

ENVIRONMENTAL STUDIES | UC SANTA BARBARA

Info Session for New Majors

Established 1970, and still growing 57 years later

Picabo Barrington, Academic Advisor



Documents: ES Overview page, es.ucsb.edu/education



Our plan for today

1

Getting oriented

Online resources and where to find us

2

How ES started

The 1969 oil spill and the program it inspired

3

What ES is and where it leads

The interdisciplinary idea, alumni careers

4

The three majors

B.A., B.S., and Hydrologic Sciences & Policy

5

Major requirements, step by step

Lower division, AP and transfer credit, Areas A, B, C

6

Making it your own

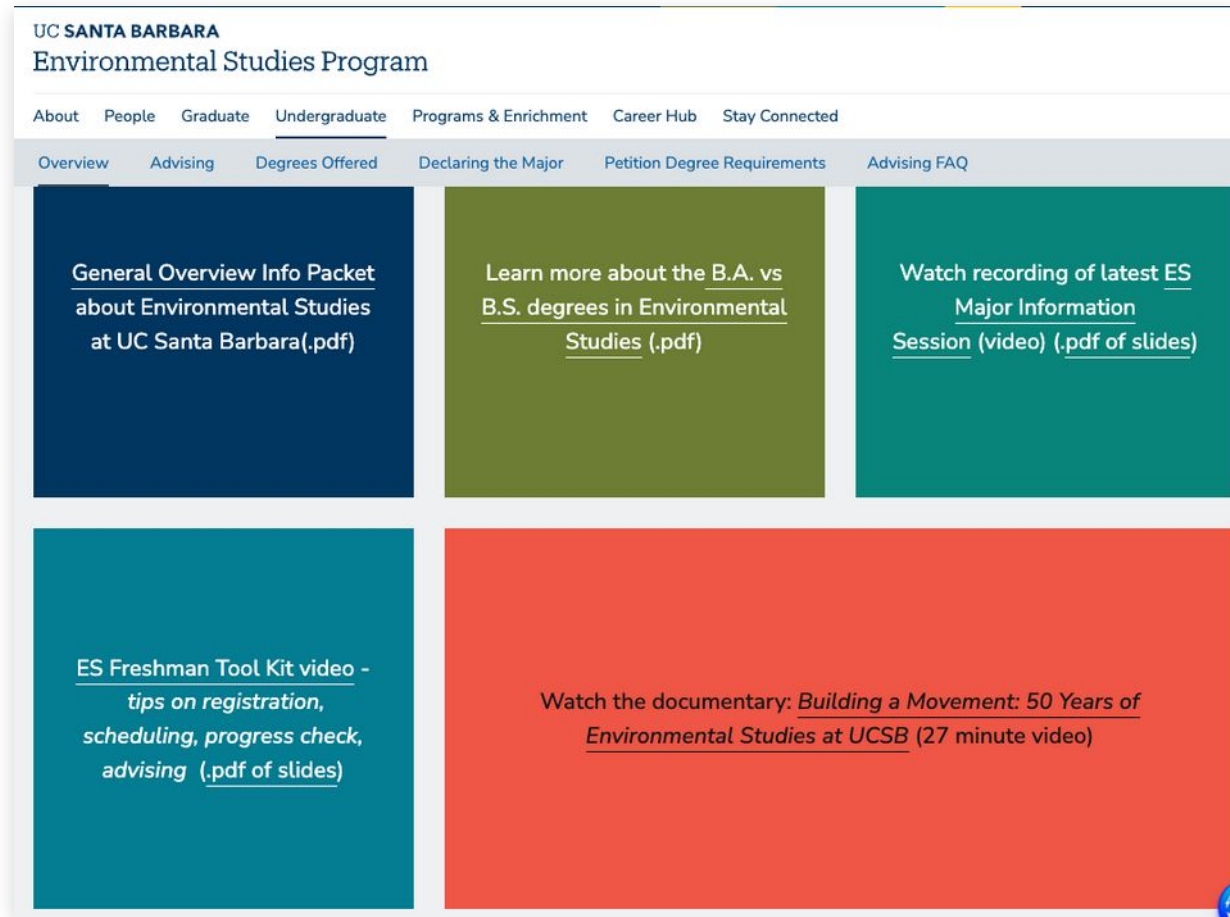
Opportunities, common questions, and your questions



In your packet

- Program overview and facts
- B.A. vs. B.S. comparison
- B.A., B.S., and Hydro worksheets
- Four-year plans
- AP credit chart
- ES course list
- 2026-27 proposed course schedule

Find today's documents on the ES website



ES Overview page

es.ucsb.edu/education



General Overview Info Packet

PDF



B.A. vs. B.S. degrees in ES

PDF



Recording of the latest Major Info Session

Video



ES Freshman Toolkit

Registration, scheduling, progress checks



Building a Movement: 50 Years of ES at UCSB

27-minute documentary

Two videos worth watching this week



ES Freshman Toolkit

About 15 minutes from an ES advisor: registration, scheduling, progress checks, and advising.



Building a Movement: 50 Years of Environmental Studies at UCSB

6,691 views · 5 years ago

4 likes · 0 comments · Transcript

Mercury Press Inc Follow

Sparked by the first image of the Earth from the moon and the 1969 Santa Barbara Oil Spill, a movement was born. In its wake, the first University of California program of its kind was founded at UCSB. This inspiring documentary (USA, 28:26 minutes) by director Isaac Hernández explores the 50-year history of the multidisciplinary Environmental Studies Program at the University of California Santa Barbara. ...more

Building a Movement

A 27-minute documentary on 50 years of Environmental Studies at UCSB, from the 1969 oil spill to today.

Both linked on the Overview page:
es.ucsb.edu/education

Find us on the 4th floor of Bren Hall



Environmental Studies

Bren Hall, 4th floor laboratory wing. Take the stairs up one flight or press "4L" in the elevator.

