

AGENCY

30 university students complete Human Space Physiology Training Course 2022

21/12/2022 1470 VIEWS 17 LIKES

ESA / Education / ESA Academy

In brief

ESA's [Education Office](#) and [Space Medicine](#) team have once again successfully collaborated to run the ESA Academy's Human Space Physiology Training Course.

In-depth

From 28 November to 2 December 2022, 30 university students studying for Bachelors or Masters in medicine, life science, biological science, and other healthcare subjects, attended the course hosted at ESA Academy's [Training and Learning Facility, ESEC-Galaxia](#), in Belgium.

Lectures were delivered by a dedicated team of 16 experts from ESA and various research institutes and universities across Europe. The topics ranged from the history of human spaceflight, the future of human exploration; and how medical operations are currently provided to European Astronaut on the International Space Station, including exercise countermeasures; and how key areas of space physiology research is conducted, both in orbit and using ground-based analogues.

— [ESA expert giving an overview of ESA's Human Research Activities](#)

"It was a wonderful week, a trip to the world of space physiology, full of new knowledge, interesting people, and unforgettable experiences. I was impressed by the friendliness and enthusiasm of the trainers and organisers. They are truly inspiring," said a Greek student from Aristotle University of Thessaloniki.

— [Students presenting the final results of their group project](#)

Formal lectures were complemented by group projects challenging the students to tackle 'hot topics' that must be overcome to support future human space exploration. Examples included: defining a medical kit suitable for use on

a mission to the [Lunar Gateway](#); and evaluating key life support infrastructure needed for a lunar village.

The students received valuable support from the trainers, and even had the opportunity to ask [Frank De Winne](#), ESA astronaut and current head of the [European Astronaut Centre](#) in Germany, questions about his experience of being in space and his views on their project ideas!

The final day saw the students present their group projects, highlighting findings and recommendations for the future. Once again the trainers were impressed with the quality of the presentations and innovative ideas that were suggested!

The groups were graded on their final presentation and received a course transcript, which in conjunction with a certificate of participation, allows them to request [ECTS credits](#) from their universities.

— [Students working together to find solutions to tackle the challenges of future human space exploration](#)

"I just wanted to express my gratitude for this experience," enthused a Romanian student from the University of Warwick. "It was a week filled with consistently high quality and engaging lectures, exceeding any expectations I could have had. It presented the niche and complex area of Space Medicine in such an accessible way to allow the breadth of students from ranges of academic backgrounds to all come away feeling impacted."

- To find more information on upcoming ESA Academy training sessions and opportunities, please visit https://www.esa.int/Education/ESA_Academy/Current_opportunities
- For enquiries, contact tip@esa.int