SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Innovative and Informal Space Education (4)

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DEDICATED SCIENTIFIC-EDUCATIONAL PROGRAM "INTERNATIONAL YOUTH SCIENTIFIC SCHOOL "SPACE DEVELOPMENT: THEORY AND PRACTICE" – AS AFFECTIVE ELEMENT OF SYSTEM OF INNOVATIVE AND FACULTATIVE SPACE EDUCATION

Abstract

Current stage of development of high-tech industries, to which the aerospace industry belongs, requires from graduates of technical universities to comply with a set of additional requirements: - ability to independently solve not only technical but organisational, management and economic problems; - ability to efficiently present and defend their projects and achievements; - professional skills, and skills of corporate communication and personnel management; - skills to integrate well within international groups of experts. Because of this, it is becoming very important to apply individual-specific models in training of experts. Since forming of individual characteristics is most efficiently performed and is best visible when person is involved in practical activities, it is required to utilize specialised educational elements for this cause.

Dedicated scientific-educational program "International Youth Scientific School "Space Development: Theory and Practice" has been implemented in Bauman Moscow State Technical University and is running for more than 10 years. The agenda of Bauman University "Scientific School" includes: - visits to various enterprises of space industry; - consultations and round-tables with scientists, experts, cosmonauts and astronauts; - cultural events. An important element of the agenda is development and implementation of joint technical projects on space topic. For example, in July 2007 the topic of Bauman University "Science School" was the development of inspector-satellite for monitoring of space, and in 2008 the topic was related to exploration of the Moon.

During the years of implementation of the program it hosted over 1000 participants – graduate and post-graduate students, industry experts – from Bauman University itself, but also from universities of UK, US, France, Switzerland, Belgium, China and other countries. Participation in the program allows adding to fundamental skills received in standard education other skills, such as practical use of theoretical knowledge, creative approach, interaction in the groups, behaviour in various situations, interaction with other individuals. "International Youth Scientific School "Space Development: Theory and Practice" allows to decrease the period of adaptation of university graduate to actual work in the industry, and decreases the cost of initial and follow-up on-the-job training.