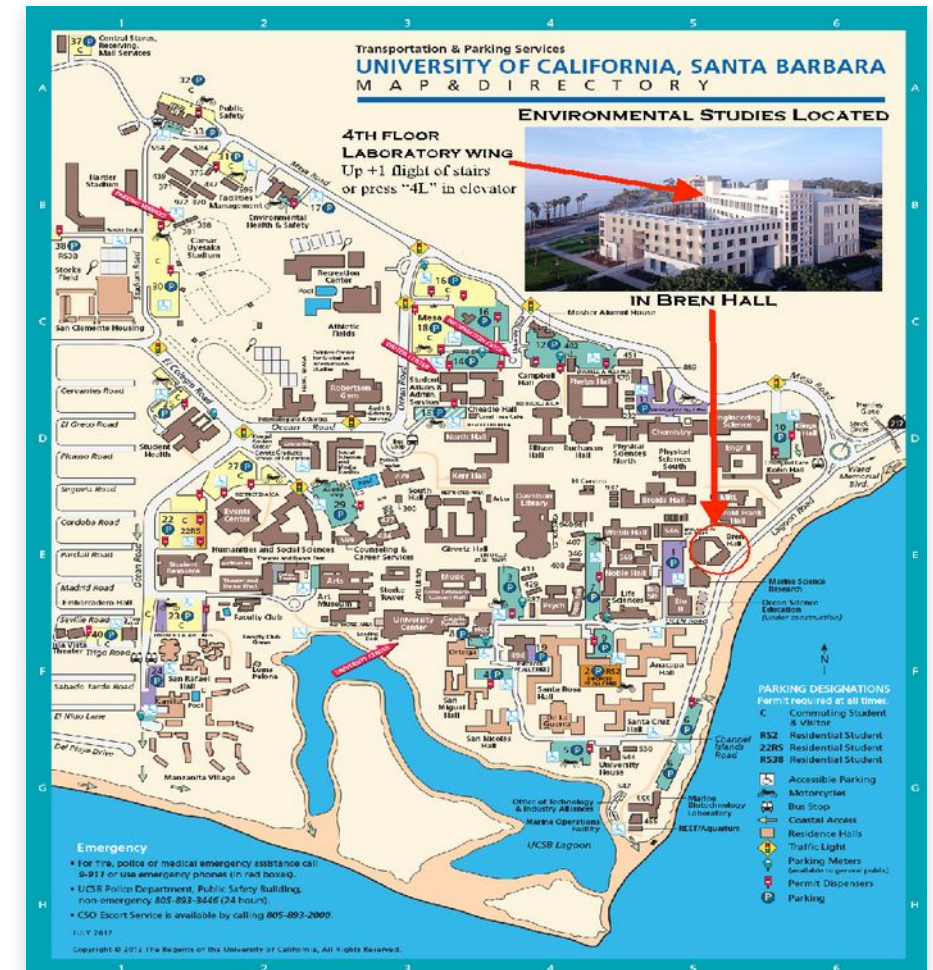


ES Advising

Bren 4312, plus Zoom appointments at es.ucsb.edu/advising



Bren Hall is the "greenest" lab building in the UC system and the first in the U.S. to earn a quadruple platinum LEED rating.



01

How it all started

An oil spill in our backyard, and a new way to study the environment

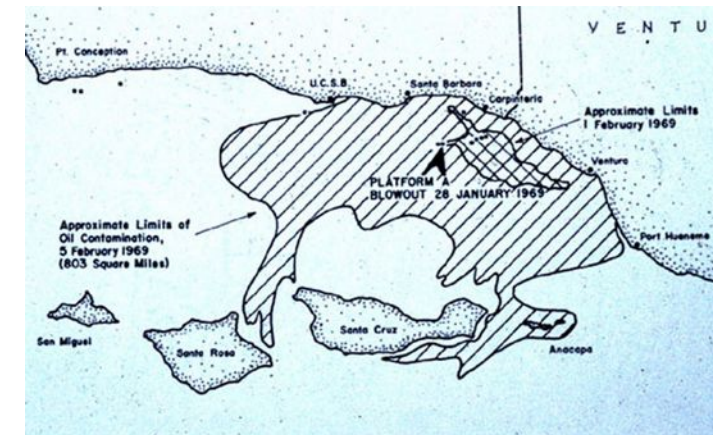


The Santa Barbara blowout

January 28, 1969

A blowout on Union Oil's Platform A spilled oil across the Santa Barbara Channel and onto local beaches. The protests that followed helped spark the modern environmental movement.

“UCSB was within sight and smell of the littered channel and its beaches.”



Fall 1970: a brand new major



UCSB Daily Nexus, October 1, 1970

“UCSB has embarked upon an academic endeavor that could be unparalleled across the country and may come to serve as a model for colleges and universities nationwide.”

12

students made up the first graduating ES class in 1972

57 years later, one of the largest programs in the world



ENVIRONMENTAL STUDIES — SITTING: Garrett Hardin, Cynthia Sage, Janet Adelson, Marc McGinnes. STANDING: Nancy Fraser, A. H. Schuyler, Ruthann Corwin, Orrin Sage, Terry Tredway, Roderick Nash. UCSB Yearbook, 1976

ES faculty and staff, 1976 UCSB Yearbook

1970

Program established

871

Graduates by 1980

9,700+

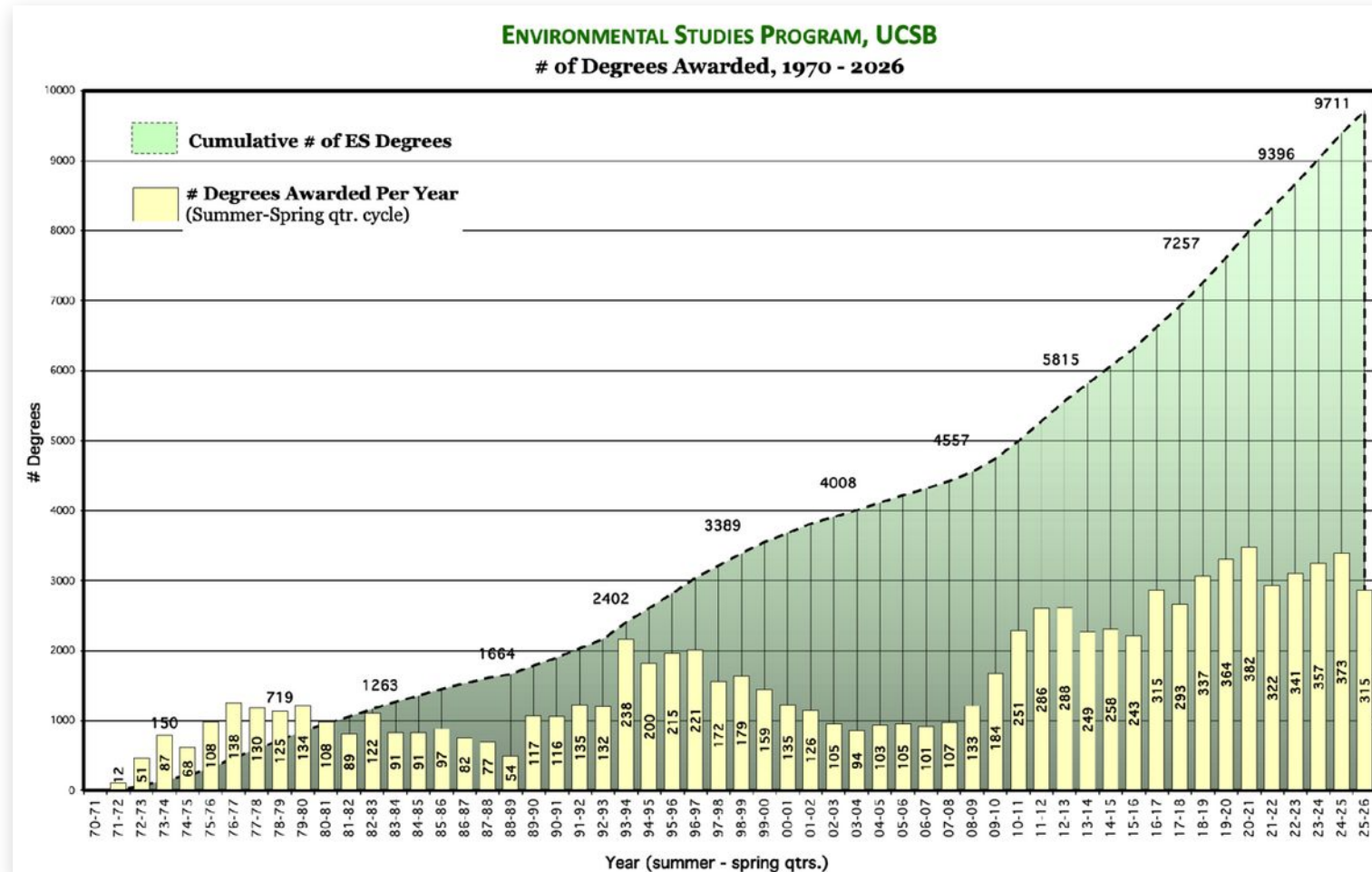
Alumni today

1,000+

Students enrolled now

One of the first, oldest, largest, and most successful undergraduate environmental programs in the world.

Degrees awarded have climbed for five decades



9,711

ES degrees awarded, 1970 to 2026

Green area: cumulative degrees
Yellow bars: degrees per year

02

What is Environmental Studies?

The idea behind the program, and where it can take you



The causes are human, so the solutions are too



“The symptoms of environmental deterioration are in the domain of the natural sciences, but the causes lie in the realm of the social sciences and humanities.”

David W. Orr, Ecological Literacy

Simply put

Environmental Studies is the systematic study of human interaction with the natural environment.

