



POST-MASTER DEGREE AERONAUTICAL OPERATIONS AND MAINTENANCE

STUDY IN ENGLISH, LIVE IN PARIS

AN INNOVATIVE PROGRAM CLOSELY ALIGNED WITH INDUSTRIAL REQUIREMENTS

The modern air transport industry needs engineers who have more than the traditional technical skills. The airlines have to ensure global security at an affordable cost. Their engineers need a global view of the legal and economic environment as well as an in-depth understanding of operations and maintenance processes in order to cope with a growing international competition and a complex regulatory framework. They will also help this industry to recover after the COVID crisis and to cope with environmental issues.



PROGRAM IN BRIEF

Aim

Acquire the skills to understand the organization and the economy of the air transport industry.

Program benefits

- Teaching faculty heavily involved in the industrial sector;
- Global overview of the air transport industry.

Skills acquired

- Implementation and execution of aircraft maintenance and airline operations from the perspective of a manufacturer, maintenance operator and airline;
- Ability to work within the constraints of aeronautics regulations;
- Understanding of European (EASA) and US (FAA) regulations;
- Understanding of relationships between airworthiness authorities, manufacturers, airlines, airports and MRO operators;
- Understanding of the industry chain value and global economy;
- Knowledge of Corporate Social Responsibility in the air industry.

500 hours of academic coursework including 400 hours face to face and 100 hours of industrial project: (October to mid-February)

- Regulatory environment (in Europe and the United States);
- Airline operations;
- MRO operations;
- Engineering skills;
- Soft skills.

24 weeks minimum of in-company operational training followed by a professional thesis defense (February - August).

Assessment

- Teaching modules assessed via exams and case studies;
- Academic project & Professional thesis assessed via dissertation & oral presentation.

Job prospects

- Aeronautical supply chain for manufacturer and equipment providers or/and airlines.
- Maintenance department manager, project manager for aircraft maintenance operations, project manager for an aircraft interior redesign operation, etc.
- Maintenance and support departments for aircraft manufacturers, aircraft maintenance operators, airlines and airport operators.
- Flight safety manager, quality manager in an airline or an airport operator.

Industrial partners

Air France (Airline & MRO) , Airbus Group , ADP (Aéroports de Paris), Safran Group, Aerobay, Corsair

Course breakdown: Lectures, case studies, team work project and management

Language: English

Number of credits: 75 ECTS



ESTACA offers a Post-Master degree in aeronautical operations and maintenance that applies to Airline, MRO operators, Airport operators, Aeronautical logistic and air manufacturing companies.

The aim of this one-year program is to offer students the means to understand the organization and the economy of the air transport industry. They will be in close contact with our partners (Aircraft manufacturers, Airlines, MRO operators, Airport operators) so they will be able to apply their theoretical knowledge directly to real cases. The Air Rules are the cornerstone of this course and are studied with different approaches.

Marc WEBER, Program Director



A MASTER WHICH PROVIDES YOU WITH THE KNOWLEDGE AND SKILLS REQUIRED TO BE DIRECTLY OPERATIONAL!

I decided to join the « Operations and Maintenance » program to get an overall view of the air transportation field, regarding international regulations and maintenance issues.

During the year, we did several group projects with the support of experts working in a specific domain.

That was really interesting. Now, my position at Air France Industries allows me to work daily with experts from Engineering and Production, Airline Operation teams, and Management. Thanks to this masters degree, I have the correct background to exchange with all the Air France Industries' teams, whatever the subject.

Safety is fundamental, and at the center of each action. This degree will teach you all the basics regarding methods, programs maintenance, and regulations in order to succeed in this industry. I strongly encourage people who want to work in air operations and aircraft maintenance to apply.

