School of Earth and Space Exploration
Arizona State University

Catalog Year: 2025-2026

Requirements for the Certificate in Field Geology

The certificate requires a minimum of 15 credit hours. At least 12 credit hours must be completed in upper-division course work and at least 9 credit hours must be completed at ASU. At least six upper-division hours in the certificate must be completed in courses offered by the College of Liberal Arts and Sciences. A grade of "C" (2.00 on a 4.00 scale) or higher is required for each course used to fulfill a certificate requirement.

Additional prerequisite courses may be needed in order to complete the requirements of this certificate.

Required Courses – 9 credit hours

GLG 310: Structural Geology (3)
GLG 452: Field Geology II (L) (3)
GLG 455: Advanced Field Geology (3)

Electives (choose two) – 6 credit hours

GLG 362: Geomorphology (3)
GLG 420: Volcanology (3)
GLG 424: Petrology (3)
GLG 435: Sedimentology and Stratigraphy (3)
GLG 489: Field Geochemistry (L) (3)

Enrollment Requirements

A student pursuing an undergraduate certificate must be enrolled as a degree-seeking student at ASU. Undergraduate certificates are not awarded prior to the award of an undergraduate degree. A student already holding an undergraduate degree may pursue an undergraduate certificate as a nondegree-seeking graduate student.

Additional enrollment requirements include completion of the following courses or their equivalencies with a "C" or better (scale is 4.00 = "A"):

- GLG 101 Introduction to Geology I (3) and GLG 103 Introduction to Geology I Lab (1) OR
  SES 121 Earth, Solar System and Universe (3) and SES 123 Earth, Solar System and Universe Lab (1)
- GLG 321 Mineralogy (3)*
- GLG 451 Field Geology I (3)

***NOTE:** Students must also complete MAT 170: Precalculus and CHM 113: General Chemistry I, with a grade of C or better, as pre-requisites for GLG 321

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Field Geology Certificate Course Planning Sheet

Prefix	Course Title	Hours	Pre-requisites	Offered
GLG 310	Structural Geology	3	GLG 101 or SES 121 with C or better; MAT 170, 171, 210, 251, 265, or 270 with C or better	F
GLG 452	Field Geology II (L)	3	All with C or better: ENG 101, 105, or 107; GLG 310; GLG 321; GLG 451	SS
GLG 455	Advanced Field Geology	3	GLG 310 with C or better; Pre- or co-requisite(s): GLG 451 with C or better if completed	F
Elective courses, choose 2 from:				
GLG 362	Geomorphology	3	GLG 101, GLG 110, or SES 121 with C or better; MAT 170, 210, 265 or 270 with C or better	F
GLG 420	Volcanology	3	Engineering, Math or Science major; Minimum Junior standing	F**
GLG 424	Petrology	3	GLG 321 with C or better	S
GLG 435	Sedimentology	3	GLG 102 or SES 122 with C or better	S
GLG 489	Field Geochemistry (L)	3	CHM 302 or GLG 321 or GLG 481 with C or better; ENG 101, 105, or 107 with C or better; Credit is allowed for only CHM 489 or GLG 489	S**
Additional pre-requisite courses (students need either GLG 101/103 OR SES 121/123, not both)				
GLG 101	Introduction to Geology I	3		F/S/SS
GLG 103	Introduction to Geology Lab I	1		F/S/SS
SES 121	Earth, Solar System and Universe	3		F
SES 123	Earth, Solar System and Universe Lab	1	Pre- or co-requisite(s): SES 121 with C or better if completed	F
GLG 321	Mineralogy	3	CHM 113 (or both CHM 111 and 117 or 114) with C or better; MAT 170, 210, 265 or 270 with C or better	F
GLG 451	Field Geology I (L)	3	ENG 101, 105, or 107 with C or better; GLG 310 with C or better; GLG 321 with C or better	S

F=Fall; S=Spring; SS=Summer Session
**Not offered in a regular pattern

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Updated 3/24/25 by KWallace