

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
On Track - Undergraduate Space Education (3)

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ADVANCING SPACE EDUCATION FOR SUSTAINABLE DEVELOPMENT IN AZERBAIJAN:
IMPORTANCE OF GEOINFORMATION TECHNOLOGIES

Abstract

Space education is becoming more crucial due to the rapid advancement of space technology and the growing number of space missions in the whole world. Moreover, Azerbaijan makes a special effort to advance space awareness and education. Several activities are being conducted to spread awareness of space technology among decision-makers, researchers, and students. Azercosmos' close cooperation with universities, developing space-related specialties in universities, and organizing internship programs, training programs, seminars, competitions, and other events are a few of them. As it is well recognized, one of the key fields of space technology is geotechnology, which contributes to the planet's sustainable development. The major goal of this paper is to demonstrate the importance of geoinformation technologies in higher education in Azerbaijan and how these relate to aims for sustainable development goals. The government of Azerbaijan pays special attention to the development of the country's space industry through the implementation of various programs. Azercosmos successfully coordinated the State Program for the development of remote sensing of the Earth implemented during 2019-2022 in Azerbaijan. One of the significant focuses of this program was to promote scientific research and education in the field of remote sensing services to strengthen the capability of the country and achieve long-term prosperity. In recent years, Azercosmos has conducted more than 40 training on 15 different topics related to the use of satellite images and geographic information systems (GIS) with about 500 participants. In collaboration with national and international universities, we also organized more than 12 internship programs, both in-person and online. The opening of the Aerospace Monitoring Training Center by Azercosmos at the National Aviation Academy in September 2022 was one of the major outcomes related to the space education of this state program. The aim of the technically advanced training centre is to train qualified specialists in the use of geoinformation technologies, particularly in the areas of analysis, digital processing of satellite images, and GIS, as well as to increase the level of knowledge and expertise of undergraduate courses in this area. Within the framework of the center's educational program, students learn how to put their theoretical knowledge into practice. The research also analyzes how space education in Azerbaijan potentially supports the country's efforts to protect the environment, combat climate change, and improve its living conditions.