B.S. EARTH SYSTEM SCIENCE DEGREE REQUIREMENTS

Basic Requirements:

A. One course from the following:

ESS 1  ___  3  ___  5  ___

All of the following courses:

ESS 51  ___  53  ___  55  ___

ESS 114 OR 115  ___  116  ___  192  ___

Math 2A  ___  2B  ___  Stats 7  ___

Chem 1A  ___  1B  ___  1C  ___  1L  ___  1LD  ___  OR

Chem H2A  ___  H2B  ___  H2C  ___  H2LA  ___  H2LB  ___  H2LC  ___

Physics 3A  ___  3B  ___  3C  ___  3LB  ___  3LC  ___  OR

Physics 7C  ___  7E  ___  7LC  ___

B. Additional Electives (seven courses from the following; at least 4 must be ESS courses)

<table>
<thead>
<tr>
<th>(ESS)</th>
<th>(ESS)</th>
<th>(ESS)</th>
<th>(ESS)</th>
</tr>
</thead>
</table>

Earth System Science: Any four-unit upper-division course (100-199) except 114, 115, 116, 198 or H198;
(ESS 199/H199 may be counted only once)
Chemistry: 51A, 51B/LB, 51C/LC, 141
Physics: 115A
Mathematics: 2D, 3A, 3D, 105A, 112A, 115
Mechanical and Aerospace Engineering (MAE): 91, 130A, 164
Civil and Environmental Engineering (CEE): 162, 171, 172, 176, 178
Biological Sciences: 93, 94, 98, D105, E106, E120, E150, E179, E179L, E189
Public Health: 161, 163, 167, 171, 172, 173
Urban Planning and Public Policy (UPPP): 133, 139, 145
Computing Skills (one of the following may be counted toward the degree): ICS 31, EECS10, MAE 10,
Physics 53, or another approved programming course

Optional Specialization in Atmospheric Science
(Courses may be used to fulfill electives in section B, where overlap exists.)

Three courses from the following: ESS 122  ___  124  ___  142  ___  198/H198/199/H199A-B-C  ___
(ESS 198/199/199/H199A-B-C must be focused on atmospheric research and may be counted only once)
AND One advanced tools course selected from the following: ESS 118  ___  134  ___  138  ___

Optional Specialization in Oceanography
(Courses may be used to fulfill electives in section B, where overlap exists.)

Three courses from the following: ESS 130  ___  144  ___  148  ___  171  ___  198/H198/199/H199A-B-C  ___
(ESS 198/199/199/H199A-B-C must be focused on oceanographic research and may be counted only once)
AND One advanced tools course selected from the following: ESS 118  ___  138  ___

Optional Specialization in Hydrology and Terrestrial Ecosystems
(Courses may be used to fulfill electives in section B, where overlap exists.)

Three courses from the following: ESS 132  ___  133 OR 140  ___  156  ___  198/H198/199/H199A-B-C  ___
(ESS 198/199/199/H199A-B-C must be focused on terrestrial research and may be counted only once)
AND One advanced tools course selected from the following: ESS 118  ___  134  ___  138  ___

Optional Concentration in Geosciences Education with Secondary Teaching Certification
This concentration allows students pursuing the B.S. in Earth System Science to earn a bachelor’s degree and complete the required coursework and field experience for a California Preliminary Single Subject Teaching Credential at the same time. In addition to the major requirements listed above, all of the following must be completed:

ESS 7 OR 140  ___; Physics 20A OR 20B  ___; Physical Sciences 5  ___  105  ___;
Chemistry/Physics 193  ___; LPS 60
Education 55  ___  109  ___  143AW  ___  143BW  ___  148  ___ and two quarters of Education 158  ___

Effective Fall 2021
## General Education (GE) Requirements

### I. Writing (2 lower-division, 1 upper-division)
1. 
2. 
3. 

### II. Science & Technology (any 3)
1. 
2. 
3. 

### III. Social & Behavioral Sciences (any 3)
1. 
2. 
3. 

### IV. Arts & Humanities (any 3)
1. 
2. 
3. 

### V. Quantitative, Symbolic and Computational Reasoning
- Va. 
- Vb. 
- Va or Vb.

### VI. Language Other than English
- 1C or equivalent

### VII. Multicultural Studies (one course)

### VIII. International/Global Issues (one course)

---

### Fall
- Math 2A
- Chem 1A
- ESS 1
- ESS 45
- ESS 51
- Physics 3A
- Chem 1LD
- ESS Elective
- Approved Elective
- Elective

### Winter
- Math 2B
- Chem 1B
- GEN ED
- GEN ED
- ESS 53
- Physics 3B, 3LB
- GEN ED
- ESS Elective
- GEN ED
- Elective

### Spring
- Stats 7
- Chem 1C, 1LC
- GEN ED
- GEN ED
- ESS 55
- Physics 3C, 3LC
- GEN ED
- Elective
- Elective

(sample program, your schedule may differ greatly)

ESS Department:
- http://www.ess.uci.edu

Research Opportunities:
- http://www.ess.uci.edu/undergradrespro

Course offerings:
- http://www.ess.uci.edu/academics/courses/
course.descriptions.php

For enrollment questions:
- http://www.ess.uci.edu/academics/undergraduate

---

### UNIVERSITY REQUIREMENTS:
- English (UC ELW) ______
- American History ______
- Institutions ______

### RESIDENCY REQUIREMENTS:
- 36 of the final 45 units must be completed at UCI ______

### UNIT REQUIREMENT:
- 180 units are required for graduation ______

### GPA REQUIREMENT AND STANDING:
- Overall GPA of 2.0 ______
- GPA in major at least a 2.0 ______
- GPA in upper-division major classes at least a 2.0 ______

### TRANSFER STUDENTS:
- Partial IGETC ______
- Full IGETC ______

cert received? yes ____ no ____

---

[Student Affairs (Academic Counseling): http://ps.uci.edu/~stuaff](http://ps.uci.edu/~stuaff)