Today's environmental problems are complex and interdisciplinary, with political, economic, social, physical, and biological dimensions. So every ES degree draws on three areas:



Social Sciences

Politics, economics, law, planning, and how communities make decisions



Natural, Physical & Life Sciences

Ecology, chemistry, earth systems, water, and climate



Humanities

Ethics, history, justice, culture, and how we tell environmental stories

Our alumni put their degrees to work

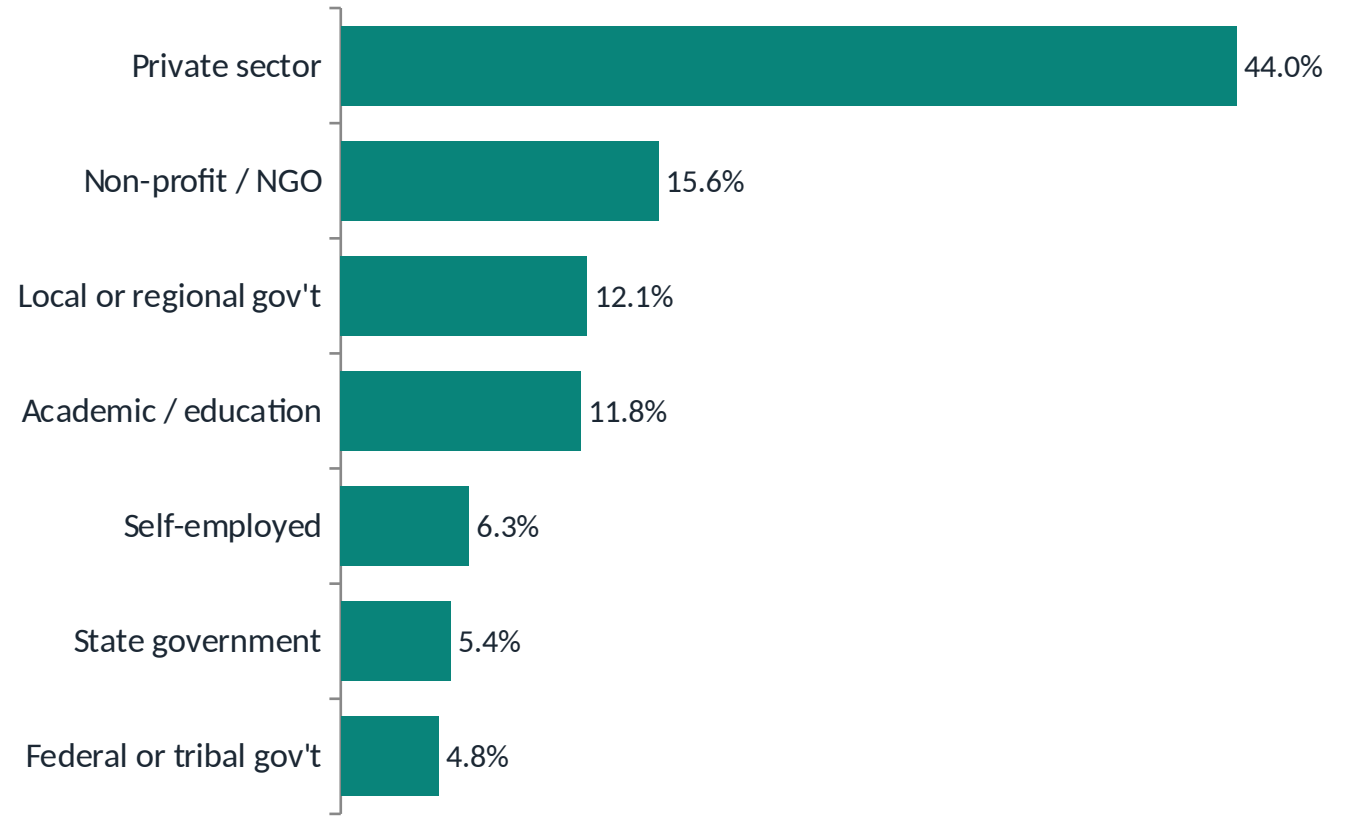
90.2%

were employed (dozens retired, 58 in grad school, only 38 looking for work)

67%

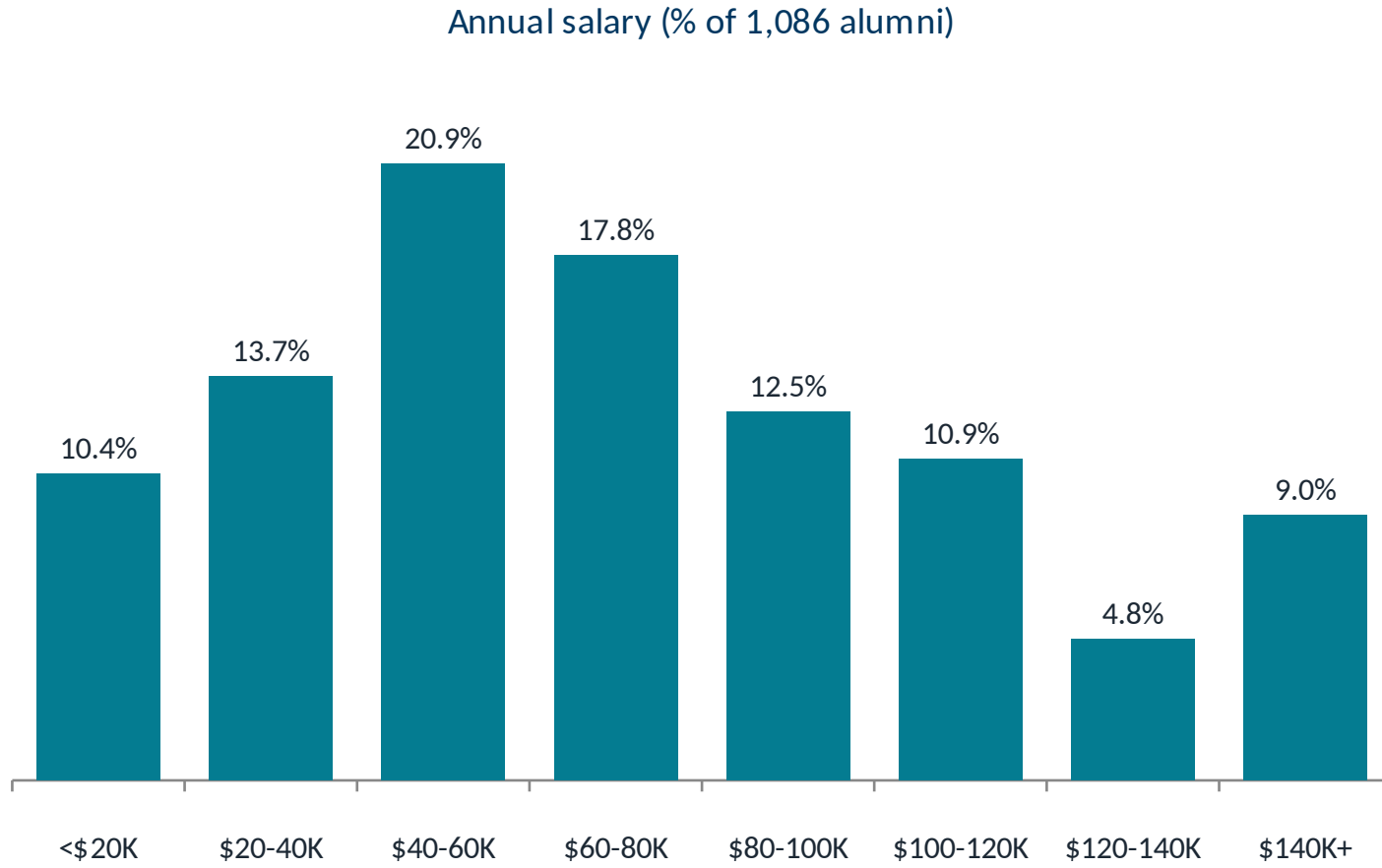
described their job as an “environmental career”

Where employed alumni work (% of 1,124 replies)



Source: 2016 ES Alumni Survey, 1,140 responses

A wide range of careers and salaries



Source: 2016 ES Alumni Survey (2016 dollars)

Example job titles

Ecologist
Senior Environmental Engineer
Air Pollution Specialist
Senior Planner
Park Superintendent, NPS
Battalion Chief, Forest Service
Asst. Secretary of Resources, CA
Director of Conservation
Associate Professor
Teacher
Architect
President, Rincon Consulting

Two out of three alumni kept learning after ES

67.7%

of surveyed alumni pursued additional schooling after their ES degree

2016 ES Alumni Survey



Graduate school (M.A., Ph.D., etc.)

