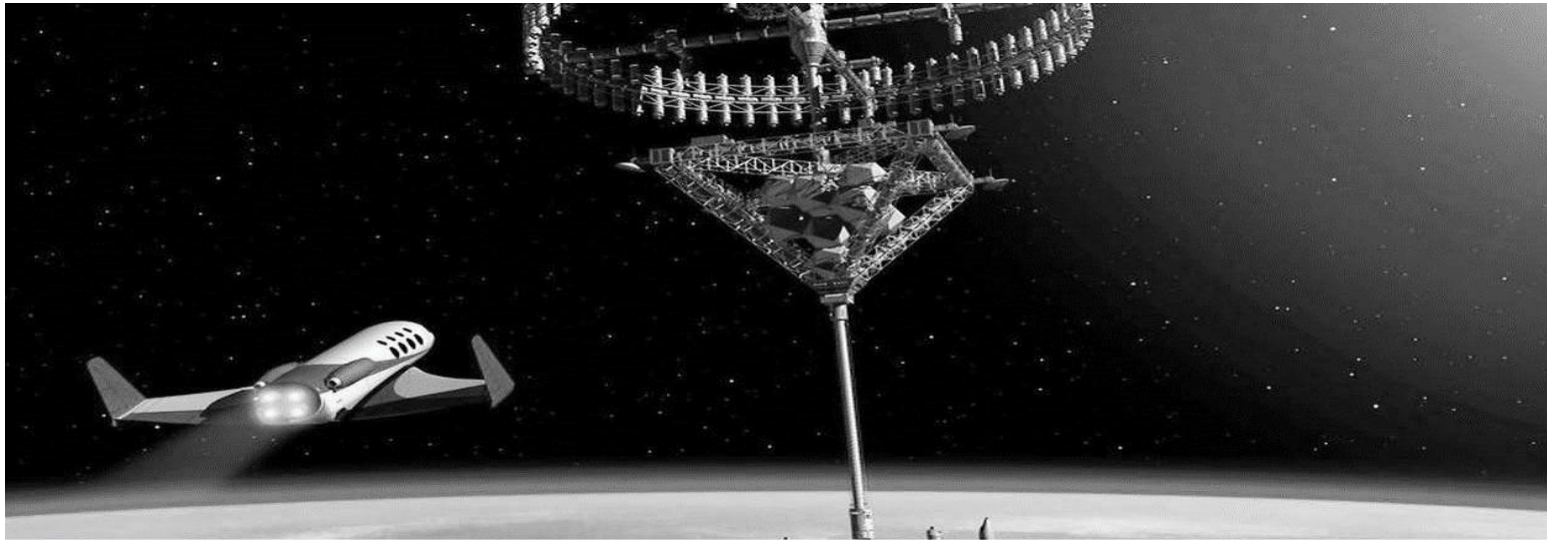


Branch:Aeronautical Engineering



Code: SEOSST

Option: SPACE - Earth-oriented space science and technology

Level: Master

Prerequisites:

Opportunities:

As a graduate of an MSc in SPACE, you are qualified to start a career in international aerospace agencies as well as in national or international research institutes or universities. Other opportunities are offered by the aerospace technology industry and, in general, by companies in the field of navigation and logistics or security-related applications.

Description:

ESPACE is situated between air navigation and the use of satellites in the natural and engineering sciences. It is possible to do a double degree with Wuhan University in China.

What happens in this study program?

The Master of Science in Earth-oriented Space Science and Technology (ESPACE) is an interdisciplinary program positioned at the interface between space technology and the technical and scientific use of satellite data. It is a two-year Master's program with the possibility of a double degree in cooperation with Wuhan University, China. ESPACE combines the technical aspects of satellite and observation systems with scientific and commercial applications. This requires interdisciplinary knowledge across the boundaries of different

engineering disciplines such as geodesy, mechanical and electrical engineering, as well as physics, computer science and geosciences.

The objective of the ESPACE Master Program is to train students to become experts in the use and development of satellites in the three main areas of Earth System Science, Remote Sensing and Navigation. Students acquire fundamental knowledge and skills in these three areas as a general basis, as well as the interfaces between them in order to be able to link technological know-how with practical application. At the same time, they learn the necessary basics of signal processing, sensor technology, orbital mechanics and space technology, in order to be able to contribute to the planning and development of future missions in the above-mentioned areas.

By integrating numerous scientific institutes and the space industry into the teaching concept, ESPACE fully exploits the potential of excellent scientists and also offers the possibility of working on specific projects and writing Master's theses in close cooperation with these institutions and, in many cases, on site. Thus, students are involved in current projects, cutting-edge technologies and sciences, and everyday practice.

Quality and competences:

As a graduate of the Earth-oriented Space Science and Technology (ESPACE) Master program, you have acquired strong thematic and methodological skills in the fields of Earth-oriented space science and technology. You have basic skills in the three core areas of satellite and remote sensing data analysis, space engineering and satellite applications engineering. Depending on your chosen specialization, either in Earth Systems Science, Remote Sensing or Navigation, you have developed further skills and abilities.

Thanks to the international approach of the Master program, you have increased your social and intercultural skills. This allows you to work in intercultural and interdisciplinary groups in the global framework of satellite technology and research. You are able to develop common solutions across the boundaries of specialized fields and present them in a way that is appropriate for your target audience.