Field Geology, Certificate

LAFDGCERT

Enhance your prospects for geology-related careers, internships or graduate school opportunities with a foundation in field-based geologic skills.

Description

The certificate program in field geology prepares undergraduate students with the core knowledge base and field experience to identify, describe, collect and interpret a variety of types of geological field data.

At a glance

- **College/School:** The College of Liberal Arts and Sciences
- **Location:** Tempe

Program requirements

2024 - 2025 Certificate Map
Certificate Map (Archives)

The certificate requires a minimum of 15 credit hours. At least 12 credit hours must be completed in upper-division coursework and at least nine 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.

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)

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

Courses not completed at ASU must be approved for use in this certificate.

Enrollment requirements

Students must complete the following prerequisite courses or their equivalencies with a "C" or better (scale is 4.00 = "A") to pursue the field geology certificate:

GLG 101 Introduction to Geology I (Physical) and GLG 103 Introduction to Geology I Lab, or
SES 121 Earth, Solar System and Universe and SES 123 Earth, Solar System and Universe Lab, and GLG 321 Mineralogy and GLG 451 Field Geology I

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.

Career opportunities

Students who complete this undergraduate certificate possess a strong field-based background, which is required for many entry-level jobs with resource mining, geotechnical and environmental consulting companies. It is also a strong asset for acceptance into many graduate research programs in the earth sciences.

Career opportunities include:

- geologic materials technician
- geologic sample test technician
- geoscientist
- geotechnician
- mining and geological engineer

Sample career settings include:

- environmental industry
- geotechnical industry

- mining and petroleum industries

Contact information

School of Earth and Space Exploration | ISTB4 795
sese-advising@asu.edu | 480-965-5081