199 alumni

64.2%



Certificate or credential programs

92 alumni

29.7%



Associate or second bachelor's degree

10 alumni

3.2%

Graduate degrees include: 21 Ph.D.s, 42 J.D.s, 13 MBAs, 12 MPAs, 31 M.A.s in Planning, 8 M.S.s, 2 DVMs, and 1 M.D.

Faculty from across the disciplines



20 Ladder faculty

Anthropology, ecology, economics, geology, geography, history, sociology, and more, including three endowed chairs



9 Affiliated faculty

Classics, economics, EEMB, geography, political science, anthropology, film studies, English



20-25 Lecturers

Working environmental professionals in waste management, education, law, planning, water policy



7 Staff

Advisors, internship coordinator, business officer, and office staff



Meet them at es.ucsb.edu/people

A big program with a close community



2 academic advisors

Picabo and Eric



~25 TAs

Graduate students from
many departments



9,711 graduates

and a very active, supportive
alumni network



\$40,000+

in ES scholarships awarded
each year



03

The three majors

Three interdisciplinary paths, each with its own focus



Three degree options



B.A. Environmental Studies

About 3/4 of majors

The most flexible ES degree. Science literate, with wide-open upper-division electives.

Leads to: Env. law, planning, education, policy and politics, business, sustainability, consulting



B.S. Environmental Studies

About 1/4 of majors

Still interdisciplinary, built on a strong natural and physical science foundation.

Leads to: Air and water quality, env. health, toxicology, restoration, soil science, wildlife biology



B.S. Hydrologic Sciences & Policy

About 12 students

A specialized degree on water: how it occurs, moves, and is managed. Similar prep to the B.S.

Leads to: Water quality specialist, water resource manager, consulting, conservation planning

Possible career paths by degree

B.A. degree

- Urban / regional planning
- Environmental law
- Environmental justice
- Sustainability management
- Environmental media
- Green business, energy consulting
- Parks and recreation management

Either degree

- Environmental education
- Environmental policy
- Environmental consulting
- Sustainable agriculture
- Health and safety management
- Local, state, national government
- Landscape design / architecture

B.S. degree

- Pollution monitoring and control
- Environmental toxicology / health
- Field scientist / technician
- Conservation / restoration biology
- Renewable energy design
- Environmental engineering
- Wildlife biology / management

These are broad trends, not fixed paths. Many B.A. grads work in science, and many B.S. grads become planners, attorneys, and educators.

Strengths of the ES curriculum



Integrated training

Social and physical sciences studied together, not in silos



Maximum flexibility on a solid foundation

A shared core, then room to follow your own interests



Academic and hands-on learning

About 1/3 of courses are taught by working environmental professionals, with many field and lab courses



Education outside UCSB

Study abroad (UCEAP, Semester at Sea, Global Routes) and field studies (Wildlands Studies, School for Field Studies)



Signature programs that set ES apart



ES Internship Program

ENVS 192

Academic credit for real-world experience with 100+ local agencies, plus statewide, national, and international placements. 125+ students a year.



Senior Thesis

ENVS 197

A capstone course and a unique chance to build professional research and writing skills.



Leadership Incubator (ELI)

ENVS 195A-B-C

A nine-month program: leadership training in fall, then a student-led project with mentors in winter and spring.



Independent Research

ENVS 99 / 199 / 199RA

Work directly with faculty on research as an independent study or research assistant.



Vast Alumni Network

9,700+ alumni

Graduates in public, private, academic, and non-profit careers around the world.



Dedicated Faculty

20+ faculty

Small upper-division classes and faculty invested in student success.

04

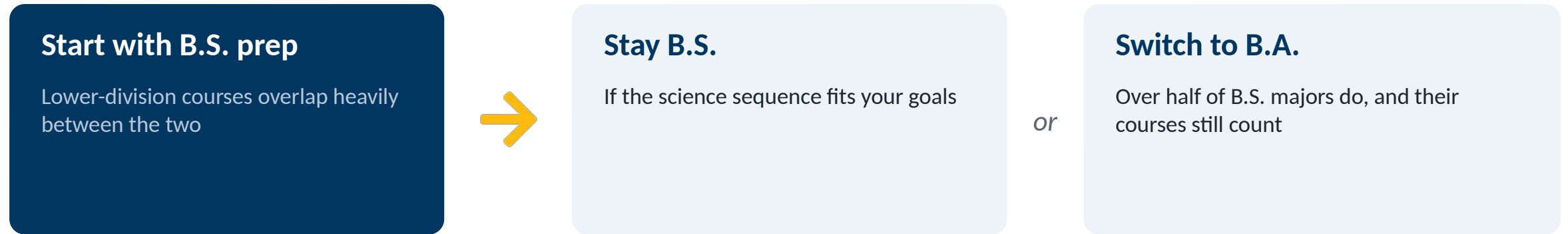
Major requirements, step by step

Grab your packet. We'll walk through each requirement together.



Your first decision: B.A. or B.S.?

If you're undecided, start on the B.S. path. It keeps both doors open.



Switching is normal, not a setback

The B.A. is one of the hardest and most comprehensive B.A. degrees on campus, and B.A. grads are still science literate.



Many add a second credential

More than a third of ES majors graduate with a double major or official minor.



Compare side by side

B.A. vs. B.S. sheet and worksheets at es.ucsb.edu/degrees

The shared core: same for B.A. and B.S.

Requirement	UCSB course options
Four intro ES courses	ENVS 1, 2, 3 and ENVS 40
One economics course	Econ 1, 2, or 9, or ENVS 30
One geography or earth science course	Geog 3 or 4, or Earth Sci 2, 4, or 20
One introductory statistics course	PSTAT 5A or 5LS, or Econ 5
One ethics and justice course	ENVS 70, AsAm 9, Engl 37, FEMST 50, Phil 4, or Pol S 1



Good to know

- You can declare after just one of ENVS 1, 2, 3, or 40
- ENVS 1, 2, and 3 are each offered in specific quarters. ENVS 40 is offered every quarter.

Where the B.A. and B.S. differ

	B.A.	B.S.
Culture & Society, Policy & Politics	One course from each list	One course from a combined list
Math	Two quarters: Math 34A, 2A, or 3A, and Math 34B, 2B, 3B, or ENVS 25	Calculus with applications: Math 3A-3B (or 2A-2B)
Biology & Ecology	ENVS 60, or MCDB 1A-1LL and EEMB 2	MCDB 1A-1B-1LL and EEMB 2-2LL-3
Chemistry	Chem 1A-1B + 2AL, or ENVS 15A and 15B-BL	Chem 1A-1B-1C + 2AL and 2BL
Physics	None	Phys 6A-AL, 6B-BL, 6C-CL, or 7A, 7B, 7C-CL
Total lower-division units	71 to 78.5	97 to 99

AP, IB, and transfer credit can count

AP exam (score 3+)	UCSB equivalent
Calculus AB	Math 2A, 3A, 34A
Calculus BC	Math 3A-3B or 34A-34B
Environmental Science	ENVS 2
Micro or Macroeconomics	Econ 1 or 2 (ES & Hydro majors)
Physics C: Mechanics	Physics 6A + 6AL
Physics C: E&M	Physics 6B + 6BL
Statistics	Comm 87, PSTAT 5AA-ZZ, Psych 5
Human Geography	Geog 5



Community college coursework

Check assist.org for official articulation of UCSB courses.



