Université Paris-Saclay
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M2 Smart Aerospace and Autonomous Systems

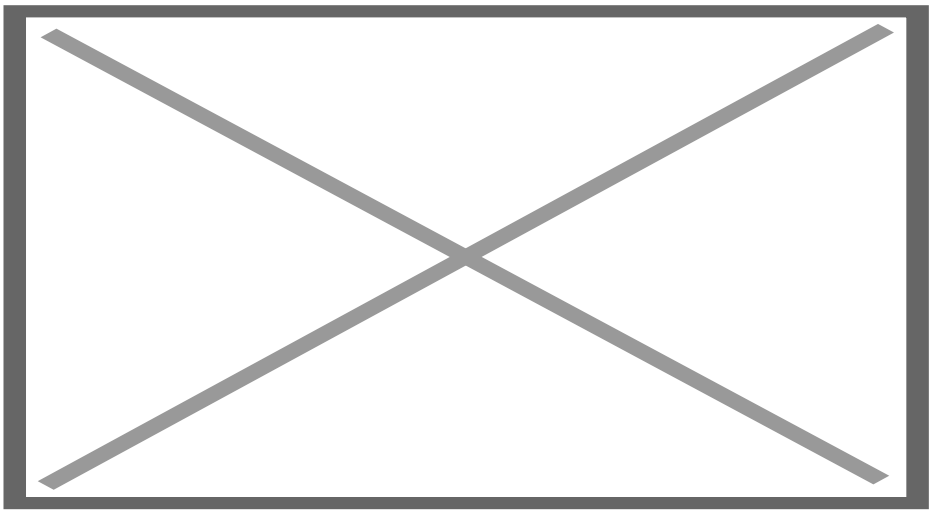
Master's degree
Specialisation Electrical Engineering
Enrolment type
Formation initiale
Formation continue
Language(s) of instruction
English

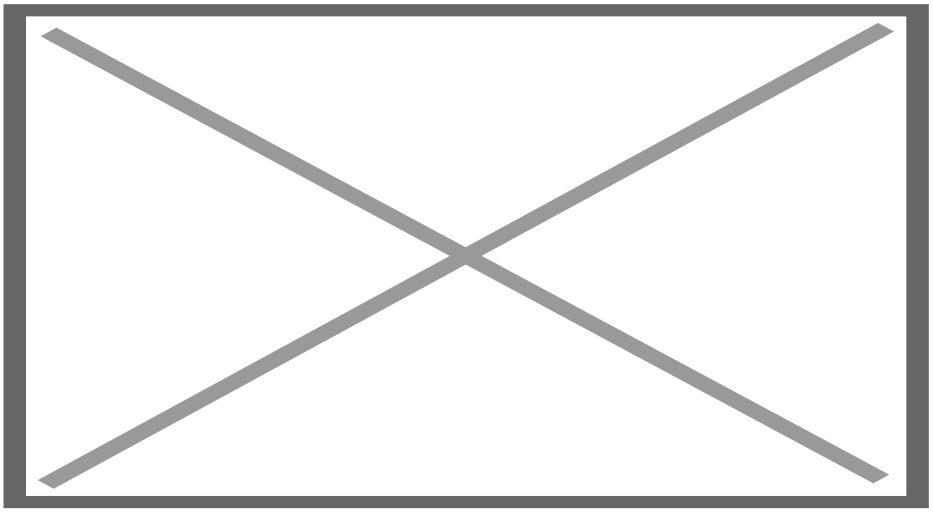
The *Master in Smart Aerospace and Autonomous Systems* trains experts in designing, modeling, and controlling intelligent vehicles and autonomous systems. This unique program combines scientific rigor, artificial intelligence, and embedded technologies to address the industrial and societal challenges of tomorrow.

