

# Embedded software engineering for nano satellite

ISAE-SUPAERO + AIRBUS



**NICOLAS BAUDIN**  
INTERNSHIPS IN FRANCE INITIATIVE

<b>Name of the hosting institution in France</b>	ISAE-SUPAERO
<b>Name of the host laboratory / research team</b>	Department of Aerospace Vehicles Design and Control (DCAS)
<b>Address</b>	10 Av E. Belin 31400 Toulouse France
<b>Web site</b>	<a href="https://www.isae-superaero.fr/en/">https://www.isae-superaero.fr/en/</a>
<b>Name of the supervisor</b>	Benedicte Escudier
<b>Function</b>	Professor, Coordinator for Space Affairs
<b>Email</b>	Benedicte.escudier@isae-superaero.fr

## Internship offer

**Topic of the internship (title)** Embedded software engineering for nano satellite

**Proposed dates of the internship** **Start:** 2019-11-01 **End** 2020-04-30

**Scientific and academic objectives of the internship (detailed description of the internship content, work expected from the intern and expected outcomes):**

In the frame of the CSUT, several projects of cubesats have been developed in Toulouse (3 units and 12 Units) for different missions. After the first launch in April 2019 of Entrysat, a 3-unit cubesat devoted to the atmospheric re-entry, a second 3-unit cubesat, NIMPH will allow to test in orbit some opto electronic components for optical communications. The objective of the internship will be to develop the flight software that will be embedded on the OBC and prepare the qualification tests.

<b>Name of industrial partner</b>	AIRBUS Defence and Space SAS
<b>Role of the industrial partner in the internship project</b>	Co-supervision, technical expertise
<b>Main contact at the French industrial partner</b>	Christa BARDOT
<b>Main contact at the French industrial partner's branch in Australia</b>	Valentin MERINO
<b>Targeted Australian university</b>	Any

## Expected profile of applicant

<b>Level of study</b>	Master's student or excellent Bachelor's student
<b>Discipline</b>	SPACE SYSTEMS
<b>Required qualities, knowledge and skills</b>	Team spirit, curiosity and autonomy, C, python, matlab, space technology, mission analysis, Systems Engineering.

