

MY ESPACE EXPERIENCE

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The ESPACE Master's program delicately walks the thin line between science and engineering not only giving the students a solid and stable scientific background, but also giving them the most updated space engineering foundations. Thus, the ESPACE graduates are, amongst others, the "few" who have a complete view of the different scientific and engineering aspects of a space mission, giving them the flexibility to enter the world of either space sciences or in space engineering.

How interesting can ESPACE be?

When I was applying for the ESPACE Master's program, I couldn't believe that it would give me so many opportunities and would open so many doors in the future.

- ESPACE adapts the European Space Agency's philosophy and within its framework offers numerous "ESA-like" workshops and projects. Additionally, students who want to combine studies with real work experience can work at the university, or at the very close to ESPACE collaborating research institutes such as the German Aerospace centre (DLR) or the German Geodetic Research Institute (DGFI). In my case, I enjoyed serving as a tutor for the course "Orbital Mechanics" to the first semester students, gaining valuable experience and surely increasing my knowledge.
- Moreover, last summer I had the opportunity to intern for 8 weeks as a Payload Experimental Test and Validation Engineer for the Mars Gravity Biosatellite at Massachusetts Institute of Technology (MIT). The Mars Gravity Biosatellite will carry a small population of mice to low Earth orbit aboard a spinning spacecraft creating "artificial gravity" equivalent to that on the Martian surface. The principal objective of the mission is to conduct the first in-depth study of how mammals adapt to a reduced-gravity environment and thus, to determining future possibilities for human space exploration. My work at MIT involved the assembly, integration, testing, validation and operation of a ground-based experimental simulation system for the Mars Gravity Biosatellite payload.

What comes after ESPACE?

Once you graduate from the ESPACE program, you realize the advantages of having complete and solid knowledge from both the space engineering and the scientific domain. This enables ESPACE graduates to get actively and competitively involved with serious space industry or space research. I am now working as a Young Graduate Trainee at the European Space Research and Technology Centre of the European Space Agency (ESA) dealing with Earth magnetic field determination and analysis, within the scope of the fifth Earth explorer mission, the so-called SWARM satellite mission. The objective of the Swarm mission is to provide the best ever survey of the geomagnetic field and its temporal evolution, and gain new insights into improving our knowledge of the Earth's interior and climate.

Since ESPACE Professors very actively collaborate with ESA and plenty other research institutes and universities throughout Europe, there are also excellent PhD opportunities for those who want to put the last ring in the chain and expertise in one specific field.

I am sure you will not regret having applied for ESPACE. It goes without saying that it is a modern, high quality master's program and a very strong key which can open doors you couldn't have imagined before.