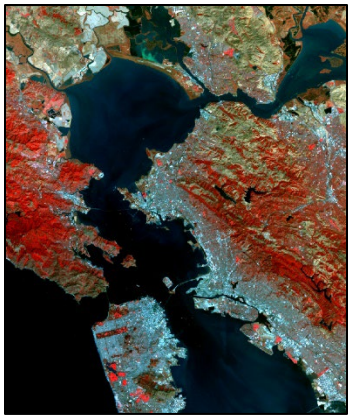
SAN FRANCISCO STATE UNIVERSITY

Environmental Science

Bachelor of Science

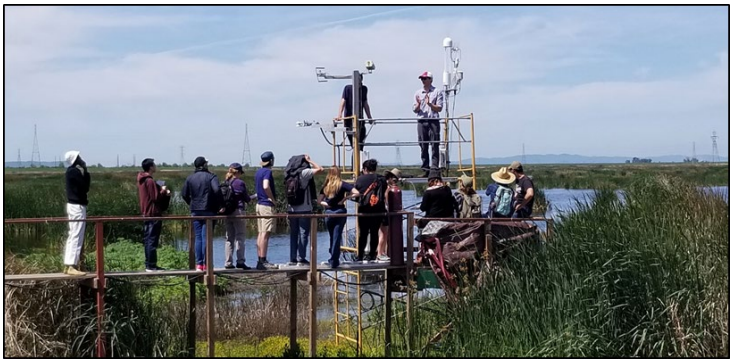


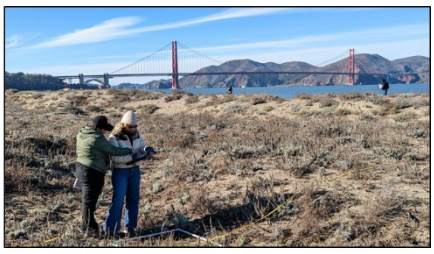
This degree prepares students for graduate school or for direct entry into a career as an environmental scientist or environmental manager in industry, government, or NGOs.

Federal agencies that hire environmental scientists include the EPA, National Parks Service, U.S. Forest Service, U.S. Bureau of Reclamation, Geological Survey, Bureau of Land Management, and the Natural Resources Conservation Service. State agencies include Department of Fish & Wildlife, Conservation, Water Resources, Parks & Recreation, Forestry & Fire Protection, Cal EPA, Water Resources Control Board, Air Resources Board, Coastal Commission, and various conservancies.

Careers in Environmental Science

- Environmental Scientist
- Physical Scientist
- Watershed Scientist
- Watershed Manager
- Water Quality Monitor
- Environmental Program Manager
- Environmental Modeler
- Environmental Consultant
- Air Pollution Specialist
- Agricultural Climatologist
- Hydrologist
- Environmental Planner
- Remote Sensing Specialist
- Image Analyst
- Environmental GIS Analyst





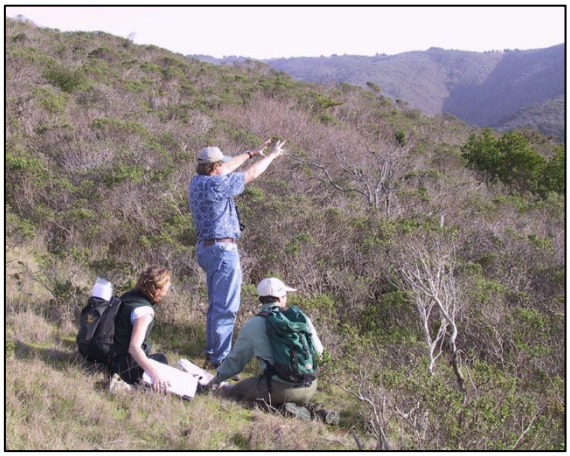
School of the Environment
1600 Holloway Ave., SF, CA 94132
http://environment.sfsu.edu

Curriculum

B. S. in Environmental Science

The curriculum comprises a core providing a foundation of science and methods courses – earth systems and environmental science, biology, chemistry, physics and mathematics – as well as distributed electives in environmental science, environmental management and analytical methods, culminating in a capstone senior seminar where students pursue a senior thesis or internship.

A unique strength of this program compared to many environmental science programs is in geo-spatial analytical methods at the introductory and advanced levels.



Lower Division Requirements (27 units)

Earth Sci.	GEOG 101 ***or*** ERTH 112	3
GEOG 102	The Human Environment	3
GEOG 160	Introduction to Environmental Science	4
ENV 205	Our Environment through Data	3
MATH 226	Calculus I	4
CHEM 180	Chemistry For Energy & Environment	3
Biology	BIOL 150 **or** 170 or 313	3
Physics	PHYS 111 & 112 **or** 220 & 222	3

Upper Division Requirements (9 units)

ENV 500	Physical & Human Dimensions of Climate Change – GWAR	3
GEOG 603	Introduction to Geographic Information Systems	3
ENV 690	Senior Capstone	3

Electives (30-32 units)

Environmental Science Electives	11-12
Environmental Management Electives	11-12
Analytical Methods Electives	7-8

Total Units, B.S. Environmental Science = 65-68

Environmental Systems Electives (11-12 units)

GEOG 312	Landforms ***or*** ERTH 425 Geomorphology	4
ERTH 410	Earthquakes and Volcanoes	3
ERTH 500	Earth and Life though Time	3
ERTH 515	Sedimentary Materials and Environments	4
GEOG 313	Earth's Climate Systems ***or*** ERTH 400	3-4
ERTH 535	Planetary Climate Change	4
GEOG 314	Bioclimatology	4
GEOG 316	Biogeography	4
GEOG 317	Soils	4
GEOG 342	Surface Water Hydrology (also ERTH 442)	4
GEOG 644	Water Quality	3
CHEM 380	Chemistry behind Environmental Pollution	3

Environmental Management Electives (11-12 units)

GEOG 421	Future Environments	3
GEOG 427	Agriculture & Food Supply	4
GEOG 642	Watershed Assessment & Restoration	4
GEOG 647	Geography of Water Resources	4
GEOG 648	Management of National Parks & Protected Areas	4
GEOG 652	Environmental Impact Analysis	4
GEOG 666	Geog of Garbage: Recycling & Waste Reduction	3

Analytical Methods Electives (7-8 units)

GEOG 602	Field Methods in Environmental Science	4
GEOG 604	Environmental Data Science	4
GEOG 610	Remote Sensing of Environment I	4
GEOG 611	Remotes Sensing of Environment II	4
GEOG 620	Geographical Information Systems	4
GEOG 621	GIS for Environmental Analysis	4
GEOG 625	Programming for GIScience	4
BIOL 458	Biometry	4

School of the Environment
1600 Holloway Ave., SF, CA 94132
http://environment.sfsu.edu

SAN FRANCISCO STATE UNIVERSITY