

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
In Orbit - Postgraduate Space Education (4)

Author: Mr. Viktor Khutornyi
The National Aerospace Educational Center of youth, Ukraine

Mr. Oleksii Kulyk
National Center of Aerospace Education, Ukraine
Mrs. Iryna Fedorenko
The National Aerospace Educational Center of youth, Ukraine

REFORMING EDUCATIONAL PROGRAMS IN THE DOMAIN OF SPACE TECHNOLOGIES IN
UKRAINE (ACCORDING TO RESULTS OF TEMPUS-CRIST PROJECT IMPLEMENTATION)

Abstract

The prominent step in aerospace education in Ukraine is participation of the Ukrainian universities and the National Aerospace Education Center of Youth in the international project TEMPUS JPCR-144681-2008 “CRIST” – Curricula Reform in Space Technology in Kazakhstan, Russia, Ukraine. The CRIST Project was implemented during the period of 2009 – 2011, for the purpose of reforming the educational programs for training specialists in creation and operation of light-weight satellites at the universities of Ukraine, Russia and Kazakhstan.

Consortium of the Project includes: TU Berlin, ILR, University “Lessius” (Belgium), Institute of Engineering “De Nayer” (Belgium), University “Fontys”, Institute of Business and Management, the Netherlands.

Ukraine in the CRIST Project is represented by the National Aerospace Education Center of Youth, Dnipropetrovsk National University, National Aerospace University “Kharkov Aviation Institute”, National Technical University of Ukraine “Kiev Polytechnic Institute”.

According to the results of the Project implementation, the bachelors’ and masters’ curricula were supplemented with new training courses under the European educational standards, with the use of advanced technologies and methods of designing micro- and pico- satellites, space communication, management of space industry and international space business. State-of-the-art infrastructure on developing and testing micro-satellites and their control during the flight is now available at the universities.

The important result of the Project implementation became the formation of the network covering 10 ground-based receive/transmit stations for operating and controlling micro-satellites from Belgium to Krasnoyarsk (Russia).

It is the first project on post-Soviet area, which combines the efforts of aerospace universities of Ukraine, Russia, and Kazakhstan, as well as the European universities, and is financed with the assistance of the European Commission.

High results of CRIST Project allowed to continue the activity on the further reforming the educational processes in the domain of aerospace technologies. In year 2012 the application for the next project was filed: “A pilot model of Doctoral Programs due to Bologna Process in the area of Engineering and Aerospace in KZ, RU, UA (DENGAS)”, which develops the results obtained towards the doctoral educational programs.