IB credit

See the IB Credit Chart in the UCSB General Catalog.



Check GOLD

Your UCSB Course History shows automatically articulated credit. Not sure? Ask an ES advisor.



AP Bio and AP Chem

Earn units but don't meet ES or Hydro requirements. A 4 or 5 lets you take MCDB 1A without the Chem prerequisite.

Three areas: A, B, and C

Area	B.A.	B.S.
A Required ES courses	13 units: ENVS 190 (1-unit seminar) + one course from each of three themed clusters	17-18 units: same as B.A., plus one upper-division stats, data science, or modeling course
B ES electives	28 units from any ES courses numbered 100-199	32 units: 20 from the B-1 “science” list, 12 from any ES course
C Outside Concentration	16 units from any one L&S department, or an interdisciplinary emphasis	16 units from approved STEM departments, or an interdisciplinary emphasis
Total upper-division units	57	65 to 66



By petition, study abroad or field studies units can satisfy part or all of Area C, and up to 12 abroad units can count toward Area B.

Required courses: one from each cluster



1. Ecosystems & Society

ENVS 101, 130C, 149, 153



2. Energy, Water, Climate

ENVS 115, 117, 163A



3. Built Environment

ENVS 116, 135A, 155, 156

Both degrees

- ENVS 190: a 1-unit P/NP seminar (fall or winter)
- Extra cluster courses can count as Area B electives

B.S. adds one more

One stats, data science, or modeling course: ENVS 126 (193DS) or 164, Geog 172, EEMB 146 or 179, or PSTAT 120A

Electives: over 90 ES courses to choose from

Environmental Law

Climate Justice

Renewable Energy Systems

Ecopsychology

Conservation Planning

GIS

Wildland Fire

Transforming Food Systems

Sea Turtle Conservation

Green Building Design

Environmental Water Quality

Socio-Env. Data Science

Religion and Ecology

Coastal Processes

Waste Management

28

B.A. units: any ES course
100-199

32

B.S. units: 20 from B-1
science list + 12 any

Limits to know

- Max 8 units combined from ENVS 192, 194, 199, 199RA (4 each)
- Max 12 UCEAP units, by petition
- Courses not used in Area A

Full list with descriptions: es.ucsb.edu/courses

The Outside Concentration: 16 units, two ways



Option 1: Single department

Any 16 upper-division units from one department or program.

B.A.: any L&S department.

B.S.: Chemistry & Biochemistry, EEMB/MCDB, Earth Science, Geography (B.S. Physical Geog. courses), Math, Statistics, Physics, or Psychological & Brain Sciences.

A double major or official minor satisfies Area C automatically, as long as 16 UD units don't overlap with Areas A or B.



Option 2: Interdisciplinary emphasis

16 units from more than one department that form a coherent environmental focus. Study abroad or field studies units can count by petition.

Submit a Petition for Degree Requirements explaining how the courses connect. B.S. students draw from the STEM departments listed in Option 1.

Not sure where to start? See the OC guide and video at es.ucsb.edu/degrees.



Outside Concentration guide, example concentrations, and a 12-minute explainer video: es.ucsb.edu/degrees

The B.A. at a glance

Environmental Studies, UCSB 8/1/26

BACHELOR OF ARTS (B.A.) WORKSHEET 2026-27

LOWER-DIVISION / PREPARATION FOR MAJOR (generally 1st and 2nd years)

ENVS 1 (P or Sem qtr)* ☐ ENVS 2 (S or Sem qtr)* ☐ ENVS 3 (W or Sem qtr)* ☐ ENVS 40 (P, W, S qtr)* ☐ Ethics & Justice: ASAM 9; Engl/Rgst. 37; ENVS 70 (P qtr)* ☐ Fem. St. 50; Phil. 4; Pol. Sci. 1	Culture & Society: Anth. 2; ASAM 1; ☐ Blk. St. 1; Ch. St. 1A; Film. St. 46; Globl. 1; Psych. 1; Relig. St. 1 or 14; Sociology 1	Chemistry: Chemistry 1A + 1B ☐ and 2AL ☐ ----- OR ----- ENVS 15A (W qtr)* and ☐ ENVS 15B/BL (S qtr)* ☐	Quantitative Skills: Math 34A or 3A (2A) ☐ and one course from Math 34B or 3B (2B) or ENVS 25 (S qtr)* ☐	Statistics: PSTAT 5A or 5LS or Econ 5 ☐ (Or by petition: Comm. 87 or Pol. Sci. 15, or Pay. 10B)	Ecology: ENVS 60 (P or Sem qtr)* ☐ ----- OR ----- MCD 1A/ILL (P/W qtr)* ☐ and EEMB 2 (W qtr)* ☐
Economics: ENVS 30 (S qtr)* or ☐ Economics 1 or 2 or 9	Physical Earth Sci.: Earth Sci. 2 or 4 ☐ or 20 or Geog. 3 or 4				

Advanced Placement (AP), International Baccalaureate (IB) and Transfer credit may be substituted for Prep for Major requirements!
 Review your UCSB Course History on GOLD for automatically articulated credit or see an ES Advisor for assistance.

UPPER-DIVISION (generally 3rd and 4th years) - Total of 57 units

A. ES REQUIRED COURSES (13 UNITS) ENVS 190 (a 1 unit seminar offered P/NP only) (P or W qtr)* ☐ One course from each of the themed cluster of courses below: 1. <i>Ecosystems & Society:</i> ENVS 101, 130C, 149, 153 ☐ 2. <i>Energy, Water, Climate:</i> ENVS 115, 117, 163A ☐ 3. <i>Built Environment:</i> ENVS 116, 135A, 155, 156 ☐ Additional courses may be taken and used as Area B electives. B. ES ELECTIVES (28 UNITS) Any upper-division ES courses (#100-199) not used in Area A. <table style="width: 100%;"> <thead> <tr> <th>ES Elective Courses</th> <th>Units</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td></tr> <tr> <td style="text-align: right;">Total = 28</td> <td></td> </tr> </tbody> </table> No more than 8 units combined and 4 units each from ENVS 192, 194, 199, and 199RA may apply; and max 12 UCEAP units by petition. <table style="width: 100%;"> <thead> <tr> <th>Outside Concentration Courses</th> <th>Units</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td></tr> <tr> <td style="text-align: right;">Total = 16</td> <td></td> </tr> </tbody> </table> NOTE: All courses, including cross-listed (either version), may apply to one area only in any part of the major. Courses taken to fulfill any major requirement must be taken for a letter grade unless only offered P/NP.	ES Elective Courses	Units	1. _____	_____	2. _____	_____	3. _____	_____	4. _____	_____	5. _____	_____	6. _____	_____	7. _____	_____	Total = 28		Outside Concentration Courses	Units	1. _____	_____	2. _____	_____	3. _____	_____	4. _____	_____	Total = 16		C. OUTSIDE CONCENTRATION (16 UNITS) There are 2 options for the Outside Concentration: 1) Single department: Complete any 16 upper-division units from any one UCSB department or program and they will automatically apply. Completion of a double major will automatically satisfy this area as will an official minor as long as 16 UD units don't overlap with Areas A or B. OR 2) Interdisciplinary emphasis: Combination of 16 upper-division units from more than one department or program outside ES may be used to create a concentration of study as long as they form a coherent focus or emphasis. A student pursuing this option must submit a <i>Petition for Degree Requirements</i> form to ES justifying how courses taken relate to each and form a coherent theme. A list of some example environmental concentrations one might use is available from the ES Advisors or at: www.es.ucsb.edu/degrees NOTE: Study Abroad or Environmental Field Studies units may be used to satisfy part or all of Area C using either option 1 or 2 above. Units earned must be UC transferable, upper-division, and relate to a coherent concentration. A <i>Petition for Degree Requirements</i> must be approved by Environmental Studies before units will be accepted. Students interested in applying study abroad or field studies units, or pursuing an interdisciplinary emphasis, are encouraged to consult an ES Advisor before starting. Visit the ES Advising webpage at: www.es.ucsb.edu/advising
ES Elective Courses	Units																														
1. _____	_____																														
2. _____	_____																														
3. _____	_____																														
4. _____	_____																														
5. _____	_____																														
6. _____	_____																														
7. _____	_____																														
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Outside Concentration Courses	Units																														
1. _____	_____																														
2. _____	_____																														
3. _____	_____																														
4. _____	_____																														
Total = 16																															

