Astronomy Education in Iraq



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: Education in Iraq is controlled by the Iraqi government, through the Ministry of Education. In Iraq education is free from Primary School, all the way to Doctoral degrees. Besides public schools, private schools exist at all levels of schooling.

According to UNESCO estimates, the Education system in Iraq, prior to 1991, was one of the best in the region. Iraqi education was known to be of extremely high caliber throughout the Middle East, also the largest and preferred destination for students from the Middle East, Africa, and the Muslim world. Thousands of students went to Iraq to study and to better their lives. In addition, this decline of the higher education system was the major reason to isolate and separate the country from ongoing development in the rest of the world. However, Iraq plans to rebuild the war-torn country. There are ongoing efforts to improve the higher education sector and its rule to build the new country.

The official educational cycle in Iraq consists of:

- 1- two-year kindergarten (age 4 or 5 years)
- 2- six-year primary (age 6 years)
- 3- Three- year intermediate.
- 4- Three -year secondary.

The general and vocational education tracks are provided in the three-year upper secondary level education. Students who finish high school can join colleges, institutes and universities depend on his/her grades in the last year in the secondary school. Most schools are Arabic with other languages including Kurdish and Iraqi Turkmen also present. Most schools are non-religious.

A four-year undergraduate phase follows secondary school, the bachelor's degree is usually completed in four years of full-time study. The Master's degree requires one year of matriculation and one year of research. The Doctorate is conferred after a further three years' study beyond the Master's degree.

Education facilities: Iraq schools have typical class sizes under 45 pupils. Some small schools' class sizes reach as high as 60 students, operating in two or three shifts daily, which significantly reduces the amount of time children have to learn.

Children in Iraq are suffering from protracted periods of conflict and lack of access to quality education. Half of all school buildings in Iraq need urgent repairs. Children are dropping out of school while others are repeating grades. Across the country nearly one in five schools cannot be used because they have been destroyed, damaged. Most schools have no access to internet connections.

Governance and organisation: All public (state) and private schools are under the authority of the Ministry of Education who are also responsible for the curriculum.

Teacher Training:

Primary school teachers enroll in a five-year course after secondary intermediate school. Courses lead to a diploma. There also exist two-year training institutes to which students are admitted after completing the secondary phase. Most of these institutes have been converted into four-year teachers' colleges at the university level.

The intermediate and secondary school teachers mostly study undergraduate degrees in education at the university. The Colleges of Education functioning at different Universities in Iraq.

Astronomy in the curriculum: Unfortunately, a small percentage of astronomy knowledge is actually used in teaching at schools. Most schoolteachers have no background in astronomy or astronomy teaching there are no specialized school courses in astronomy. Instead astronomy content can be found in Environmental Studies. Astronomy is an integral part of the physics subjects in the 5th and 6th (primary school). Students are taught the cause of seasonal changes, and several characteristics of the Sun–Earth–Moon relative movements like Moon phases, Sun and Moon eclipses. Students in high school take astronomy as a part of their physics subjects in the 2nd and 3rd year (Kepler's law planetary motion, solar system planets, eclipses, celestial phenomena ...etc). There is no programme for governmental astronomy/science education or outreach programmes.

Astronomy education outside the classroom: In Baghdad, a large planetarium was built in 1979. But after 2003 was vandalized and its contents stolen. Late 1970 witnessed the construction of the Iraqi National Observatory which consisted of two optical telescopes and one big radio telescope (30-meter), unfortunately it was destroyed by the two wars.

There is also a small observatory in Iraq but unfortunately none of them are operating now. No governmental programs take place in Iraq with exception to astronomy department in Baghdad University.

The Department of Astronomy and Space at the Baghdad University is one of nine departments belonging to the Faculty of Science. It was established in 1998. The department is a unique institution for the research and education in the field astronomy and astrophysics in Iraq. Aiming to educate highly qualified astronomers working in all related fields to Physics.

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