BS Earth Science
Dept. of Earth Science

Major Requirements 58-63 units (no Minor requirement)

A. Lower Division Required Courses (23-26 units)

EAR 100. Physical Geology (3) or
GEO 200. Physical Geography (3)
EAR 101. Physical Geology Laboratory (1)
EAR 200. Earth History and Evolution (3)
EAR 201. Earth History and Evolution Lab (1)

MAT 131. Elementary Statistics and Probability (3) and
MAT 171. Survey of Calculus for Management & Life Sciences (4)
or
MAT 191. Calculus I (4) and
MAT 193. Calculus II (4)

CHE 110. General Chemistry I (5) and
CHE 112. General Chemistry II (5)
or
PHY 120. Elements of Physics I (4) and
PHY 122. Elements of Physics II (4)
or
BIO 120. Principles of Biology (4) and
BIO 122. Principles of Biology II (4)

B. Upper Division Required Courses (26 units)

EAR 370. The World Ocean (3)
EAR 376. Field Mapping (3)
EAR 410. Environmental Geology (3)
EAR 450. Plate Tectonics and the Rock Cycle (4)
EAR 460. Global Change (3)
GEO 370. Numerical Methods in Geography (3)
GEO 412. Rivers and Streams (3)
GEO 415. Geographic Information Systems (3)
EAR 490. Senior Seminar in Earth Sciences (1)

C. Upper Division Electives (9 units)

EAR 476. Groundwater (3)
GEO 310. Geomorphology (3)
GEO 315. The Weather (3)
GEO 357. Urban Environmental Geography (3)
GEO 433. Environmental Analysis and Planning (3)
GEO 380. Biogeography of Southern California (3)
GEO 408. Remote Sensing and Image Processing (3)
GEO 416. Earth’s Climates (3)
GEO 417. Applied GIS (3)
GEO 420. Natural Resources (3)
EAR 495. Advanced Topics in Earth Sciences (3)
EAR 496. Internship in Earth Sciences (3)