

AGENCY

ESA pioneers Technology Transfer & Innovation Workshop for engineering and scientific university students

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30 highly-motivated university students from 13 different ESA Member and Associate States have successfully completed a brand new ESA Academy's Technology Transfer & Innovation Workshop at [ESA Education Training Centre](#) in ESEC-Galaxia, Transinne, Belgium. The students were either 3rd or 4th year Bachelor, Master, or PhD students in engineering and science, and were trained by specialists from [ESA's Technology Transfer & Business Incubation Office](#) and from industry; all experts in the fields of Technology Transfer, innovation and entrepreneurship.

Technologies developed for the space industry need not be constrained solely to use beyond Earth. Likewise, satellite infrastructure can be used in new and innovative ways. Our everyday lives can [benefit hugely](#) from space technology used and adapted to improve healthcare, water and waste management, sports, and more. This workshop is focused on technology transfer which is an excellent way of bringing the benefits of ESA's technological developments to the masses. These facts are well-known to ESA's Technology Transfer and Business Incubation Office, who teamed up with ESA Education Office to design and run this innovative workshop. Its primary aim: empower students to take the leap required to see how space technology can be modified to fit wider purposes. Technology transfer needs people with creative flair and vision; skills that this workshop develops. There are many opportunities for entrepreneurs wanting the challenge of developing new products!

Students were separated into groups of five, and given a challenge: over the workshop's duration, from 13 to 16 November 2018, they had to devise a business idea from an ESA patent. Each day they would develop their idea, including a complete business plan around a selected application. This gave students the opportunity to apply their newly-gained knowledge and get some hands-on experience with technology transfer and entrepreneurship.

— Discussing the best application of their ideas with the trainers.

An Italian student from the Scuola Superiore Sant'Anna explained: "*This workshop was a unique opportunity for me to start thinking about the translation of science into new products for space and non-space industry, and add skills for my future career. I think that this multidisciplinary approach is the key to step forward towards the future in science and technological fields.* "

With the challenge set, the students then began their first lecture, about intellectual property; the different strategies you can adopt when coming up with an invention; and the structure of a patent. They met an ESA inventor and discovered the ESA patent they would use for the group project. This patented technology related to a light and large deployable structure concept for telecom and Earth Observation applications. Before long, the students were brainstorming ideas!

The second day commenced with learning about Technology Transfer. With the help of several case studies, they were able to understand the challenges and benefits of transferring a technology from one field to another. For the group project session, they selected the best idea from their initial brainstorm, and started to investigate it further, with the aim of developing a business around it.

On day three the students learned about entrepreneurship,