

## 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 \_\_\_\_

**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	
<b>I. Writing (2 lower-division, 1 upper-division)</b>	<input type="checkbox"/>
1.	
2.	
3.	
<b>II. Science &amp; Technology (any 3)</b>	<input type="checkbox"/>
1.	
2.	
3.	
<b>III. Social &amp; Behavioral Sciences (any 3)</b>	<input type="checkbox"/>
1.	
2.	
3.	
<b>IV. Arts &amp; Humanities (any 3)</b>	<input type="checkbox"/>
1.	
2.	
3.	
<b>V. Quantitative, Symbolic and Computational Reasoning</b>	<input type="checkbox"/>
Va.	
Vb.	
Va or Vb.	
<b>VI. Language Other than English</b>	<input type="checkbox"/>
1C or equivalent	
<b>VII. Multicultural Studies (one course)</b>	<input type="checkbox"/>
<b>VIII. International/Global Issues (one course)</b>	<input type="checkbox"/>

	Fall	Winter	Spring
<b>Freshman</b>			
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
<b>Sophomore</b>			
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
<b>Junior</b>			
ESS 114		ESS 116	ESS Elective
ESS 192		Approved Elective	ESS Elective
GEN ED/ Elective		GEN ED/ Elective	Elective
Elective		Elective	Elective
<b>Senior</b>			
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>