

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

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SPACEMASTER: AN INTERNATIONAL, INTERDISCIPLINARY MASTER IN SPACE SCIENCE  
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**Abstract**

The significant demand for aerospace engineers led 2005 to the foundation of the interdisciplinary program “SpaceMaster”, established by six European Universities. It was established in the European elite-program “Erasmus Mundus” to train talented young people in the challenging subject of space science and technology. The universities cooperate and contribute their special expertise to the courses in order to cover the broad interdisciplinary area of spacecraft design and space environment. In particular system design techniques are emphasized, which are of interest for a broad spectrum of industrial applications well beyond aerospace.

The international dimension of this space education is reflected in the distribution of places for education: 1st semester in Würzburg (Germany), 2nd semester in Kiruna (Sweden), second year according to the desired specialization in one of the six partner European Universities. The students receive double diploma from two European Universities. The student population is also very international: typically from about 600 applications 50 students are selected, half of them from Europe, the other half from outside Europe. The acceptance of the SpaceMaster-alumni in industry, space agencies and research institutes is very high and has been tracked now for more than 10 years.

The students are able to follow the more scientific tracks on space physics with an emphasis on instrumentation and astrophysics, or atmospheric and planetary physics. The engineering tracks emphasizes the design of spacecraft and mission realization. Here specifically the design of CanSats and educational CubeSats is used to complement the overview lectures by practical implementation aspects.

In this contribution the international university cooperation, the contents of the curriculum, as well as the specific challenges and acquired experiences in this international program are addressed.