* Denotes specific quarter a course is to be offered; accurate for current academic year ONLY & subject to change year to year

- The most flexible ES major
- Includes a core of introductory science
- Upper-division electives are wide open: any ES course 100-199
- Outside Concentration can come from any department on campus
- A double major or minor in any department fills Area C
- Study abroad or field studies can complete Area C

57 upper-division units | worksheet in your packet

The B.S. at a glance

8/1/26

Environmental Studies, UCSB

BACHELOR OF Science (B.S.) WORKSHEET 2026-27

LOWER-DIVISION / PREPARATION FOR MAJOR (generally 1st and 2nd years)

ENVS 1 (9 or 3 sem qtrs)* ☐ ENVS 2 (8 or 3 sem qtrs)* ☐ ENVS 3 (8 or 3 sem qtrs)* ☐ ENVS 40 (9 or 3 sem qtrs)* ☐ Ethics & Justice: ASAM 9; Engl. 37; ☐ ENVS 70 (9 qtrs)* ☐ Fem. St. 50; Phil. 4; ☐ Pol. Sci. 1 ☐	Culture, Society, Policy & Politics: Anth. 2; ASAM 1; ☐ Blk. St. 1; Ch. St. 1A; ☐ Film. St. 46; ☐ Globl. 1 or 2; Hist. 5; ☐ 7; Poli.Sci. 6, 7, or 12; ☐ Psych. 1; Relig. St. 1 ☐ or 14; Sociology 1 ☐	Chemistry: CHEM 1A ☐ 1B ☐ 1C ☐ and 2AL + 2BL ☐ Physical Earth Sci.: Earth Sci. 2 or 4 ☐ or 20 or Geog. 3 or 4 ☐ Economics: ENVS 30 (9 qtrs)* or ☐ Economics 1 or 2 or 9 ☐	Math 3A or 2A (9 qtrs)* ☐ Math 3B or 2B (9 qtrs)* ☐ Physics: Physics 6A/AL ☐ Physics 6B/BL ☐ Physics 6C/CL ☐ or 7A ☐ Physics 7B ☐ Physics 7C + L ☐	PSTAT 5A or 5L ☐ or Econ 5 ☐ (or by petition: Comp. 87 or Phil. Sci. 15, or Page 108) Biology & Ecology: MCDB 1A (9 sem qtrs)* ☐ MCDB 1B (8 sem qtrs)* ☐ MCDB 1LL (9 sem qtrs)* ☐ EEMB 2 (9 sem qtrs)* ☐ EEMB 2LL (9 sem qtrs)* ☐ EEMB 3 (9 sem qtrs)* ☐
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Advanced Placement (AP), International Baccalaureate (IB) and Transfer credit may be substituted for Prep for Major requirements. Review your UCSB Course History on GOLD for automatically articulated credit or see an ES Advisor for assistance.

UPPER-DIVISION (generally 3rd and 4th years) - Total of 65-66 units

A. ES REQUIRED COURSES (17-18 UNITS) ENVS 190 (a 1 unit seminar offered P/NP only) (9 or 6 qtrs)* ☐ One course from: ENVS 126 (193DS) or 164; ☐ GEOG 172; EEMB 146, 179; PSTAT 120A (Math 4A required) ☐ One course from each of the three clusters of courses below: 1. <i>Ecosystems & Society:</i> ENVS 101, 130C, 149, 153 ☐ 2. <i>Energy, Water, Climate:</i> ENVS 115, 117, 163A ☐ 3. <i>Built Environment:</i> ENVS 116, 135A, 155, 156 ☐ Additional courses may be taken and used as Area B electives.	C. OUTSIDE CONCENTRATION (18 UNITS) There are 2 options for the Outside Concentration: 1) Single department: Complete any 16 upper-division units from any one of the following STEM departments: Chemistry & Biochemistry, EEMB and/or MCDB (Bio), Earth Sciences, Geography (only courses that apply to the B.S. Physical Geog. major), Math, Statistics, Physics, or Psychological & Brain Sciences. Completion of a double major or minor from the above depts will satisfy this area. If pursuing an official minor make sure 16 UD units don't overlap with Areas A or B. OR 2) Interdisciplinary emphasis: Combination of 16 upper-division units from more than one department listed above may be used to create a concentration of study as long as they form a coherent focus or emphasis. A student pursuing this option must submit a <i>Petition for Degree Requirements</i> to ES justifying how proposed courses relate to each other and the desired concentration. A list of some example environmental concentrations one might use is available from the ES website at: www.es.ucsb.edu/degrees . NOTE: Study Abroad or Environmental Field Studies units may be used to satisfy part or all of Area C using either option 1 or 2 above. Units earned must be UC transferable, upper-division, and relate to a student's chosen concentration. A <i>Petition for Degree Requirements</i> must be approved by Environmental Studies before units will be accepted. Students interested in applying study abroad or field studies units, or pursuing an interdisciplinary emphasis, are encouraged to consult an ES Advisor before starting. Visit the ES Advising webpage at: www.es.ucsb.edu/advising
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B. ES ELECTIVES (32 UNITS)
 32 UD ES units from courses (#100-199) not used in Area A.
Section B-1: At least 20 units must be taken from this list: ENVS 101, 103A, 105, 111, 113, 114A-B, 115, 119, 120A-B, 121, 126, 128, 130C, 133, 134, 137, 140, 141, 142, 144, 145, 147, 148, 149, 150, 152, 153, 154, 156, 162, 163A, 164, 166DC, 167, 168, 169, 171, 193AW, 193CS, 193DD, 193EB, 193GW, 193ST, 197. * = cross-listed
ES Elective Courses **Units**
 1. _____ _____
 2. _____ _____
 3. _____ _____
 4. _____ _____
 5. _____ _____
Section B-2: Any UD ES courses to reach 32 total units
 6. _____ _____
 7. _____ _____
 8. _____ _____
 No more than 8 units combined and 4 units each from ENVS 192, 194, 199, and 199RA may apply; and max 12 UCEAP units by petition.
 1. _____ _____
 2. _____ _____
 3. _____ _____
 4. _____ _____
 Total = 16

NOTE: All courses, including cross-listed (either version), may apply to one area only in any part of the major. Courses taken to fulfill any major requirement must be taken for a letter grade unless only offered P/NP.

