Astronomy Education in Mongolia

This overview is part of the project "Astronomy Education Worldwide" of the International Astronomical Union's Office of Astronomy for Education. More information: https://astro4edu.org/worldwide

Structure of education: The formal education system in Mongolia currently consists of kindergarten and preschool (up to age 7), primary education (4 years), lower secondary education (4 years), and upper secondary education (2 years). Since the 2005/06 school year, the Government extended the structure of the school education from grades 1–10 (4 years primary + 4 years lower secondary + 2 years upper secondary) to grades 1–11 (5+4+2) with the expectation of commencing a 12-year system (6+3+3) in 2008. Basic education (primary and lower secondary education) is compulsory and is funded by the state.

Education facilities: State owned schools have typical class sizes under 40 pupils with practical subjects like science, art and technical subjects having smaller classes. Private schools only have a few pupils per school year with teachers teaching groups from multiple years together. Schools have access to running water and good internet connections in Ulaanbaatar. The majority of children from families in remote rural subdistricts and districts (bag) attend district or provincial boarding schools. School buildings are generally well-maintained but it is different in the countrysides.

Governance and organisation: The Ministry of Education, Culture and Science (MECS) is the central administrative body that formulates national educational policy and sets the standards for each level of formal education. MECS also administers general provisions on education matters, teacher training, curriculum development, and state examination procedures, and is responsible for the accreditation of higher education institutions. MECS is the sole public sector provider of technical and vocational education (TVE) for the youth. MECS administers 43 higher education institutions and 42 TVE institutions. The latter institutions consist of 22 vocational education and training centers; vocational training and production centers, which offer 2.5 years of combined professional and general education based on the former Soviet system, leading to a professional certificate and a secondary education certificate; and 14 branch schools and 6 technical colleges, which provide advanced training for higher level skills up to a professional diploma or bachelors degree.

Teacher Training: After graduating from high school students who want to study at the Mongolian National University of Education admit. They study to be teachers for four years. After that, they take the certificate of a teaching license. The Mongolian National University of Education doesn't have an official astronomy teacher course.
**Astronomy in the curriculum:** There are no official astronomy curriculums in Mongolia. But the physics teacher teaches astronomy in high school and the university’s classes such as Space science, Remote sensing. Physics teachers teach basic astronomy only in elementary school. In high school, only basic physics lessons are taught. However, these classes only last a few days. Also, The Space Science Department of the National University of Mongolia organizes astronomy classes, sometimes. In doing so, they invite foreign astronomers to teach.

**Astronomy education outside the classroom:** Astronomy education outside the classroom: There are several science or astronomy outreach centres such as Khurel togoot observatory, Institute of Astronomy, Space science in Mongolian National university, Institute of Physic. Voluntary youth run astronomy education events themselves or visit outreach centres. Researchers often make an astronomical presentation to people and show them the stars by telescope in Khureltogoot observatory.

---

The International Astronomical Union’s National Astronomy Education Coordinator (NAEC) Team for Mongolia: Amarsaikhan, Altan-Ochir, Dr. Batmunkh, Dr. Batbayar

For specific information about astronomy education in Mongolia or on this document please contact the Office of Astronomy for Education (oae@astro4edu.org).