

AGENCY

Science and Engineering students wanted for the Earth Observation Remote Sensing Workshop 2018

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ESA / Education / ESA Academy

ESA's Education Office, with the support of the Science, Applications & Climate Department, is now inviting applications from Master and PhD students enrolled in engineering or science degrees for an exciting new workshop on Earth Observation Remote Sensing.

ESA is dedicated to Earth Observation (EO) satellite missions, being the driving force behind the Sentinels missions, among many others, such as the small Proba-V one. EO satellites are vital for supporting the daily lives of people all around the globe, and will be at the forefront of efforts to confront future challenges. The remote sensing data they generate enables rapid responses to natural disasters such as flooding; the monitoring of vegetation and agriculture; optimisation of water usage; methods of preserving resources; better understanding of urban development; monitoring meteorological and environmental parameters essential to understanding the evolution of Earth's global-scale dynamics... the list goes on! ESA is running this Earth Observation Remote Sensing Workshop to support future generations of EO scientists.

The Workshop will be held from the 10 to 14 December 2018 in ESA Academy's Training & Learning Facility (TLF) located in ESEC-Galaxia, Belgium. During these five days, university students will become acquainted with the basics of Remote Sensing, along with an overview of ESA's EO satellite missions. Students will also learn about the science of radar and optical remote sensing, as well as data fusion. Delivered by retired ESA[NC1] specialists and experts from academic institutions and industry, emphasis will be given to gaining practical skills and putting them to use through group exercises using actual remote sensing tools.

Draft schedule

Day 1	Introduction to Earth Observation Missions at ESA Basics of Remote Sensing Exercise 1: Familiarisation with Remote Sensing Tools
Day 2	Radar Remote Sensing Introduction Radar Remote Sensing Application Exercise 2: Analysis of Radar Remote Sensing Images
Day 3	Optical Remote Sensing Introduction Optical Remote Sensing Application Exercise 3: Analysis of Optical Remote Sensing Images
Day 4	Introduction to Thermal Infrared Remote Sensing Invited Speaker on EO Processing Workflow & Application Visit to ESEC-Redu site Remote Sensing Data Fusion Exercise 4: Analysis of Optical & Radar Remote Sensing Images using Data Fusion
Day 5	Data Fusion & GIS applications Exercise 5: Second exercise on Data Fusion & GIS applications Evaluation

Who can apply?

In order to participate, students must fulfil the following criteria at the time of application:

- be aged between 18 and 32;
- be a citizen of an ESA Member or Associate State;
- be enrolled as a full-time Master or PhD student in a university (not graduating before the Workshop);
- be studying for an engineering or science degree.

— ESA Academy's training facilities give students the opportunity to shine

The selected students will be sponsored by ESA. The sponsorship will cover accommodation and meals, as well as up to 200 Euros for travelling to Belgium.

How to apply

- Fill in the application form;
- Upload a motivation letter (PDF, maximum 1 page, no images);
- Upload a CV (Europass format, PDF, maximum 2 pages);
- Upload a formal recommendation letter (PDF, maximum 1 page, including signature, no images) from a university professor or academic supervisor of current university;
- Upload a copy of academic records (PDF, in English, with the university stamp).

All answers and documents should be in English (except academic records if not available).

The deadline for applications is 26 October 2018.