

TIRIS x UNIVERSEH
2026

Summer School

Space and sustainability

June 29th – July 10th 2026
Toulouse, France

ABOUT OUR SUMMER SCHOOL

Are you a Master's (M1/M2) or PhD student?
Join the TIRIS x UNIVERSEH 2026 Summer School and explore
the challenges of space and sustainability!



An interdisciplinary and pioneering excellence program in the sector, co-organized by TIRIS and UNIVERSEH, the European University Alliance on Space education and research.

You will benefit from excellent interdisciplinary training, combining practical workshops, inspiring lectures and exchanges between experts. You will also get the chance to discover Toulouse, the European capital of space and aeronautics, while earning ECTS credits towards your degree.

The TIRIS x UNIVERSEH 2026 Summer School is part of a unique dynamic, driven by the [TIRIS project](#) and supported by UNIVERSEH and the University of Toulouse. By combining science, technology and societal reflection, the TIRIS x UNIVERSEH 2026 Summer School aims to train you as tomorrow's leaders, capable of imagining innovative solutions to climate and space issues.

Join now in Toulouse to rise up to tomorrow's challenges
of space and sustainability !

Communauté
d'universités
et établissements
de Toulouse



TIRIS
Toulouse Initiative
for Research's Impact on Society

UNIVERSEH



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A SUMMER TO TAKE OFF

Who is it for ?

The TIRIS x UNIVERSEH 2026 Summer School is open to students with a **master's level or PhD students** who wish to broaden their knowledge and deepen their interdisciplinary approach in the field of space studies and sustainability. With limited spots available, this program aims to deliver high-quality courses on critical issues and trends.

A complete program : Explore, understand, innovate

The TIRIS x UNIVERSEH 2026 Summer School offers an immersive, interdisciplinary experience entirely in English, structured around 3 main themes:



Environment and sustainable space :

Using space technologies to understand climate change.



Society and sustainable space :

Reflecting on ethical and governance issues related to New Space.



Human and sustainable space :

Addressing the challenges of human resilience in space exploration.

A programm of immersion and excursion

- ✦ A guided excursion around Toulouse
- ✦ A visit of La Cité de l'Espace & Airbus
- ✦ Two social events

Typical day

Morning

Lectures, masterclasses,
round tables
with international experts

Afternoon

Hands-on workshops
and site visits

Evening

Networking activities
and cultural discovery
of Toulouse

DETAILED VIEW OF THE PROGRAM



THEME 1 : ENVIRONMENT AND SUSTAINABLE SPACE

Using space technologies to understand climate change

This theme will cover the remote sensing aspects of observing terrestrial ecosystems, oceans and forests, in order to study, quantify and prevent pollution, and carry out carbon and greenhouse gas assessments and their impacts on ecosystems.

To understand the issues at stake, different types of presentations will be offered in the form of lectures (on oceans and forests, for example) and hands-on workshops using remote sensing tools and satellite data. Participants will be able to exchange ideas with PhD students from the school's partner laboratories, during a half-day of in-person poster sessions and "ma these en 180 s" pitch sessions.

Forecast program



Remote sensing



Greenhouse gases



Carbon footprint



Space mission from conception to satellite launch



Practical workshops and exchange sessions with doctoral students from partner laboratories.



THEME 2 : SOCIETY AND SUSTAINABLE SPACE

Reflecting on ethical and governance issues related to New Space

Nowadays, the space sector is of strategic importance in economic, political and societal terms. In economic terms, the emergence of the "New Space" is profoundly transforming industrial approaches, with the entry of new private players, sometimes from outside the traditional space sector.

Politically and geopolitically, it represents a major challenge for national sovereignty. On a societal level, the space sector raises legitimate questions that require the involvement of all players in society, not just engineers, scientists and political decision-makers.



Space industry economics and New Space financing



Geopolitics & Geo-strategy of space: the key challenges



Ethics and Perception : Acceptability of space & Ethics: cost and benefit, reality of space, space tourism



Space law



Space Policy, Space Programs



Conferences and potential visits of innovative companies



THEME 3 : HUMAN AND SUSTAINABLE SPACE : CHALLENGE « THE MARS VILLAGE »

Teams will be formed to design the first living base on Mars.

