Atmospheric Sciences, Certificate

LAATMSCERT

Are you fascinated by weather? The atmospheric sciences certificate program is designed to provide an extensive knowledge of the study and practice of meteorology and climatology and can make you competitive for positions in your primary field of study that are related to meteorology.

Description

Students in the atmospheric sciences certificate program gain a focused understanding of weather, climate and the various related methods of measurement and instrumentation. The coursework is designed to give students the knowledge and skillset necessary to approach meteorological-related programs through the lens of their primary field of study.

The curriculum of the certificate program is also associated with the requirements for certification as a meteorologist by the National Weather Service. Through completion of both the atmospheric sciences certificate and the BS program in geography with a concentration in meteorology-climatology, students achieve the skill sets in GIS and meteorological instrumentation required for national-level certification with the National Weather Service.

At a Glance

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

2019 - 2020 Major Map
Major Map (Archives)

Program Requirements

The certificate requires 21 credit hours with a "C" (2.00 on a 4.00 scale) or higher. At least 12 of the 21 credit hours must be upper-division courses.
Required Courses -- 18 credit hours

GPH 212: Introduction to Meteorology (SQ) (3)
GPH 213: Climate and Weather (SG) (3)
GPH 412: Physical Meteorology (3)
GPH 413: Meteorological Instruments and Measurement (3)
GPH 414: Climate Change (G) (3)
MAT 275: Modern Differential Equations (MA) (3)

Upper Division Elective Course -- 3 credit hours

GIS 311: Geographic Information Science III (CS) (4)
GIS 341: Cartography and Georepresentation (CS) (3)
GIS 351: Air Photo Interpretation (3)
GPH 314: Global Change (HU & G) (3)

Depending on a student's undergraduate program of study, prerequisite courses may be needed in order to complete the requirements of this certificate.

Enrollment Requirements

Applicants must have completed GPH 111 Introduction to Physical Geography, MAT 271 Calculus with Analytic Geometry II, and PHY 121 University Physics I: Mechanics with a grade of "C" or better (scale is 4.00 = "A").

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.

Global Opportunities

PLuS Alliance
Global Experience
Global Degree

Career Opportunities

Contact Information
Schedule an advisor appointment
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