade	Course #	Course Title	Prerequisites