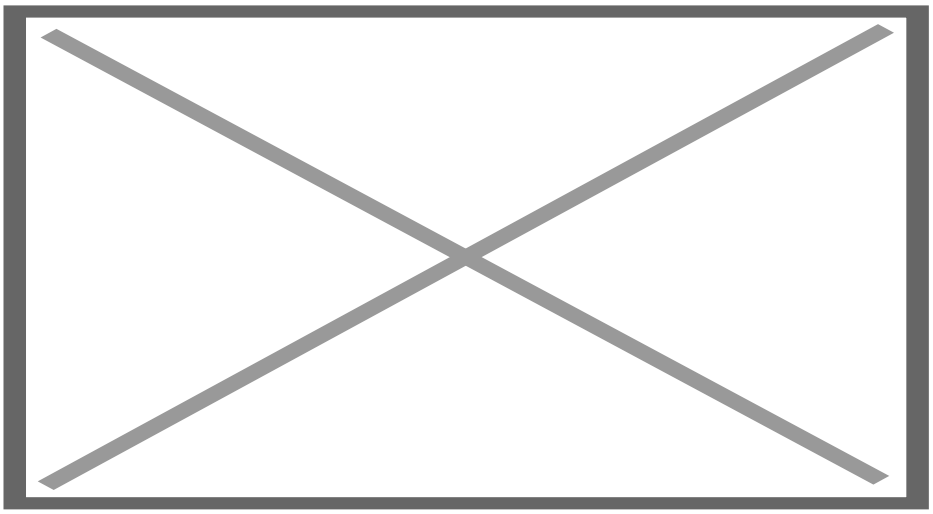
To train professionals and researchers capable of working on drones, autonomous vehicles, or cooperative robotic fleets, mastering both theoretical and practical aspects.

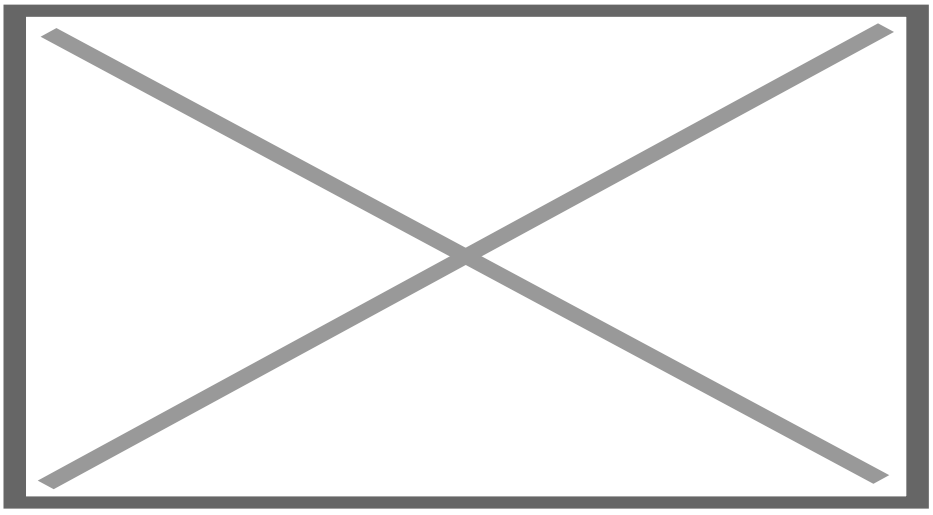
General Organization:
The program includes lectures, tutorials, practical labs, and supervised projects, offering a balance between fundamental knowledge and operational technical skills. The second semester of the Master is dedicated to a 6 months internship.

Télécharger la fiche détaillée
Apply Now









Information

- Overview
- Application requirements
- Schedule

Présentation

Skills

- Model, simulate, and control autonomous systems while ensuring stability, robustness, and maneuverability.
- Plan and coordinate missions, and integrate artificial intelligence for perception, decision-making, and the autonomy of intelligent vehicles.

Objectives

The rise of autonomous systems and intelligent vehicles has accelerated dramatically over the past decade, in both research and industry. Today, these technologies are transforming a wide range of fields: from surveillance and precision agriculture with drones, to aerial photography, autonomous cars, service robotics, and even maritime and space exploration. This rapid expansion makes specialized training indispensable, equipping students, future engineers or researchers with the expertise needed to design, analyze, and control such complex systems.

The Master’s program in Smart Aerospace and Autonomous Systems directly addresses this demand by offering a unique curriculum that combines theoretical foundations with practical applications. It integrates the latest advances in control, artificial intelligence, and embedded technologies, all applied to intelligent vehicles and autonomous platforms.

