

The BS degree in Earth and Space Exploration with a concentration in Geological Sciences requires the following core courses (24 credits):

¹ SES 121 Earth, Solar Sys, & Univ I (3)	GLG 310 Structural Geology (3)
¹ SES 122 Earth, Solar Sys, & Univ II (3)	GLG 321 Mineralogy (3)
¹ SES 123 Earth, Solar Sys, & Univ Lab I (1)	SES 401 SESE Colloquium (1)
¹ SES 124 Earth, Solar Sys, & Univ Lab II (1)	GLG 451 Field Geology I (3)
SES 130 Coding for Exploration (3)	GLG 452 Field Geology II (3)

¹For Arizona community college students, the full sequence of GLG 101-104 may be substituted for SES 121-124

In addition, TWO of the following Branch Courses must be taken (6 credits):

GLG 362 Geomorphology (3)	
GLG 418 Geophysics (3)	GLG 435 Sedimentology (3)
GLG 424 Petrology (3)	GLG 471 Hydrology (3)
GLG 430 Paleontology (3)	GLG 481 Geochemistry (3)

Plus THREE Upper-division GLG Elective courses (9 credits)*:

GLG Elective (3)
GLG Elective (3)
GLG Elective (3)

*Upper-division courses are classes taught at the 300 or 400 level.

Required courses in other related fields include the following (25 credits):

CHM 113 General Chemistry I SQ (4)
CHM 116 General Chemistry II SQ (4)
MAT 265 Calculus for Engineers I (3) or MAT 270 Calculus w/Analytic Geometry I (4)
MAT 266 Calculus for Engineers II (3) or MAT 271 Calculus w/Analytic Geometry II (4)
MAT 267 Calculus for Engineers III (3) or MAT 272 Calculus w/Analytic Geometry III (4)
PHY 121 University Physics I: Mechanics (3)
PHY 122 University Physics Laboratory I (1)
PHY 131 University Physics II: Electricity and Magnetism (3)
PHY 132 University Physics Laboratory II (1)

IMPORTANT NOTES:

- **Students must receive C's or better in all of the above courses in order for them to count toward the major.**
- **The major map for the student's catalog year represents the official catalog for the degree.**
- **Substitutions for any of the requirements above must be approved by a SESE advisor and the student must notify the advisor if substitutions or other requirements are not showing up on the DARS correctly.**