

**Requirements for the minor in  
SCIENCE AND MATHEMATICS EDUCATION  
SECONDARY (GRADES 7-12) TRACK, 2022-2023**

The Science and Mathematics Education Minor, Elementary Track consists of 26 upper-division units, with courses distributed according to the listing below. Students may be awarded the minor using only one track. Courses may be taken in any order. All courses applied to the minor must be completed with a letter grade 'C' or higher, and no more than 5 units may be graded as Pass/No Pass (P/NP). Please note unit variability between courses as this may impact your minor track unit total. **Many of the required courses for this minor track have prerequisites.**

**UPPER-DIVISION**

23 UD units are required, distributed as follows:

I. California Teach

One course from the following

ED 130, 131 ..... 4 \_\_\_\_\_

II. Education Core

Three courses from the following

ED 111, 123, 125, 126, 145, 150 ..... 12 \_\_\_\_\_

III. Disciplinary

One course from the following

ED 132, 133, 134, 136, 137\*

ENV S 127A, 136 (also cross-listed as ED 136), 149 (also cross-listed as GEOG 161)

EEMB 127, MATH 181A (also cross-listed as ED 134), PHYS 120 ..... 3-4 \_\_\_\_\_

IV. Disciplinary Practicum

One course from the following

CHEM 102, ED 135

ENV S 127B, 166FP (also cross-listed as GEOG 171FP), 191

EEMB 182\*, MATH 181B (also cross-listed as ED 135), PHYS 160J\* ..... 3-5 \_\_\_\_\_

\*Students selecting these courses should note the minor track unit total of 23 when choosing the other disciplinary course.

**Substitutions Policy:** Community College and other lower-division courses may NOT be used as substitution for any minor course. Six upper-division quarter units may be transferred from a college or university other than UCSB if the minor advisor approves the units.

Students must consult the *General Catalog* for prerequisites to required courses.

The following conditions must also be met for official recognition of the minor:

- The sponsoring department reports completion of the minor prior to the posting of the degree.
- At least 23 upper-division quarter units are completed for the minor. (Waivers cannot reduce the requirement below this number.)
- At least 17 of the upper-division units for the minor are completed while in residence at UCSB.
- No more than 5 upper-division units overlap between this minor and the upper-division portion of the major(s) or other minor(s). If overlap is greater with the major(s), completion of the minor will not be formally recognized; if overlap with other minor(s) is greater, only the first minor reported will be recognized.