* Denotes specific quarter a course is to be offered; accurate for current academic year ONLY & subject to change year to year

- Same structure and still multidisciplinary: econ, social science, ethics and justice
- A full year each of intro biology, chemistry, and physics, plus calculus
- Area A adds a stats or modeling course
- 20 of 32 elective units come from the B-1 science list
- Outside Concentration from STEM departments
- A demanding degree, so plan your science sequences early

65-66 upper-division units | worksheet in your packet

B.S. Hydrologic Sciences & Policy

Environmental Studies, UCSB

8/1/26

Hydrologic Sciences & Policy (B.S.) Worksheet 2026-27

LOWER-DIVISION / PREPARATION IN MAJOR (generally 1st and 2nd years)

ENVS 1 (1 or 5 units)*
or ENVS 3 (1 or 5 units)*
and ENVS 40 (1 or 5 units)*

Economics:
ENVS 30 (3 units)* or
Economics 1 or 2 or 9

Physical Earth Sci.:
Earth Sci. 2
and Geography 4

Biology & Ecology:
MCDB 1A (1 or 5 units)*
MCDB 1B (1 or 5 units)*
MCDB 1LL (1 or 5 units)*
EEMB 2 (1 or 5 units)*
EEMB 2LL (1 or 5 units)*
EEMB 3 (1 or 5 units)*

Statistics:
PSTAT 5A or 5LS

Chemistry:
CHEM 1A (1 or 5 units)*
and 2AL (1 or 5 units)*

Quantitative Skills:
Math 3A or 2A (1 or 5 units)*
Math 3B or 2B (1 or 5 units)*
Math 4A
Math 4B

Physics:
Physics 6A/AL
Physics 6B/BL
Physics 6C/CL
OR
Physics 7A
Physics 7B
Physics 7C + L

Advanced Placement (AP), International Baccalaureate (IB) and Transfer credit may be substituted for requirements above!
Review your Course History/Profile on GOLD for automatically articulated credit or see the ES Advisor for assistance.

UPPER-DIVISION (generally 3rd and 4th years) - Total of 56 units required!

A. U.D. REQUIRED COURSES (21 UNITS)

ENVS 102
ENVS 126 (193DS) or 164

ENVS 144*
Geography 116/Earth Sci. 173 (5 unit course) (w/ 40)*

ENVS 163A (1 or 5 units)*

B. REQUIRED U.D. THEMED CLUSTERS (24-25 UNITS)

Complete one course from each of the following six clusters of courses. One additional course from each cluster, excluding #3, may apply to Area C if desired. ^ denotes course is cross-listed with another dept.

1. Water Policy, Management, and Society: ENVS 138*, 163B, 193TW

2. Water Quality: ENVS 162*, 168*, 169*

3. Intro to GIS: Earth Sci. 176; ENVS 154; GEOG 176C (5 units & GEOG 176A-B from Area C are prerequisites)

4. Soil and Ecology: EEMB 120, 148, 168; ENVS 101, 114A*, 128*, 133*, 171*

5. Climate and Environmental Justice: ENVS 116, 130A, 134CF*, 180, 181, 186, 188

6. Field Studies: ENVS 114B* (ENVS 114A* is a prerequisite), 119*; GEOG 112

C. U.D. ELECTIVES (10-11 UNITS)

Any units from the following list of electives and/or one additional course from any cluster in Area B, excluding #3 (Intro to GIS), may be used to bring the total number of U.D. units completed in the major to 56:

Earth Science 106, 113, 114, 117, 130, 131, 134, 164B, 175;
Environmental Studies 145, 156, 165A, 165B, 170, 190, 192, 193AW,
195A-B-C, 197, 199, 199RA;
Geography 110, 115A-B-C, 119, 133, 134, 137, 142, 172, 175, 176A-B, 178

Elective Courses:
1. _____
2. _____
3. _____
4. _____
Total = _____

Need 11 units unless completed GEOG 176C in Area B-3; then need just 10.

NOTES: • Study Abroad or Environmental Field Studies units may be used to satisfy part or all of Area C, and parts of Area A and B. They need to be hydrology related, U.D., and approved by petition. Consult an ES Academic Advisor for more information before pursuing one of these options: www.es.ucsb.edu/advISING

• All courses, including cross-listed (either version), may apply to one area only in any part of the major.

• Courses taken to fulfill any major requirement must be taken for a letter grade unless only offered P/NP.

* Denotes specific quarter a course is to be offered; accurate for current academic year ONLY & subject to change year to year

A specialized degree focused on water, with lower-division prep similar to the ES B.S.

21 units of required upper-division courses (A)

24-25 units across six themed clusters (B): water policy, water quality, GIS, soil and ecology, climate and justice, field studies

10-11 units of electives (C) to reach 56 total

Study abroad and field studies can count by petition if hydrology related.

Environmental Studies | UC Santa Barbara

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Four-year plans and planning tools

Suggested Four Year Schedule for Environmental Studies Majors

The tables below serves as a scheduling aid to help plan one's academic program. While it's not mandatory to follow this schedule, it's designed to help satisfy the degree requirements within 4 years. Please see an ES Academic Advisor to assist you with creating your own personal schedule. Visit the ES Degrees Webpage to download the complete 4 year Plan handouts: es.ucsb.edu/degrees
 Δ = a required course offered once a year and during that specific quarter (not including Summer).

	FALL qtr.	WINTER Qtr.	SPRING Qtr.	SUMMER SESSION(S)	
YEAR 1	ES 1 Δ Math 34A or 3A or 2A	ES 3 Δ Math 34B, 3B, 2B or ES 25 (sp)	ES 2 Δ Econ 1 or 2 or 9 or ES 30 (fall)	1 st (Optional) 2 nd	
	<<< Choose one course from Culture & Society list: Anth 2, Geog 5, Global St. 1, 2 etc.... >>>				
YEAR 2	ES 60 Δ or MCDB 1A/1LL Δ + EEMB 2 in Winter qtr. Any one from: Geog 3, 4 or Earth 2, 4, 20 ES 190 (1 unit F or S)	Chem 1A/2AL or ES 15A Δ << ES 40 (fall, wt, or possible sp) >> <<< Choose one course from Ethics & Justice list: ES 70, Biol 4, Femst 50, Ling 50, Phil 4 or Pol 1 >>> <<< Choose one course from Policy & Politics list: Hist 5, 7, Poli Sci 6, 7, 12 >>>	Chem 1B or ES 15B/BL Δ Pstat 5A or 5LS or Econ 5		
YEAR 3	One course from Area A's ES Cluster #1, #2, or #3 ES Elective #1	One course from Area A's ES Cluster #1, #2, or #3 ES Elective #2 Outside Concentration #1	One course from Area A's ES Cluster #1, #2, or #3 ES Elective #3 Outside Concentration #2		
YEAR 4	Outside Concentration #3 ES Elective #4 ES Elective #5 (Senior Thesis Optional) Δ	Outside Concentration #4 ES Elective #6	ES Elective #7		

	FALL qtr.	WINTER Qtr.	SPRING Qtr.	SUMMER SESSION(S)	
YEAR 1	ES 1 Δ Chem 1A Math 3A or 2A Δ	ES 3 Δ Chem 1B/2AL Math 3B or 2B Δ	ES 2 Δ Chem 1C/2BL << One course from Ethics & Justice: ES 70, Biol 4, Ling 50, Femst 50, Phil 4 or Pol 1 >>	1 st (Optional) 2 nd	
YEAR 2	MCDB (bio) 1A Δ Pstat 5A or 5LS or Econ 5 ES 190 (1 unit any qtr.)	MCDB (bio) 1B Δ + 1LL Δ EEMB (bio) 2 Δ Any one from: Geog 3, 4 or Earth 2, 4, 20 <<< Choose one course from Culture, Society, Policy & Politics list: Anth 2, Geog 5, 7, etc.... >>>	EEMB (bio) 3 Δ + 2LL Δ <<< ES 40 (fall, wt, or sp) >>> Econ 1 or 2 or 9 or ES 30 (fall)		
YEAR 3	Physics 6A/AL or 7A One course from Area A's ES Cluster #1, #2, or #3 ES Elective #1	Physics 6B/BL or 7B One course from Area A's ES Cluster #1, #2, or #3 ES Elective #2	Physics 6C/CL or 7C/CL One course from Area A's ES Cluster #1, #2, or #3 Outside Concentration #1 <<< One U.D. stats/modeling course: ES 164, 193DS, Geog 172, EEMB 146, 179, Pstat 120A >>>		
YEAR 4	Outside Concentration #2 ES Elective #3 ES Elective #4 (Sr. Thesis Optional) Δ	Outside Concentration #3 ES Elective #5 ES Elective #6	Outside Concentration #4 ES Elective #7 ES Elective #8		

Environmental Studies, UCSB

updated on: 10/14/25

2025-26 Proposed Schedule of Courses

WARNING! This list of courses is the most up-to-date for the coming year - but not set in stone!

