School of Earth and Space Exploration
Arizona State University

Catalog Year: 2024-2025

The BS degree in Earth and Environmental Sciences requires the following major courses (62 credits):

Core required courses (26 credits)

GLG 108 Water Planet (4)
GLG 110 Dangerous World (3) and GLG 111 Dangerous World Laboratory (1)
SES 220 Biology of a Changing Earth (3)
SES 225 Global Biogeochemical Cycles (3)
GLG 305 Dynamic Earth (3)
GLG 325 Oceanography (3)
GLG 327 Earth's Critical Zone (3)
GLG 464 Solving Environmental Problems (3)

Related Area requirements (24 credits minimum)

Chemistry (complete all):

- CHM 113 General Chemistry I (4)
- CHM 116 General Chemistry II (4)
- CHM 231 Elementary Organic Chemistry (3) **or** CHM 233 General Organic Chemistry I (3)
- ERM 406 (3) **or** CHM 302 (3) Environmental Chemistry

Math (choose one):

- MAT 251 Calculus for Life Sciences (3)
- MAT 265 Calculus for Engineers I (3)
- MAT 270 Calculus with Analytic Geometry I (4)

Statistics (choose one):

- STP 231 Statistics for Life Science (3)
- GIS 270 Statistics for Geography and Planning (3)

Physics (complete 4 credits):

- PHY 101 Introduction to Physics (4)
- PHY 111 General Physics (3) **and** PHY 113 General Physics Laboratory (1)

Upper Division Electives (12 credits)

- Students must take at least 4 upper division elective classes (3 credits each).
- At least 2 of the 4 courses (6 credits) need to be 400-level classes.
- The List of Pre-approved Upper-Division Electives is available on the Undergraduate Forms and Resources page of the SESE website (click "Major Course Planning Sheets" and scroll down to the section for the BS in Earth & Environmental Sciences).

Important Notes:

- Students must receive a grade of "C" or better in each of the courses listed above for them to count toward the major.
- Your major map represents the official catalog for your degree plan.
- Substitutions for any of the requirements above must be pre-approved by a SESE advisor and/or the SESE Undergraduate Committee. Students must notify their advisor if substitutions are not noted on the DARS correctly.
- Students must also complete two Science & Society courses as part of the BS degree. One must be Upper Division. The list of approved courses can be found on the DARS report.

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Updated November 8, 2024 by DWinhold