

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

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SPACE4ECES, A PIONEERING SPACE ENGINEERING TRACK FOR FILIPINO ELECTRONICS
ENGINEERS IN ADAMSON UNIVERSITY, PHILIPPINES

Abstract

The Philippines stands on the cusp of a transformative era in space exploration and technology, where the indispensable role of space engineers in shaping the nation's scientific and technological landscape has become increasingly recognized. Because the international space industry is growing so quickly, the Philippines needs to quickly train skilled space engineers who can lead the way in making progress and making important contributions to the growing field of space research.

A lot of progress in the Philippines' space efforts has been seen in the last decade. Projects like the STAMIN4Space Program and the support of the Department of Science and Technology (DOST) and the Philippines Space Agency have helped space science and technology grow in the country. There's more to becoming a major player in the global space stage than just having goals. To do that, the country needs to train a group of skilled space engineers who can move the country's space goals forward.

Recognizing this need, Adamson University has started a new project called Space4ECES, which is a space engineering track that is designed to meet the needs of Filipino Electronic Engineers. This initiative aims to address the shortage of skilled space engineers by and getting the support of the university administration, establishing its own space-related research laboratory, and providing a curriculum tailored in Philippine context

This paper discusses how important it is for the Philippines to have a skilled workforce of space engineers and stresses how effective projects like Space4ECES are at meeting this urgent need. In addition, the paper will discuss about the specific challenges encountered, lessons learned, technical and facilities needs and best practices learned throughout the implementation of the initiative. The information provided in this paper will help future efforts to improve the teaching of space engineering in the Philippines.

This result comes from the STAMINA4Space program's capacity-building activities, which were funded by the Department of Science and Technology (DOST) and carried out with the help of the Kyushu Institute of Technology. Notably, a faculty member at Adamson University worked on the BIRDS-4 Satellite project, which was very important in developing the skills and knowledge needed for the Space4ECES initiative.