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____; 1LC____ 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)

_____ _____ _____ _____ _____ _____ _____
(ESS) (ESS) (ESS) (ESS)

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

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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/H198/199/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/H198/199/ 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/H198/199/ 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 course work 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

UCI SCHOOL OF PHYSICAL SCIENCES
UNIVERSITY / GENERAL EDUCATION REQUIREMENTS

NAME_____ **STUDENT ID**_____

Other Colleges_____

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 ☐

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	Winter	Spring
Freshman		
Math 2A	Math 2B	Stats 7
Chem 1A	Chem 1B	Chem 1C, 1LC
ESS 1	GEN ED	GEN ED
ESS 45	GEN ED	GEN ED
Sophomore		
ESS 51	ESS 53	ESS 55
Physics 3A	Physics 3B, 3LB	Physics 3C, 3LC
Chem 1LD	GEN ED	GEN ED
GEN ED	GEN ED	GEN ED
Junior		
ESS 114	ESS 116	ESS Elective
ESS 192	Approved Elective	ESS Elective
GEN ED/ Elective	GEN ED/ Elective	Elective
Elective	Elective	Elective
Senior		
ESS Elective	ESS Elective	ESS Elective
Approved Elective	Elective	Elective
Elective	Elective	Elective
Elective	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