**INTRODUCTORY REQUIREMENTS**

**Calculus:**  
MATH 11A (FWS) ___ OR MATH 19A (FWS)___  
MATH 11B (FWS) ___ OR MATH 19B (FWS)___

**Advanced Mathematics:**  
EART 111 (F) ___ (recommended) OR MATH 22 (S) ___ OR MATH 23A (FWS) ___

**General Chemistry:**  
CHEM 1A (FWS) ___ + CHEM 1B/M (FWS) ___ + CHEM 1C/N (FWS) ___

**Geology:**  
ONE from the following...  
EART 5/L California Geology & Laboratory (F) ___  
EART 10/L Geological Principles & Laboratory (W) ___  
EART 20/L Environmental Geology & Laboratory (S) ___

**Physics:**  
PHYS 6A/L (FWS) ___ + PHYS 6B/M (WS) ___  
OR PHYS 5A/L (F) ___ + PHYS 5B/M (W) ___

**ADVANCED REQUIREMENTS**  
EART 110A/L Evolution of the Earth (F) ___  
EART 110B/M Earth as a Chemical System (W) ___  
EART 110C/N The Dynamic Earth (S) ___  
EART 190 Earth Science Mentorship (F) ___ (One Credit; Optional)

**Electives:** Complete six elective courses (5+ credits each) from upper-division Earth Sciences or Ocean Sciences offerings

**NOTE:** 5 credits of internship (EART 198) or Independent Study (EART 199) may be substituted for 1 upper division elective

**Lab/Field Intensive Requirement**  
TWO of the six required electives must be from analysis list  
EART 107 Remote Sensing of the Environment (W) ___  
EART 109/L Elements of Field Geology (FS) ___  
EART 116 Hydrology (S) ___  
EART 117/L Paleomagnetism Laboratory (*) ___  
EART 119 Introduction to Scientific Computing (W) ___  
EART 120/L Sedimentology and Stratigraphy Lab (S) ___  
EART 125 Statistics and Data Analysis in the Geosciences (W) ___  
EART 130/L Magmas and Volcanoes Laboratory (S) ___  
EART 140/L Geomorphology (W) ___  
EART 142 Engineering Geology for Scientists (*) ___  
EART 146 Ground Water (W) ___  
EART 148 Glaciology (S) ___  
EART 150/L Structural Geology (F) ___  
EART 188A Summer Field Internship (S) ___  
EART 188B Geographic Information Systems w/ Applications (S) ___

**DC Requirement:**  
TWO required courses must be from the following  
Earth Sciences Disciplinary Communication Curriculum...  
EART 100 Vertebrate Paleontology (W) ___  
EART 102 Marine Geology (*) ___  
EART 104 Geologic Hazards (F) ___  
EART 109 Elements of Field Geology (FS) ___  
EART 120 Sedimentology and Stratigraphy (S) ___  
EART 140 Geomorphology (W) ___  
EART 146 Ground Water (W) ___  
EART 148 Glaciology (S) ___  
EART 150 Structural Geology (F) ___  
EART 152 Tectonics (S) ___  
EART 160 Planetary Sciences (F) ___  
EART 188A Summer Field Internship (S) ___  
EART 191 Climate Change Science and Policy (W) ___  
EART 195 Senior Thesis (FWS) ___

**NOTE:** Courses may simultaneously satisfy both the laboratory or field data acquisition/analysis and DC requirements.

**COMPREHENSIVE REQUIREMENT OPTIONS**

ONE from the following list of Senior Capstone options:  
Summer Senior Field: EART 188A (S) ___ + 188B (S) ___ (EART 109/L is a prerequisite)  
Senior Thesis: enroll in EART 195 (FWS) ___ in the quarter that the thesis will be completed (required)  
Graduate course or seminar: Must achieve grade of B or better; course must be 5-units and include written report ___  
EART 191 Climate Change Science & Policy (S) ___  
Internship: Must complete written report, may enroll in EART 198 (FWS) ___ (Required)

**NOTE:** none of the above may count toward fulfilling an upper-division elective if used as a capstone.