Atmospheric Sciences, Certificate

The atmospheric sciences certificate program is designed to provide our students with extensive knowledge of the study and practice of meteorology and climatology and advanced skills, making them competitive for meteorological-related positions in their primary field of study.

Description

The certificate program coursework is associated with the requirements for certification as a meteorologist by the National Weather Service. Students will achieve skill sets in GIS and meteorological instrumentation, which is beyond the scope of study in the undergraduate program in meteorology-climatology at the School of Geographical Science and Urban Planning. Additional work will be required for national-level certification with the National Weather Service.

At a Glance

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

2018 - 2019 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 (Choose one) -- 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 (2.00 on a 4.00 scale).

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.

Contact Information

Schedule an advisor appointment
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