





Summer school

# SECOIAS SUMMER SCHOOL 2025

Security and Communication In Aerospace Embedded Systems

#### You will earn 5 ECTS credits over these two weeks.

Electronic embedded systems (EES) play a vital role in avionics and spacecraft industry. They ensure functions as essential as navigation, communication, flying, landing control, monitoring, sensing, image processing and data transfer, all of which must operate reliably and safely. EES also fuel the future of aerospace industry through the development of breakthrough technologies and the miniaturization of components, helping meet ambitious goals of decreasing costs and energy consumption.

Do you wish to gain practical experience to develop secure and communicating embedded systems?

Toulouse is home to the European aeronautics and space industry, which includes **the Airbus Group**, **Thales Avionics**, **Thales Alenia Space**, **Intespace**, **Safran**, **ATR**, **Latécoère**, **Liebherr Aerospace**, **and the National Center for Space Studies**.

Here, you will study the basis of aerospace embedded systems at INSA Toulouse, a highly ranked French engineering institute. BY ATTENDING SECOIAS, YOU WILL DEVELOP AND HONE SKILLS THROUGH COURSES, GUEST TALKS FROM AEROSPACE EXPERTS, AND HANDS-ON EXPERIMENTS ON FOUR TOPICS:



Development of Embedded Systems for a Nanosatellite Mission



Security Challenges in Aerospace



Design of Antennas for Aerospace



Secure Wireless Communication for Aerospace



# ACTIVITIES

Guided tour in Carcassonne (UNESCO World Heritage Site)

- Visit of AIRBUS facilities
- Visit of LAAS-CNRS Laboratory

## WHO CAN APPLY

All science and engineering students with undergraduate level (Bachelor of Science in computer science or electronics)

## FEES:

Full cost: €1,900 (accommodation, lunch, social events and visits included).

Discount cost: €1,650



2 weeks, June 23 to July 4 2025



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**Educational Manager:** Dr. Alexandre Boyer alexandre.boyer@insa-toulouse.f

APPLICATION DEADLINE: April, 15<sup>th</sup> 2025 **To access the detailed program,** practical information and registration link, please visit: gei.insa-toulouse.fr/fr/international/secoias.html



Université

