



# GEOLOGY

## Transfer Requirements

The following requirements for the major are subject to change without notice. To assure accuracy of the information on this sheet, you should consult with a Geology Counselor or Articulation Officer, or review articulation agreements via the Internet at [WWW.ASSIST.ORG](http://WWW.ASSIST.ORG)

**CAREER OPPORTUNITIES:** Geological careers relate to the natural environment, earth resources, land use, pollution and other areas of critical importance to present and future world problems. About half of all geologists and geophysicists are employed by the petroleum industry. Their work usually involves exploration for new sources of oil and natural gas. In the mining industry, geologists have responsibilities for mining engineering and mineral economics. Government employs geologists for basic research, geological mapping, mineral resources studies, water supply investigation and highway studies. Geologists help develop adequate water supplies, waste disposal methods, and programs for land use and reclamation. Geologists evaluate environmental hazards in earthquake and landslide-prone states. A master's degree is generally required.

### CALIFORNIA STATE UNIVERSITY, CHICO (2007-2008)

Chemistry 1A, Geology 1 & 3, Geology 2 & 4; Math 190, Math 191 or 150; Physics 2A or 1A

Strongly recommended that students planning to attend graduate school should also consider completing Chemistry 1A; Math 191; Physics 2B or Physics 1A, 1C.

### CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS (2007-2008)

**Requirements:** Chemistry 1A-1B; Geology 1, 2, 3

**Options:** Earth Science: add Physics 2A-2B or Biology 1A-1B or 101-102

Geology: add Math 160 & 150 (or Math 190 & 191); Physics 2A-2B or Physics 1A-1B-1C-1D

Physical Science: add Math 190-191; Physics 1A-1B-1C-1D

### CALIFORNIA STATE UNIVERSITY, LONG BEACH (2007-2008)

**Required Core Course B.S. in Geology:** Biology 10; Chemistry 1A and 1B; Geology 1, 2, 3, 4; Math 190 and 191; Physics 1A-1B-1C.

**Additional courses required for options listed below:**

A. Geochemistry/Mineralogy/Petrology: add Math 220

B. Stratigraphy/Sedimentology (All Upper Division)

C. Petroleum Geology: add Math 220

D. Structural Geology/Tectonics: add Math 220

E. General Geology: (All Upper Division).

**Required Core Course B.S. in Earth Science:** Chemistry 1A; Geology 1, & 3, Geology 2 & 4; Math 190 & 191 & 220, Physics 1A-1B-1C.

**Options:** Engineering Geology: add Chemistry 1B; Biology 10; Engineering 9

Exploration Geophysics: add Biology 10

Marine Geology/Oceanography: add Chemistry 1B; Biology 10

Geohydrology/Environmental Geology: add Chemistry 1B; Microbiology 33; Engineering 9;

### CALIFORNIA STATE UNIVERSITY, LOS ANGELES (2007-2008)

**B.S. in Geology Requirements:** University requirement: English 1C; Chemistry 1A-1B; Geology 1, 2, 3, 4; Math 190-191; Physics 2A-2B.

### CALIFORNIA STATE UNIVERSITY, NORTHRIDGE (2007-2008)

**Requirements:** Chemistry 1A and 1B; Geology 1, 2, 3, 4; Math 190; Select one sequence from Physics 2A-2B or 1A-1B-1C-1D

**Options:** Geology: Choose eight elective units from: Chemistry 7A and 7B, CIS 16, CS 10, Math 150, 191, 220, 270, Physics 1B and 1D

Geophysics: add Physics 1A, 1B, 1C, 1D; Math 191, 220 and 270; Computer Science 10 or CIS 16 or 80.

Environmental Geology: add Chemistry 7A and 7B

### CAL POLY POMONA (2006-2007)

Chemistry 1A, 1B; Geology 1 & 3, Geology 2 & 4, Math 190 & 191; Physics 1A & 1B & 1C; Biology 10

**SAN DIEGO STATE UNIVERSITY (2007-2008)**

**Geological Science B.S., General.:** Geology 1 & 3 or Geology 3 & 6 or Oceanography 10; Biology 10; Chemistry 1A, 1B; Math 190, 191, Physics 1A, 1C;

**Emphases:**

Engineering Geology: add Geology 2 & 4; Physics 1B, 1D; Engineering 9; Math 220 and Math 150 or Psychology 9A or Sociology 109

