



# 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.

### **ASSOCIATE DEGREE FOR TRANSFER (AS-T)**

Students who have completed the AS-T in Geology will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. This coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. This degree is intended for students who majoring in Geology and may provide priority consideration for admission to a CSU.

**Students considering transferring to a UC, private, or out of state university: Please consult with a counselor before applying to transfer since transfer requirements may be slightly different than those required for the AS-T.**

**Required courses:** Geology 1, 2, 3, 4; Chemistry 1A, 1B; Math 190, 191

**Total Units 28**

### **CALIFORNIA STATE UNIVERSITY, FULLERTON**

**Geological Science:** Geology 1, 3; Geology 2, 4; Chemistry 1A, 1B; Biology 10; Math 190, 191; Physics 1A, 1B, 1C or Physics 3A, 3B or Physics 2A, 2B; one course from Anatomy 30 or Math 220 or 270 or Physics 1D

### **CALIFORNIA STATE UNIVERSITY, LONG BEACH**

**Required Core B.S. in Geology:** Chemistry 1A, 1B; Geology 1, 2, 3, 4; Math 190, 191; Physics 1A, 1B, 1C with C grades or better

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

### **CALIFORNIA STATE UNIVERSITY, LOS ANGELES**

**B.S. in Geology Requirements:** Chemistry 1A, 1B; Geography 2; Geology 1, 2, 3, 4; Math 190, 191; Physics 2A, 2B or 3A; Oceanography 10

**Option Environmental Geoscience:** Biology 101, 102 or Physics 2A+2B or 3A

### **CALIFORNIA STATE UNIVERSITY, NORTHRIDGE**

**Requirements:** Chemistry 1A; Geology 1+3 or 2+4 or Oceanography 10

**Options:** Geology: Math 190, 191 or 150; Physics 1A

Geophysics: add Physics 1A, 1C, 1D; Math 191, 220, 270; Computer Science 1

### **CAL POLY POMONA**

Chemistry 1A, 1B; Math 190, 191; Physics 1A, 1B, 1C or 2A, 2B or 3A, 3B; Biology 10 or 101

**Geology:** all upper division courses

**Geophysics/Earth Exploration:** add Astronomy 25 or Oceanography 10; CS 1 or 3

**Environmental Resources:** no additional courses

### **SAN DIEGO STATE UNIVERSITY**

**Geological Science B.A.** Geology 2, 4; Geology 1+3 or Oceanography 10; Math 150 or Psychology 9A or Sociology 109; Math 190+191 or select two from: (1.) Astronomy 20+25, (2.) Math 180 or Math 130+170, (3.) Math 190, (4.) Physics 2A or Physics 3A, (5.) Physics 1A, (6.) Physics 1C; Chemistry 1A, 1B or 4; Biology 10 or 11 or Chemistry 1A

**Emphases:** Engineering Geology: add Physics 1A, 1B, 1C, 1D; Engineering 9; Math 190, 191, 220; Chemistry 1A

Geophysics: add Physics 1A, 1B, 1C, 1D; Math 190, 191, 220; does not require Geology 2, 4

Hydrogeology: add Math 190, 191, 220; Physics 1A, 1B, 1C, 1D; Chemistry 1A, 1B; Biology 10

Paleontology Emphasis: add Biology 101 & 102; Math 190; Physics 2A or 3A; Chemistry 1A, 1B; Oceanography 10 or Geology 1+3 or Geology 3 + Biology 15

General: Chemistry 1A, 1B; Physics 1A, 1C; Math 190, 191; Biology 10

### **SAN JOSE STATE UNIVERSITY**

**Geology**: Geology 1, 3; Geology 2, 4; Geology 30 or 32 or 34 or 36; Chemistry 1A, 1B; Physics 2A, 2B or Physics 3A, 3B or Physics 1A, 1C; Mathematics 190, 191; English 1B or 1C or Philosophy 5 or Psychology 3

**Earth Science**: Geology 1, 3; Geology 2, 4; Geology 30 or 32 or 34 or 36; Chemistry 1A and 1B; Math 180, Physics 2A, 2B or Physics 3A, 3B or Physics 1A, 1C; English 1B or 1C or Philosophy 5 or Psychology 3

### **UNIVERSITY OF CALIFORNIA, DAVIS**

**Geology A.B.**: Geology 1, 2, 3, 4; Math 190, 191; Math 150 or Psychology 9A or Sociology 109; Chemistry 1A, 1B; Physics 2A, 2B or Physics 3A, 3B

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

**Options:** General Geology: required: Math 220, 270; recommended: Physics 1A, 1B, 1C, 1D

Geochemistry: Math 220; Physics 1A, 1B, 1D; recommended: Math 270, Physics 1C

Quantitative Geophysics: Math 220, 270; Physics 1A, 1B, 1C, 1D

### **UNIVERSITY OF CALIFORNIA, LOS ANGELES** ([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; Math 190, 191, 220; Physics 3A, 3B or Physics 1A, 1C; Computer Science 1

**Geophysics B.S.**: Chemistry 1A; Math 190, 191, 220, 270; Physics 1A, 1C, 1D

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

### **UNIVERSITY OF CALIFORNIA, RIVERSIDE**

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: Biology 102; Chemistry 1A, 1B; Geology 1, 2, 3, 4; Geography 1, 6; Math 190, 191; Physics 1A-1B-1C or 3A-3B

#### **Geology B.S. Options:**

General Geology: no additional requirements

Geobiology option: add Biology 101

Geophysics option: add Math 220, 270; Physics 1D

Global Climate Change: add Oceanography 10; Biology 101

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

\*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**

**B.S. Earth Science**: Math 190, 191, 220, 270; Chemistry 1A, 1B; Geology 1; Geology 2 and 3; Geology 30 or 32 or 34 or 36; Physics 2A, 2B or Physics 3A, 3B or Physics 1A, 1B, 1C, 1D; Recommended: Math 150 and a transferrable course in computer programming

**Emphasis:** Geology: no additional requirements

Geohydrology: Geology 2+4 or Oceanography 10

Geophysics: Geology 2+4 or Oceanography 10, Computer Science 1 or 14