

BACHELOR OF ARTS IN EARTH SCIENCES – GEOL ASSOCIATE DEGREE FOR TRANSFER (ADT) ROADMAP

This is a sample pathway for students who transfer to San Francisco State University in the current Bulletin year with an AS-T in Geology. Sixteen units in the major (CHEM 115, MATH 226, EARTH 210, and three additional lower-division units in chemistry or calculus) and all lower-division GE requirements have been satisfied. Check with a major advisor about the most appropriate course sequence. **Degree completion guaranteed in 60 units; see the Associate Degree for Transfer (ADT) section for more information (<http://bulletin.sfsu.edu/undergraduate-admissions/transfer-students/>).**

To Do at SF State:

Enough total units to reach 120 minimum for graduation; 30 units minimum at the upper-division level; to include the following:

University-Wide Requirements: 9–15 Units

- American Institutions (0–6 units): US History, US Government, California State and Local Government requirements if not taken before transfer.
- Upper-Division GE, Areas B, C, and D (9 units): Courses required for the major may double-count if approved for UD GE.
- Students entering this major with the AS-T in Geology are not required to fulfill SF State Studies requirements.
- B.A. Earth Sciences students satisfy the Complementary Studies requirement by completing the Basic Science and Math Foundation.

Earth Sciences Major: 34 Units

- Basic Science and Math Foundation (4 units): PHYS 111/PHYS 112 or PHYS 220/PHYS 222. If PHYS completed before transfer, consult with a major advisor about appropriate course choices. (Units from the ADT applied for CHEM 115 and MATH 226, plus three additional units in CHEM or CALC.)
- Earth Sciences Foundation (11 units)
- Earth Sciences Electives (15 units): Must be upper-division courses organized around a coherent theme approved by an advisor. (Four units for EARTH 210 from ADT applied here.)
- Culminating experience (4 units): Students may choose from EARTH 652 OR EARTH 690 and EARTH 695

University Electives: 11 or More Units

Depends on course choices made at the community college, how transferred units are applied to the requirements above, and course choices at SF State. Some courses may meet more than one requirement, e.g., both in UD GE and the major.

Course	Title	Units
First Semester		
ERTH 205	Techniques in Earth Sciences (Earth Sciences Foundation)	2
ERTH 400	Earth Systems I (Earth Sciences Foundation)	3
Select One Set of Courses (Major Science and Math Foundation):		4
PHYS 111 & PHYS 112	General Physics I and General Physics I Laboratory (B1, B3)	
PHYS 220 & PHYS 222	General Physics with Calculus I and General Physics with Calculus I Laboratory (B1, B3) ¹	
US History (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/#USHaGR) or University Elective if US History met before transfer		3
University Elective		3
		Units
		15
Second Semester		
ERTH 500	Earth Systems II (Earth Sciences Foundation)	3

ERTH 600GW	Earth's Climate History - GVAR (Earth Sciences Foundation)	3
Earth Sciences Elective (15 units) - Take One ¹		3
GE Area UD-C: Upper-Division Arts and/or Humanities		3
U.S. and California Government (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/#usg) or University Elective if US/CA Government met before transfer		3
Units		15
Third Semester		
Earth Sciences Elective (15 units) - Take Three ¹		9
GE Area UD-B: Upper-Division Physical and/or Life Sciences		3
University Elective		3
Units		15
Fourth Semester		
Select One (Major Culminating Experience):		4
ERTH 652		
ERTH 690 & ERTH 695		Earth Sciences Capstone Presentation and Senior Project
Earth Sciences Elective (19 units) - Take One ¹		3
GE Area UD-D: Upper-Division Social Sciences		3
University Elective		5
Units		15
Total Units		60

¹ **Earth Sciences Electives (15 Units)**

- Select at least 15 units of Earth & Climate Sciences (ERTH) or closely related coursework, with a coherent theme approved by a Department of Earth & Climate Sciences advisor.
- At least 15 elective units must come from upper-division coursework. At least 11 elective units must come from ERTH courses.
- No more than 4 of the 15 elective units can come from courses designed primarily to satisfy General Education requirements (such as 100 and 300 level ERTH courses).