



# AEROSPACE PROJECT MANAGEMENT

ADVANCED MASTER



## ONE YEAR FULL TIME

- 6 months of courses
- 6 months of professional thesis or internship.

## TEACHING LANGUAGE

- English

## START OF CLASSES

- End of September

## LOCATION

- ISAE-SUPAERO, Toulouse, France
- ENAC, Toulouse, France
- Ecole de l'Air et de l'Espace, Salon-de-Provence, France

## KEY POINTS

- Prepare for both civil and defense project management.
- To get an updated overview of the aerospace industry.
- PMI Certification preparation (optional).

## HEADS OF PROGRAM

- ISAE-SUPAERO: Prof. Philippe GIRARD  
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- École de l'Air et de l'Espace: Prof. Camille GUIROU  
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- ENAC: Prof. Nicolas PETEILH  
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## CONTACT

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## OBJECTIVES

The Aeronautical, Space and Defense business is, by nature, complex, innovative with high technical added value. Placed at the heart of political, economic, environmental and technological issues, in France, in Europe and worldwide, it requires a prospective vision from decision makers. It is based on specific industrial processes, characterized by long, costly and risky cycles (R & D, production, maintenance & support). In this context, project management in an aerospace environment requires mastering a wide range of knowledge, know-how and expertise adapted to the specific needs and issues of this challenging global business.

To address these concerns, ISAE-SUPAERO, Ecole de l'Air and ENAC have pooled their expertise to develop the Aerospace Project Management (APM) advanced master. The professionally-oriented APM advanced master provides students with an overview of the military or civil international Aerospace industry and gives up-to-date skills, cutting-edge knowledge, and the skills needed to successfully lead Project or Program teams in the global aerospace and defence industry.

## LEARNING APPROACH

### 1<sup>st</sup> semester:

With an emphasis on operations, the program is designed for those starting out on a project management career or professionals seeking to sharpen their skills for faster career development. The APM program is taught by experts and lecturers with extensive aerospace project experience, with a combination of formal presentations, in-class exercises and study cases. The objectives of this practical approach are to provide students with current techniques and tools in project management taking into account the industrial, economic and legal specificities of the Aerospace business.

The teaching staff is composed of professors, lecturers and consultants from ISAE-SUPAERO and Ecole de l'Air (CReA). Several consultants, experts in project management are invited to have students benefit from the knowledge they have gleaned from their own experience. On top of that, many experts from industries, most of the time heads of aerospace programs, will illustrate parts of the courses.

**2<sup>nd</sup> semester:** Students are required to conduct a 4 to 6 months professional thesis or internship:

- in an industry or in a laboratory,
- in France or abroad,

supervised by a tutor from the host organization and from Ecole de l'Air et de l'Espace or from ISAE-SUPAERO.

The thesis concludes with the submission of a report and an oral dissertation in front of a jury.

## CAREER OPPORTUNITIES

The APM advanced master program leads students to integrate or to become Heads of Aerospace program teams, to design and steer complex projects with Aerospace or defense companies and ensure on-going control over costs and risks.

## CAREER OUTCOMES

- PMO - Project Management Officer,
- CTO - Chief Technical Officer
- Quality control manager,
- Logistician, Buyer, finance controller...

### Companies recruiting our students:

AIRBUS, Air France, AVIC, Liebherr Aerospace, Reliance Defence, Scalian, Safran Electronics & Defense, Elron Consulting, Jet Aviation, RUAG Aerospace Structures...

More information





## SYLLABUS



### Part 1: Overview of the aerospace industry

- an in-depth overview of the global aeronautics and space industries;
- an overall understanding of technologies, products, innovation;
- strategy stakes in the global civil and defence market;

### Part 2: Methodology

- a good understanding of Project management tools (WBS, planning, needs specification, etc);
- Models and Methods of Project management in an Aerospace context with specificities for high stakes and long cycle programs;

### Part 3: Economic and financial aspects

- a good understanding of the economic stakes for nations or industries and the role of politics.
- how to evaluate the cost of a long term program, the expected return on investment;
- managing costs during development or manufacturing phases;

### Part 4: Knowledge management in multicultural team project

- the need to integrate and federate skills around a common goal: how to motivate people for a long term project.
- how to integrate intercultural management within an international Program to avoid conflict and combat resistance to change.

In each of these parts the focus will be systematically on risk assessment and control as well as Aerospace quality concepts and indicators.

#### PMI Certification

The APM program offers the possibility of PMI Certifications: CAPM or PMP. In a rapidly changing world, professional certification ensures that project managers meet the demands of space projects all over the globe. By offering an additional month of training, you will be especially prepared for CAPM or PMP exams. Volunteers will have the opportunity to supplement the APM diploma with a renowned PMI certification appreciated all over the world and which opens the door to a successful future. Preparation Teachers are certified themselves and PMBOK reference experts.

#### TESTIMONIES

##### DHANUSH NATTUVELTY

Class of 2021-2022

As an engineering graduate who later moved into a management career stream, I was not professionally trained in management. Although I attained professional experience in managing IT for Aerospace, I always felt that I lacked some information with respect to the aerospace domain and management in this sector. Hence I looked for a course that covers some basics in Aerospace with a management focus. That is when I came across ISAE supaero and the advanced masters that are offered. **ISAE Supaero was also highly recommended by my managers as one of the best grandes ecoles in France.** After communicating with the ISAE supaero team they gave me additional details on the courses offered and I found that the specialized masters in APM is exactly what I was looking for.

I found that the advanced masters course **covers the basics of aerospace and goes into depth about management.** What I liked most in the course is how the course is organized to provide **hands-on experience in project management.** By actually managing a project we were able to learn from experience and apply what we learnt from our tutors. The tutors who came from different schools and companies, provided us with different perspectives. I believe that this will help us greatly in our professional career.

##### ALIX CHOMA-BEX

Class of 2021-2022

During my engineering studies I started to feel I wasn't going in quite the right professional direction. I felt attracted to more general topics and coordination. Through different academic projects I realized I enjoyed being the facilitator, the person making everyone and everything work and fit together. Also, I had been dreaming of aerospace for a while but my studies were devoid of this field.

**All these factors led me to the APM Advanced Masters which encapsulated everything I wished for. The broad yet extremely relevant Syllabus paired with the CAPM certification coaching, all under the ISAE-Supaero (ENAC and EAE) name is a golden key to a world of possibilities.** And considering the positions my classmates and I were able to obtain, with the right inner passion this curriculum leads to any Aerospace sector one desires