

2024 - 2025 Certificate Map

Planetary Science

School/College: [The College of Liberal Arts and Sciences](#)

Location: [Tempe](#)

Program Requirements

The certificate requires a minimum of 18 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 (9-10 credit hours) -- 9 credit hours

[AST 111: Introduction to Solar Systems Astronomy \(SCIT OR SQ\)](#) or [GLG 101: Introduction to Geology I \(Physical\) \(SCIT OR SQ\)](#) or [SES 100: Introduction to Exploration \(QTRS OR CS\)](#) or [SES 106: Habitable Worlds \(SCIT OR SQ\)](#) or [SES 107: A Solar System Journey \(SCIT OR SG\)](#) or [SES 121: Earth, Solar System and Universe \(SCIT OR SQ\)](#) (3-4)

[GLG 404: Fundamentals of Planetary Geology](#) (3)

[SES 421: Foundations of Planetary Science](#) (3)

Electives (choose three) -- 9 credit hours

[AST 494: Exoplanets](#) (3)

[GLG 321: Mineralogy](#) or [GLG 424: Petrology](#) (3)

[GLG 362: Geomorphology](#) (3)

[GLG 406: Geology of Mars](#) (3)

[GLG 418: Geophysics](#) or [GLG 419: Geodynamics](#) (3)

[GLG 420: Volcanology](#) or [GLG 422: Planetary Volcanology](#) (3)

[GLG 485: Meteorites and Cosmochemistry](#) (3)

[GLG 490: Remote Sensing](#) (3)

[SES 294: Introduction to Space Weather](#) (3)

[SES 311: Essentials of Astrobiology: Exploration for Life in the Universe](#) or [GLG 460: Astrobiology](#) (3)

[SES 494: Geology of Venus](#) (3)

[SES 494: Planetary Interiors](#) (3)

Students may also use other courses as electives, especially special topics courses (SES/AST/GLG

494 and/or GLG 490), chosen in consultation with an academic advisor in the School of Earth and Space Exploration.

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