Schedule changes may still occur prior to the start of each quarter. See an ES Advisor or visit the ES Courses webpage for regular updates and list of course descriptions and prerequisites (www.es.ucsb.edu/courses).

FALL '25	#	Course Title	ES Requirement
Alagona	1	Introduction to Environmental Studies	
Pede	30	Introduction to Environmental Economics	
Martin	40	Critical Thinking & Evidence-Based Reasoning	
Murray	60	Applied Ecology	
Stratton	95	Intro. Ecological Restoration Field Skills	
Dowdy	101	Ecosystem Services and Biodiversity	A-1 or B-1
Gray	102	Qualitative Methods in Env. Studies	
Miller	111	CA Channel Islands	B-1
Holzer	114A	Intro to Soil Science	B-1
Shamander	116	Sustainable Communities	A-3
Pulver	117	Transition to a Low Carbon Society	A-2
Pye	129	Ecopsychology	
Maldonado	130A	Un-naturalizing Disasters, Risk, Vulnerability, Resilience	
McCauley	133	Biodiversity & Conservation Biology	B-1
Carlisle	148	Transforming Food Systems	B-1
Hoelle	151	Environmental Anthropology	
Sweeney	154	Intro to Environmental GIS	B-1
New Schmitt	156	Pathways to Sustainable Water Infrastructure	New A-3 or B-1
Williams	159	Public Lands Law & Policy	
Athanasoulis	160	Literature of Animals, Food, and the Environment	
Stone	165A	Environmental Impact Analysis	
Clark	168	Aquatic Transport of Pollutants	B-1
Schmel	171	Ecosystem Processes	B-1
Johnson	172	Waste Management	
Mildenberger	177	Comparative Environmental Politics	
Callahan	178	Politics of the Environment	
Pellow	181	Power, Justice and the Environment	
Kayson	187	Intro to Green Buildings	
Zimmerman	190	Current Topics in Env. (Env. Careers - 1 unit)	
Russel	191	Nature and Science Education Practicum	
Zollet	195A	Env. Leadership Incubator (same students - 3 qtrs)	
Martin	197	ES Senior Thesis	B-1
WINTER '26	#	Course Title	ES Requirement
Pellow	3	Intro. Social & Cultural Environments	
Holzer	15A	Environmental Chemistry 1	
Martin	40	Critical Thinking & Evidence-Based Reasoning	
Sideris	70	Intro to Environmental Ethics	
Stratton	95	Intro. Ecological Restoration Field Skills	
Selmann	96	Intro. Curatorial Natural History Collections	
New Shamander	104	Environmental Health, Inequality, and Justice	
Martin	108O	History of Oceans	
Alagona	108W	Wildlife in America	
Geog Assoc	111	CA Channel Islands	B-1
Holzer	114B	Advanced Soil Science	B-1
Brown	118	Industrial Ecology	
Krop	125A	Introduction to Environmental Law	
Maldonado	130B	Global Environmental Tourism	

OVER >>>

Four-year plans

- All three degrees take a lot of units
- You don't have to follow the plan exactly
- Δ marks required courses offered once a year

Proposed course schedule

- The most current list for 2026-27, but not set in stone
- Shows the quarter each course is offered and which requirements it meets

Full plans with GE: es.ucsb.edu/degrees

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Making it your own

Flexibility in the major means lots of opportunities



Flexibility in the major = lots of opportunities



Study abroad

In 2024-25, 100+ ES students studied in 21 countries through UCEAP and other programs



Field studies programs

Wildlands Studies (38 students in 2024-25), School for Field Studies, and more



Research with faculty

Independent study and research assistant positions



Academic internships

Local, statewide, national, and international



Double majors and minors

More than a third of ES majors add one



Field courses

Hands-on learning outdoors, from restoration to field ecology

ENVS 190: open to all majors



Current Topics in Environmental Careers

ENVS 190 | 1 unit | P/NP

Required for ES majors (Area A), and welcome to anyone interested in environmental careers.



Open to every major

You don't need to be in ES. Bring a friend who's curious about environmental work.



Hear from professionals

A colloquium on current environmental topics and career paths.



Offered fall and winter

The fall section focuses on environmental careers. Check the course schedule in your packet.

Common questions



Is there an ES minor?

No, but more than a third of ES majors graduate with a double major or official minor, and you can build your own unofficial concentration with ES electives.



How do I choose between the B.A. and B.S.?

Don't stress. Plenty of courses overlap, and starting on the B.S. path keeps both options open.



How do I map out my four years?

Start with the ES four-year plans (with GEs) at es.ucsb.edu/degrees, then bring questions to advising.



How and when do I declare?

It's all online at es.ucsb.edu/declaring-major. You only need to complete one of ENVS 1, 2, 3, or 40, not the entire preparation.

A few tips before you go



Thinking about a double major or minor?

Check with that department's advisors, too.



Study abroad and field studies are very popular

They can apply to Areas B and C, but plan ahead.



Wildlands Studies info session

This Thursday, Oct 8, 4:00 pm, Bren 4316



Eco Expo, hosted by CUEL

Mon, Oct 12, 11:30 am-1:30 pm, CMPS Lawn (free burritos!)



ES + Study Abroad info session

Tue, Oct 13, 4:00-5:30 pm, Bren 4016



Read your ESmail messages!

Internships, senior thesis, ELI, ES scholarships, CUEL events, and more are announced there.

ES Academic Advising



Email questions

advising@es.ucsb.edu



Zoom appointments

es.ucsb.edu/advising



In person

Bren Hall 4312



Advising FAQ and Freshman Toolkit

Linked from the advising page

UC **SANTA BARBARA**
Environmental Studies Program

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ES Academic Advising Overview

Environmental Studies offers advising to current and prospective students. Advising is one way to make the most of your university experience. Please don't be afraid to ask questions, seek advice, and make decisions that work best for you.

- If you need advising for the Environmental Studies or Hydrological Sciences majors, first try our [Frequently Asked Questions \(FAQ\) page](#) for answers to many common questions. For first-year students, check out our [ES Freshman Toolkit video](#) for additional helpful tips compiled by the ES Advisors.
- We also **offer Drop-in Advising** in-person in Bren Hall, Rm 4312, Monday, Wednesday and Thursday from 1:00-3:00 pm. Just come by and we will help you on a first come-first serve basis.
- Or, you can **schedule a remote Zoom appointment** with an advisor using the [Schedule Appointment](#) link below. Appointments are generally available M-F 9:00-11:45 am and 1:00-4:00 pm.
- Students are also welcome to email their questions to advising@es.ucsb.edu and we will do our best to respond as soon as possible (normally 1-2 business days).

[Schedule an Appointment](#)

Academic Advisor



Picabo Barrington
Bren Hall 4312A (Floor 4L)
(805) 893-2283
advising@es.ucsb.edu
Drop-in Office Hours:
Mon., Wed., & Thur. 1:00-3:00
or [Book a Zoom appointment](#)

Academic Advisor & Student Services Manager

Your questions?

Thank you for coming!

advising@es.ucsb.edu
es.ucsb.edu/advising