- ★ Mars planetology : characteristics, constraints, Mars-Earth opposition (where to locate the base? when to communicate?)
- ★ Living bases in hostile environments: general principles, environmental control, life support system, energy, logistics
- ★ Risks and potential countermeasures in the Martian environment: hypogravity, radiation, regolith, isolation, confinement, contamination, etc.
- ★ Martian astrobiology : exploration and protection of traces of life
- ★ Augmented man for space exploration: myth or reality?
- ★ Space law, governance and ethics of Martian exploration

Participants will have to meet this challenge by integrating the knowledge provided according to a set of specifications to be supplied at the start of the module. The proposed interventions will help build a proposal for a living base on Mars. Each group will be evaluated by a jury during an oral presentation at the end of the session.

HOW TO APPLY ?

The TIRIS x UNIVERSEH 2026 Summer School on Space and Sustainability is open to UNIVERSEH Alliance students with limited spots available.

For any question regarding eligibility requirements or application process and deadline, please contact the international office at your university.



WELCOME TO TOULOUSE

Located in the heart of southwestern France, Toulouse is a dynamic and enchanting city where history, culture, and innovation come together in perfect harmony. Nicknamed La Ville Rose - "The Pink City" - for the warm hues of its terracotta brick buildings, Toulouse welcomes visitors with its distinctive charm and southern hospitality.

Renowned as the home of Airbus and a cornerstone of the European space sector, Toulouse is a hub of technological innovation, research, and higher education. At the same time, it remains deeply rooted in tradition - expressed through its bustling markets, regional gastronomy, and the lyrical influence of Occitan heritage. Whether you're passionate about art and history, eager to savor local cuisine, or simply looking to enjoy the laid-back rhythm of southern life, Toulouse offers a rich and unforgettable experience. Discover a city where past and future coexist - radiant in sunshine, and glowing in shades of pink.



The
TIRIS x UNIVERSEH
2026 Summer
School
aims to offer
a unique learning
experience,
at the crossroads
of scientific
excellence

The assets of the Toulouse territory

A unique industrial and research ecosystem

A dynamic academic community

110 000

Students

22

Members institutions

5 800

Teacher researcher

4 100

PhD students

Aerospace Sector

159 600

jobs in the Greater Southwest region

An international influence

5 500

Scientific publications per year
Partnerships in over **100** countries

18 %

International students

+18 %

sector growth including **+20%** for aeronautics.

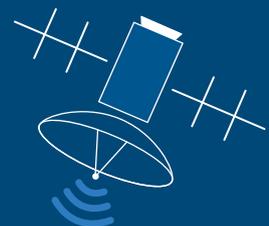
Cutting-edge infrastructures
Access to laboratories, technological platforms and world-class equipment

61 %

of aerospace jobs are located in Toulouse

A fishpond of expertise

Toulouse is globally recognized for its companies, laboratories and cutting-edge infrastructures in the aerospace sector.



PRACTICAL INFORMATION

Mobility & Excellence scholarships

available for selected students

Excellence Program

available for selected students

The package includes*

- ✦ Housing in individuals bedrooms + access to all hotel facilities (rooftop with swimming pool, cinema, table tennis...)
- ✦ Public transport card
- ✦ Lunches (from Monday to Friday)
- ✦ All travel costs and entry tickets to all activities and excursions
- ✦ Welcome breakfast and farewell cocktail



For students applying through the UNIVERSEH program, no tuition fees are applied. For more information please check with your international office.

* The package does not include flights, insurances (medical insurance), visa, breakfasts, dinners and all extra costs.

JOIN AN EXCEPTIONAL SCIENTIFIC AND HUMAN ADVENTURE !

The TIRIS x UNIVERSEH 2026 Summer School represents an exceptional scientific and human adventure in the service of sustainability and space innovation.

Visit Toulouse and help shape a more sustainable space!



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