Within this program, students build solid expertise in control and guidance, ensuring the stability and maneuverability of intelligent vehicles. They also gain advanced skills in modeling and simulation, which are crucial for the design and validation of robust systems. Special emphasis is placed on trajectory planning and artificial intelligence, enabling true decision-making autonomy. Training in sensor integration and data fusion further equips students to perceive and interpret their environment with accuracy and reliability. Finally, the study of multi-system coordination prepares graduates to manage collaborative fleets of drones, autonomous vehicles, and other intelligent systems.

Although aerospace and aeronautics are central application areas, the competencies acquired extend far beyond this sector, with direct relevance to smart mobility, logistics, security, and service robotics.

By combining an interdisciplinary vision with scientific rigor and hands-on experience, this Master’s program offers students and engineers a unique opportunity to become key drivers of innovation in the field of autonomous systems and intelligent vehicles.

Débouchés

Career prospects

After a Master's or Master's + PhD: researcher or lecturer

After a Master's + PhD: researcher or lecturer
After a Master's or Master's + PhD: engineer (Research & Development, control, production, etc.)
Research or Design Engineer

Further Study Opportunities

PhD
Engineering, research and development
R&D researcher or data modelling and analysis expert in leading-edge companies or laboratories.

Admission

Admission Route

Science and Technology
Engineering Sciences

Capacity

Available Places

28

Target Audience and Entry Requirements

Target audience

- Students holding a Master 1, Bachelor’s degree (or equivalent) who wish to specialize in autonomous and intelligent systems.
- Practicing engineers or recent graduates seeking to develop advanced skills in control, modeling, artificial intelligence, and embedded technologies.

Prerequisites

- Qualification in aeronautics, electrical engineering, computer science engineering, embedded systems and dynamic systems, or mechanical engineering.
- Solid foundations in applied mathematics, control theory, and programming.
- Good command of technical and scientific English (courses are taught in English).

Période(s) de candidature

Inception Platform

From 02/02/2026 to 05/07/2026

From 15/08/2026 to 29/08/2026

Supporting documents

Compulsory supporting documents

Rank of previous year and size of the promotion.

Copy diplomas.

Copy of identity document.

Motivation letter.

All transcripts of the years / semesters validated since the high school diploma at the date of application.

Curriculum Vitae.

Certificate of English level (compulsory for non-English speakers) or GMAT / GRE test results.

Additional supporting documents

Detailed description and hourly volume of courses taken since the beginning of the university program.

VAP file (obligatory for all persons requesting a valuation of the assets to enter the diploma).

Document indicating the list of local M2 choices available here : https://urlz.fr/i3Lo.

Supporting documents :
- Residence permit stating the country of residence of the first country
- Or receipt of request stating the country of first asylum
- Or document from the UNHCR granting refugee status
- Or receipt of refugee status request delivered in France
- Or residence permit stating the refugee status delivered in France
- Or document stating subsidiary protection in France or abroad
- Or document stating temporary protection in France or abroad.

Programme

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours
Master's thesis	24	Semestre 2							
Charger le détail									
Project	4	Semester 2							
Charger le détail									
UE libre S2	2	Semestre 2	10	10					
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	d l
Language (FLE/English)	1.5	Semestre 1		14					
Charger le détail									
Flight modelling and simulation	3	Semestre 1	12	10	8				
Charger le détail									
Unmanned Aerial Systems	3	Semestre 1	12	10	8				
Charger le détail									
Advanced artificial perception	3	Semestre 1	12	10	8				
Charger le détail									
Energy-Efficient Mission Coordination	3.5	Semestre 1	12	10	12				
Charger le détail									
Embedded software and IoT	3	Semestre 1	12	10	8				
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed	Lecture/practical	directed study/practical class	d l
Sustainable Navigation Planning and optimization	3.5	Semestre 1	12	12	12				
Charger le détail									
Advanced Control of Smart Systems	3.5	Semestre 1	12	6	8				
Charger le détail									
AI and Smart systems	3	Semestre 1	12	10	8				
Charger le détail									
Sensor Fusion for Navigation and Control	3	Semestre 1	12	10	8				
Charger le détail									

Teaching Location(s)

EVRY

Contact

- **Naïma AIT OUFROUKH**

  MCF
- **Mélodie KAMALANDUA**

  Gestionnaire de scolarité pédagogique

http://www.universite-paris-saclay.fr/formation/master/electronique-energie-electrique-automatique/m2-smart-aerospace-and-autonomous-systems