

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

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ESA ACADEMY'S TRAINING AND LEARNING PROGRAMME: TRAINING OPPORTUNITY FOR
UNIVERSITY STUDENTS

Abstract

ESA's Education Office established three years ago the ESA Academy, and organized it as an overarching programme for university students from ESA Member States, Canada and Slovenia with the aim of complementing the academic formation in space-related disciplines with opportunities for the students to develop valuable practical experience through the ESA Academy's hands-on project opportunities and to acquire theoretical knowledge via the ESA Academy's Training and Learning Programme. The Training and Learning Programme (TLP) aims at offering a transfer of know-how in selected topics, from professional specialists to the students, with the aim to better prepare them for a space-related career. The target audience are university students, from Bachelor to PhD level, mostly in science or engineering fields. The ESA Academy training sessions cover different areas of ESA expertise and are developed and delivered in collaboration with specialists from ESA, European academic institutions, space industry and other organisations involved in space activities. The Training and Learning Facility (TLF) located in ESEC-Galaxia (Belgium) hosts the ESA Academy training sessions. It accommodates workstations for the students and specialists and it is equipped with an educational Concurrent Design Facility aimed at providing training experience on the design of space missions. The facility also allows to organise lectures via video conference as well as to livestream or record sessions. Up to 20 ESA Academy training sessions, of 4 to 5 days each, are delivered every year in the TLF, and each session can host 30 University students. During their training session the students are evaluated through a group exercise or online questionnaire. At the end of the event they receive a certificate of participation and a session transcript to enable them to claim, to their respective Universities, ECTS credit(s) for their participation. Since March 2016 around two hundred different specialists have delivered lectures in the frame of the ESA Academy's Training and Learning Programme and more than a thousand University students have benefitted from participating an ESA Academy training session. In this paper the ESA Academy's Training and Learning Programme concept, operation and outcome will be presented. Lessons-learned from the organisers and benefits for the University students will be discussed.