

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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TEACHING SPACE TECHNOLOGIES THROUGH PRACTICE. THE DEVELOPMENT OF SPACE
EDUCATION IN POLAND ON THE EXAMPLE OF UNIVERSITY-BUSINESS COOPERATION AND
WITHIN THE FRAMEWORK OF EUROPEAN CONSORTIA.

Abstract

Space education in the 21st century at the higher-education level must go beyond the theoretical basics, however well-founded they may be. Students need to gain experience during their university education if they want to enter the space industry. Gaining expertise before receiving the degree allows them to join the space industry companies earlier in their life's trajectory. This is a huge value for better quality development of the sector.

At the same time, it is essential to remember that such education is a system of connected vessels: It requires commitment from business, and investment in the teaching process so that the best graduates can be chosen from among the rest. In my presentation, I would like to present the example of the AGH UST Space Technology Centre in Krakow and its organization of the space technology education system, which is giving practical knowledge to graduates through project-based education, analog missions and cooperation with industry. Thanks to this approach, students not only achieve outstanding results in space competitions around the world (such as the European Rover Challenge, University Rover Challenge and Spaceport America Cup) but also participate and conduct their research in the analog mission habitats (Lunares and Analog Astronaut Training Center). Immediately after graduation, they start jobs in the world's top space companies or decide to establish their own businesses in the space sector.

In order to strengthen the potential of the Polish space education sector Space Technology Center of AGH UAT, together with partners from France, Germany, Luxembourg and Sweden, is co-founding the European Space University called UNIVERSEH (European University for Space and Humanity) and with industry partners is offering students studying programs tailored to today's and future requirements of the space sector. I will show the effects of the courses provided by the Space Technology Centre, programs developed by STC with industry partners and results of the students projects prepared by STC students associations.

Communication, promotion and relationships between education institution and the space sector will also be a topic of my speech, as SCT AGH UST is building a strong alliance between the space sector and universities.