

Title of partnership:**SPACEMASTER: Spacemaster's Global Partnership****Masters Course running the Partnership:**

SpaceMaster - Joint European Master in Space Science and Technology

Duration: 3 years

Summary description:

Objectives

- Upgrade and enhance the skills and mobility of postgraduate students, teaching staff and administrators of higher education institutions through the provision of in-country and overseas training in collaboration with Asian and North American Universities
- Promote the exchange of experience and encourage mutual knowledge and recognition of study programmes and access to higher education for EU students in Asia and North America;
- Encourage the creation of a basis for future development, including: common curricula and courses/modules; agreements on credit transfer and mutual degree recognition, and reciprocal access to higher education
- Increase the availability of information about the EU higher education system specifically, Erasmus Mundus
- Program in the participating Asian/American countries in order to enhance the attractiveness of European higher education
- To bring together as a core group students from the whole world to share the existing space competence
- Develop it together and distribute it to benefit the European and Global space industry and research community
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Duration of the partnership is three years

Partners in the SpaceMaster EM Consortium

- Cranfield University, UK
- Czech Technical University, Czech Republic
- Helsinki University of Technology, Finland
- Julius-Maximilians Universität Würzburg, Germany
- Luleå University of Technology, Kiruna Space Campus, Sweden
- Université Paul Sabatier Toulouse III, France

Partnership universities in third-country

- Shanghai JiaoTong University, China
- Stanford University, USA
- University of Tokyo, Japan
- University of Toronto, Canada
- Utah State University, USA

Partnership activities and roles of third-country institutions

The activities will be:

- 1) Joint research work in space science and technology will be carried out by EU students in the form of Thesis/project works stipulated by the consortium.
- 2) EU students will be allowed to be integrated in real space missions that are carried out by some partner universities at their local campuses.
- 3) A steering committee comprising of SpaceMaster professors will carry out future research oriented topics and missions where EU could further integrate in joint space projects with Asia and America. One example of such a project is the current GENSO project from ESA, NASA, JAXA.
- 4) Academic exchange will improve and facilitate the transfer of knowledge in this advanced field of engineering.
- 5) The partner universities will provide complementary space related engineering modules to the EU students participating in exchange programs.

One role of the partnership institutions is to bring complementary expertise into SpaceMaster's Course. Another is to give European students options to experience a new academic environment and culture. Specifically, it is important for some students to experience the culture in China and Japan. Europe has a need of engineers and researchers that well know these countries cultures and languages. Students going to SJTU and University of Tokyo will be offered language courses.

The partnership's overall goal is to develop SpaceMaster into a European and Global high quality Master.

Outgoing mobility of SpaceMaster students and scholars

- 1) In average around 7-8 SpaceMaster students per teaching year will do Thesis work and one study module at partnership universities during their Semester 4. Minimum time is 5 months per student. The language used is English.
- 2) In average around 3 SpaceMaster students per teaching year will do study modules during Semester 2 or 3 at partnership universities. The language used is English
- 3) SpaceMaster academics will go to partnership universities for 1-3 month each. Year 1: 4 scholars; Year 2: 5 scholars; Year 3: 5 scholars
- 4) SpaceMaster's Steering Group will select outgoing students and scholars. The selection will partly be based on a competitive base. Besides, another criterion will be what will benefit the development of SpaceMaster.

European Partners:

- 1) SE - Lulea University of Technology
- 2) UK - Cranfield University
- 3) CZ - Czech Technical University in Prague
- 4) FI - Helsinki University of Technology
- 5) DE - Bavarian Julius-Maximilians University of Würzburg
- 6) FR - Paul Sabatier University -Toulouse III

Third-Countries Partner Institutions:

- 1) Shanghai Jiao Tong University (China)
- 2) Stanford University (USA)
- 3) University of Tokyo (Japan)
- 4) University of Toronto (Canada)
- 5) Utah State University (USA)

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Grant

269.900 € (45.000 € partnership + 224.900 € scholarships)