

BACHELOR OF Science (B.S.) WORKSHEET 2022-23

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

Env. St. 1 (F qtr)*
Env. St. 2 (W qtr)*
Env. St. 3 (S qtr)*

**Culture, Society,
Policy & Politics:**

Anthro. 2 or Geog. 5
or Global St. 1 or 2
or Hist. 5 or 7 or
Poli. Sci. 6 or 7 or 12
or Psychology 1
or Relig. St. 1 or 14
or Sociology 1

Chemistry 1A/AL
Chemistry 1B/BL
Chemistry 1C/CL

Math 3A or 2A
Math 3B or 2B

PSTAT 5A or 5LS
or Econ 5
(Or Comm. 87, Poli. Sci 15,
or Psych. 5 by petition)

Env. St. 40 (F, W, S qtrs)*

Physical Earth Sci.:

Earth Sci. 2 or 4
or 20 or Geog. 3 or 4

Physics 6A/AL
Physics 6B/BL
Physics 6C/CL

MCDB 1A (F, Sum qtrs)*
MCDB 1B (W, Sum qtrs)*
MCDB 1LL (W, Sum qtrs)*
EEMB 2 (W, Sum qtrs)*
EEMB 2LL (S, F qtrs)*
EEMB 3 (S, F qtrs)*

Ethics & Justice:

Env. St. 70 or Black
St. 4 or Fem. St. 50
or Linguistics 50 or
Phil. 4 or Pol. Sci. 1

Economics:

Env. St. 30 (F qtr)* or
Economics 1 or 2 or 9

----- OR -----
Physics 1 (Math 4A
Physics 2 required)
Physics 3/3L

**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 (3rd and 4th years)

A. ES REQUIRED COURSES (17-18 UNITS)

Environmental Studies 190 (1 unit, P/NP, offered F, W, S qtrs)*
One course from: Env. St. 193SW; Geog. 172; EEMB 146, 179;
PSTAT 120A (Math 4A required)

And one course from each cluster of courses below:

1. **Ecosystems & Society:** Env. St. 101 or 130C or 149
2. **Energy, Water, Climate:** Env. St. 115 or 117 or 163A
3. **Built Environment:** Env. St. 116 or 135A or 155

B. ES ELECTIVES (32 UNITS)

32 total upper-division ES units from courses (#100-199) not used in Area A and **with no more** than one additional course from each cluster.

Section B-1: At least 20 units must be taken from this list: Env. St. 101, 103A^, 105, 111^, 113^, 114A-B^, 119^, 120A, 120B, 121, 128^, 130C^, 133^, 134, 141, 142, 144^, 145 (new), 147, 148 (193TF), 149^, 152^, 154, 162^, 163A, 166DC, 167^, 168^, 169^, 171^, 193CP, 193CS, 193EB^, 193FE, 193ST, 193SW, 197. ^ denotes cross-listed course w/ another dept.

Courses **Units**

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |

Section B-2: Any 12 UD units of ES courses (#100-199) excluding units used to fulfill Area A or the first 20 units applying to section B-1.

- | | |
|----------|-------|
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |

No more than 8 units combined and 4 units each from Env. St. 192, 194, 199, and 199RA may apply. **Total = 32**

- | | |
|----------|-------|
| 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** 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 the 16 units don't overlap with Areas A or B. Spatial Studies minors must consult an ES Advisor first to assure proper STEM course selection.

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 *Request to Petition Degree Requirements* to the ES Program justifying how proposed courses relate to each other and the desired emphasis. Petition forms are available from the ES website: <https://es.ucsb.edu/degreerequirements>

A list of some example environmental emphases/concentrations one might use is available from the ES website at: <https://www.es.ucsb.edu/forms>

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 emphasis. A *Request to Petition Degree Requirements* must be approved by Environmental Studies before units will be accepted. See an ES Academic Advisor or the ES website for additional info: <https://www.es.ucsb.edu/advising>

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

>>> See the other side for more info <<<

The Environmental Studies Program (ES) at UCSB offers three undergraduate degrees. The two majors in Environmental Studies (B.A. & B.S.) addresses the interdisciplinary relationships needed to understand today's complex environmental problems by focusing on understanding the interrelationships between the humanities, social sciences, and natural and physical science disciplines. Offering two degree options affords students the opportunity to choose a major that will most appropriately fit their individual environmental interests and goals. A third major in Hydrological Sciences and Policy (B.S.) provides students with the scientific training and a fundamental background in policy needed to understand and solve complex hydrologic (water related) problems at local, regional, and global levels.

The Bachelor of Science Degree (B.S.) in Environmental Studies, shown on the reverse-side, is designed to train students to become proficient in the natural and physical sciences while also being aware how social and cultural influences play a part in solving today's complex environmental problems. For the lower-division Preparation in the Major students take a heavy load of natural and physical science courses to build a solid STEM foundation while also enrolling in a variety of introductory social science and humanities courses. At the upper-division level students take a few required courses from three clusters of ES courses as well as an additional statistics or modeling course. They then form a specific or multidisciplinary environmental emphasis by completing 32 environmental elective units (from over 75 classes), 20 of which must be from STEM fields. The last part of the major is a 16 unit upper-division outside concentration where students complete courses from one or more UCSB science departments relating to their emphasis. Approximately one-third of all environmental studies majors elect to use this section to complete a double major or minor and another quarter participate in a environmental field studies or study abroad program. Learn more about the different ES degrees offered and download worksheets offering a *Four Year Plan to Complete the Major* and *How to Create One's Own Personalized Emphasis Within the ES Major* at www.es.ucsb.edu/degrees

Declaring The Environmental Studies Major: Environmental Studies does not have a "pre-major" or require one to complete the entire Preparation for the Major before they can declare. However, we do hope one feels confident ES is the right major for them and ask students complete at least one of the lower-division introductory ES courses (ENV S 1, 2, or 3) and a minimum of two other lower-division Preparation for the Major courses before submitting their change of major paperwork. Exceptions for those who are currently enrolled in one of the above courses or for other extreme circumstances will be considered. There's no minimum GPA requirement to declare, but a one should be in good academic standing (overall GPA of 2.0 or higher).

The process for declaring starts by visiting the following webpage: www.es.ucsb.edu/declaring-major You will be asked to select and review the appropriate major/degree for you and complete the *College Change of Major Petition* online via DocuSign. Those declaring a double major will follow a slightly different procedure and must also complete the *Memo of Understanding for Double Majors*. You will save the completed forms and submit them electronically following the instructions provided on the webpage and DocuSign.

The change of major process takes on average three to five weeks to be completed. An email will be sent to you once Environmental Studies has processed the necessary forms. They are then forwarded them to the College or Registrar for final review. You will need to regularly check GOLD to see when your change of major has been finalized.

If you have any questions about how to declare the ES major contact an Environmental Studies Academic Advisor here: www.es.ucsb.edu/advising or by email at: advising@es.ucsb.edu

DON'T BE THE LAST TO KNOW - Subscribe to *ESmail*, the ES Program's Student Email Newsletter Service right away! If you're a ES major, or considering becoming one, you should immediately subscribe to the ES Program's *ESmail* listserv (use your UCSB or any outside email address). Managed by the Academic Advisor, this free email service is open to anyone interested in staying up-to-date on what's going on within Environmental Studies. One to two email messages are posted each week containing important information such as: upcoming campus deadlines, schedule of classes updates, scholarship opportunities, internship and job listings, special environmental events and lectures, and much more. One may unsubscribe from the service at anytime. **To subscribe visit:** www.es.ucsb.edu/mailing-lists and follow the posted directions.