Geochemistry: add Physics 1B & 1D; Biology 10 or 11; Chemistry 7A; Math 220, one course from Math 150 or Psychology 9A or Sociology 109

Geophysics: add Biology 10 or 11; Physics 1B, 1D; Math 220;

Marine Geology: add Biology 10 or 11; Geology 2 & 4; Physics 1B & 1D; Math 220 and Math 150 or Psychology 9A or Sociology 109

Hydrogeology: add Math 220 or Chemistry 7A; Physics 1B, 1D;

Paleontology Emphasis: add Geology 2 & 4; Biology 101 & 102; Math 160 & 161 or Math 190; Physics 2A & 2B (Physics 1A, 1C not required)

**SAN JOSE STATE UNIVERSITY (2007-2008)**

Chemistry 1A & 1B; Physics 2A & 2B; Mathematics 190 at ECC or Math 130 at SJSU; English 1B or 1C

**UNIVERSITY OF CALIFORNIA, DAVIS (2007-2008)**

**Geology A.B.:** Geology 1, 2, 3, 4; Math 190 and 191 or 160 & 161; Math 150; Chemistry 1A & 1B; Physics 2A & 2B or 3A & 3B

**Geology B.S.:** Geology 1, 2, 3, 4; Math 190, 191, 220, 270; Chemistry 1A & 1B; Physics 1A, 1B, 1C, 1D

**Options:** Geochemistry, Quantitative Geophysics

**UNIVERSITY OF CALIFORNIA, LOS ANGELES (2007-2008)** [www.ess.ucla.edu/academics/index.asp](http://www.ess.ucla.edu/academics/index.asp)

**Geology B.S.:** Geology 1 & 3; Chemistry 1A & 1B; Biology 101-102 or Life Science 1 at UCLA; Math 160 & 161 and Math 3C at UCLA or Math 190, 191, 220; Physics 3A & 3B or Physics 1A & 1C & 1D; Computer Science 1 or 10.

**Applied Geophysics B.S.:** Geology 1 & 3, Chemistry 1A; Math 190, 191, 220, 270; Physics 1A & 1C & 1D; Computer Science 1 or 10.

**Geology/Engineering Geology B.S., Geophysics and Space Physics B.S & Geophysics/Applied Geophysics B.S.:** Geology 1 & 3, Chemistry 1A & 1B; Math 190, 191, 220, 270; Physics 1A & 1C & 1D; Computer Science 1 or 10.

**Geology/Paleobiology B.S.:** Geology 1 & 3; Chemistry 1A & 1B, 7A; Math 160 & 161 and Math 3C at UCLA or Math 190 & 191 & 220; Physics 3A & 3B or Physics 1A & 1C; Life Science 2 at UCLA or Physiology 31 at ECC or Biology 101-102

**Earth and Environmental Science B.A.** Geology 1 & 3; Chemistry 1A & 1B; Biology 101-102 or Life Science 1 at UCLA; Math 160 & 161 & Math 3A at UCLA or Math 190 & 191; Physics 3A & 3B or Physics 1A & 1C  
Minors available in Geochemistry, Geology, Geophysics and Planetary Physics

**UNIVERSITY OF CALIFORNIA, RIVERSIDE (2007-2008)**

In addition to meeting published UC admission criteria for transfers, students admitted to this major will need to present an overall grade point average of at least 2.70 in UC transferable course work.

Requirements for all options: Biology 1A or 102; Chemistry 1A-1B; Geology 1, 2, 3, 4, 6; Math 190 and 191; Physics 1A-1B-1C

Geobiology option: add Biology 1B or 101 or Biology 8 and 11

Geophysics option: add Math 270; Physics 1D

Biogeography option: add Biology 1B or 101 or Biology 8 and 11

\*Note: IGETC is not accepted for majors in the College of Natural and Agricultural Sciences. Courses taken for IGETC will be applied to the College's Breadth pattern as appropriate. Transfer students who wish to supplement their math and science preparation with humanities or social science courses are encouraged to follow the College of Natural and Agricultural Sciences breadth pattern as outlined under ASSIST major titled "GE Breadth: College of Natural and Agricultural Sciences"

**UNIVERSITY OF CALIFORNIA, SANTA BARBARA (2007-2008)**

**B.A. and B.S. Geological Sciences: Requirements:** Math 190, 191, 270 (prerequisite of Math 220); Chemistry 1A and 1B; Geology 1, 2, 3; Physics 1A, 1B, 1C, 1D or Physics 3A and 3B; Recommended: Math 150