

Accredited by the Conférence des Grandes Écoles

The ISAE's Masters programs benefit of the strong connections with the aerospace and defence industries, as well as automobile, energy, etc. developed over the past 100 years by SUPAERO and ENSICA merged under a unique Institute in 2007.

Aims

The MAEST-Astro: Astronautics is intended to educate graduate students in subjects relevant to the requirements and needs of industry. MAEST-Astro program is designed to be multidisciplinary and is aimed at developing engineering skills to easily and efficiently work on multinational complex space projects (R&D, support, exploitation), either in research facilities, agencies or in companies.

Organization

Head of Program

Prof. Bénédicte ESCUDIER

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Duration of studies: one year full time

Beginning of classes: September

Location: ISAE-SUPAERO campus

Teaching language: English

Pedagogical approach

ISAE Master's programs are designed with a combination of lectures, personal project and assignments and thesis projects to be performed in industrial environment or in ISAE's laboratories. They are taught in English. Interweaving the teaching of both Masters, they offer several options enabling graduates to envisage their professional career with confidence in accordance with their wishes and interests.

Compliant with European higher education system, the MAEST-Astro is a one-year program with a total of 60 ECTS credits. MAEST-Astro consists of a second year of full Master program accessible for students having studied the first year of MS AMA.

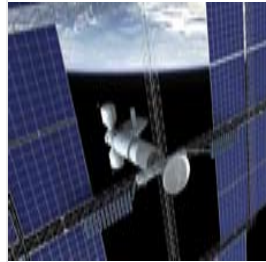
Syllabus

First semester: academic session provided by ISAE's permanent professors and experts from aerospace industry bringing current knowledge and experience, including: lectures, exercises, engineering and design study seminars, lab sessions, case study, written report and oral presentation, practical sessions, team work and team business game and industrial visits.

Courses contents:

- Mission analysis and orbital mechanics
- Space environment and effects
- Space communications systems
- Space projects and systems: satellites and launchers
- Space projects economy
- Space projects legal aspects
- Control of multidimensional systems and application
- Satellites guidance and control
- Launchers guidance and control
- Satellite electrical systems
- On board systems and data handling
- Satellite thermal control system
- Satellite engineering and design
- Foreign languages
- Research project

Second semester: students conduct a thesis within an aerospace industry or organisation, in France or abroad and supervised by a tutor from the host organisation and from ISAE. The Master thesis is concluded by the preparation of a report and an oral dissertation in front of jury.



Who can apply?

Applicants must possess a first year of Master program in aeronautics, or related domains. MAEST-Aero is also accessible for student having validated MS AMA with semester 2 in «aerodynamics & aerothermics» or «aircraft control».

How to apply?

- Through application file, to be downloaded at www.isae.fr.
- Selection is made upon the study of the application file, possible interviews can be organized if necessary.
- Deadlines for application: from April to July 2009.
- Application fees: 65 € (non-refundable).
- Applications have to be sent:
Institut Supérieur de l'Aéronautique et de l'Espace
Direction des masters et mastères spécialisés
10, avenue Édouard-Belin - BP 54032
31055 Toulouse Cedex 4 - France

English proficiency

Adequate command of spoken and written English is required for admission.

Language qualification is requested TOEFL: 550 (paper-based).

Except if applicant's first language is English or total instruction of Bachelor or Master degree has been provided in English.

Tuition fees in 2009-2010 : 10 000 € for students applying to semesters 3 & 4 only.

European Students: 5 000 € (students graduated in the year of application or the year before, and with no professional experience).

Dates: sept. 2009 - sept. 2010.

European Commission Erasmus Mundus program

EuMAS is a two-year program jointly offered by five European aerospace schools: Università di Pisa (Italy), Technische Universität München (Germany), Universidad Politécnica de Madrid (Spain), Institut Supérieur de l'Aéronautique et de l'Espace (France), and Cranfield University (United Kingdom).

EuMAS Master consists of a running program among the five partners: the two year Master program is hosted by two institution every new cycle.

EuMAS scholarships is offered to non-European students, admission to EuMAS Master program is open to European and non-European students.

Contact information

- Michel CHAUVIN, Deputy Director of Masters programs: michel.chauvin@isae.fr
- Marie JENTET, Information and marketing manager: marie.jentet@isae.fr
- Web: www.isae.fr

Career opportunities

Toulouse is at the hub of the European aerospace industry, and accommodates leading European engineering and postgraduate institutions.

The majority of graduates find positions in the aerospace industry (spacecraft, launcher, engine and equipment manufacturers), and government agencies.

They have senior positions in industry as researchers, experts, heads of projects or managers.

Witnesses

Two questions to Stephné Du Rand, astronautics MAEST student from South Africa

What is the main point of the Master course?

"As most of our lecturers come from the space industry or are well known international experts, this programme is not only tailored for educational purposes but also to what industry wants. Thus this is a good way to get a foot into the door after you have finished".

What would you say if you had to recommend this programme?

"I would recommend it to students having a deep interest in the space industry and a real drive to go into this field.

I would also outline the community spirit as you work in an international team. This is challenging!".