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ISU SPACE STUDIES PROGRAMME 2011: TEAM PROJECT ON SMALL SATELLITES FOR
CAPACITY BUILDING IN SPACE TECHNOLOGY DEVELOPMENT

Abstract

The 2011 Space Studies Programme of the International Space University was held from 11 July to 9 September in Graz, Austria, hosted by the Graz University of Technology. As part of the requirements to successfully complete the Space Studies Programme, students choose to participate in one of three team projects. The team project “Small Satellites for Capacity Building in Space Technology Development” tasked the participants with creating a comprehensive guidebook to build and maintain the capability to perform space technology development through application of nano- and small spacecraft technology. The team project was supported by the United Nations Office for Outer Space Affairs, located in Vienna, Austria, and is linked to the Basic Space Technology Initiative, implemented by the Office under the framework of the United Nations Programme on Space Applications. The Initiative takes account of recent developments leading to the establishment of simple standards for nano- and small-satellite platforms, such as the CubeSat Standard, which has created an interest in growing number of organizations worldwide to develop, build and launch their own satellites. The establishment of a basic capacity in space technology development, through measures such as the education and training of the necessary experts or the creation of the required testing and building infrastructure, is therefore becoming relevant to more and more countries. The Basic Space Technology Initiative is aiming to assist these countries with their efforts. The guidebook created by the project team is seen as an important element to reach this goal. This paper discusses the outcome of the team project and presents the guidebook and how it may contribute to capacity building in space technology development.