Prabal COUNTCAM, alumni 2015, Project Management for the Airframe Division - Air France Industries

MODULES & SUPPORTING COMPANIES

AIRLINE BUSINESS, PURSHASING METHOD AND ECONOMICS - SAFRAN GROUP, BRUSSELS AIRLINES, AIRBUS

Introduction to Airline Business
Introduction to Purchasing Methods
Geo Economy & Strategy
Air Transport Economics
The Airline / Manufacturer relationship
Juridical Liability and Responsibility
Introduction to negotiation Methods

54 Student Hours – 6 ECTS

AIR RULES AND CERTIFICATION - AIR FRANCE, TIME TO FLY, MINISTERE DES ARMEES

Air Regulations. OACI/EAS/FAA regulation architecture
European Aeronautical Institutions
Airworthiness management from certification to operations
State Owned Airships operations & Maintenance

48 Student Hours – 6 ECTS

AERONAUTICAL OPERATIONS - MINISTERE DES ARMEES, EASYJET, AEROPORT DE PARIS, AIR FRANCE

Air Savety
Airline flight safety
Airport operations
Airline operations
Helicopter operations and maintenance

58 Student Hours – 7 ECTS

AERONAUTICAL MAINTENANCE - CORSAIR, AEROBAY, SAFRAN GROUP, SR TECHNICS, AERO-CONSULTING

Aircraft maintenance program
Maintenance Methods / ATA Maintenance, MRO Aerobay
Introduction to NDI methods
Engine Maintenance
Introduction to Airworthiness management - CAMO

84 Student Hours – 11 ECTS

DISCOVERY OF THE PROFESSIONAL ENVIRONMENT IN AERONAUTICS - AIR FRANCE, AIRBUS

Professional passport
Aircraft Technical English
Visits
Forum ESTACA

58 Student Hours – 2 ECTS

PROJECT - SAFRAN GROUP & PARTNER

Project Management
Project (120 students hours including 12 hours with tutor)

148 Student Hours – 13 ECTS

PROFESSIONAL THESIS

840 Hours in Company – 30 ECTS

TOTAL: 450 student hours - 45 ECTS

TOTAL WITH PROFESSIONAL THESIS: 75 ECTS

Note: the above program might be subject to minor changes.





WHY I CHOSE ESTACA POST-MASTER DEGREE AERONAUTICAL OPERATIONS AND MAINTENANCE

I'm an aerospace engineer from Italy. I've chosen to apply to this Post-Master because I wanted to acquire more technical skills in fields like certification, maintenance and operations and I found out that ESTACA was offering this program that was exactly aligned with the skills I wanted to acquire.

For me, the best thing in this program is the possibility to be taught by professionals working in the industry. This means that they are not academics and they can share with us their knowledge and their experience.

After an internship as a Technical Support Engineer in France, I'm currently a Safety and Reliability Engineer for Airbus in Germany.

I definitely recommend this Post-Master especially to people like me who love this field, really practical and technical, but never had the chance to acquire these technical skills before.

Best souvenir from this stay is for sure the opportunity to share the experience with international and French colleagues.

Daniela GIOVINGO, student in 2019-2020

ESTACA GRADUATE ENGINEERING SCHOOL

Founded in 1925, ESTACA is a member of ISAE group, 1st world cluster in aerospace training and research. ESTACA is highly specialized in the fields of aeronautics, automotive, space and railway industries.

The training courses constantly evolve to meet the requirements of companies and adapt to the emergence of new technologies or disciplines. ESTACA's graduates undertake the design, development and production of transport systems and components. The industry has ranked ESTACA among the best engineering schools for its expertise in the transportation fields.

ESTACA IN FIGURES

3

campuses: ESTACA-Paris Saclay, ESTACA-Laval and ESTACA-Bordeaux

400

graduates per year

2 160

students

9 300

alumni

2

research teams

ISAE IN FIGURES

Group of the 4 most prestigious French engineering programs in Aerospace: SUP'AERO, ENSMA, Ecole de l'Air, SUPMECA, ESTACA

6 000

students at a high scientific level in aerospace

380

doctoral students

41 500

alumni

650

faculty, researchers and engineers



ESTACA PARIS-SACLAY CAMPUS IN SAINT-QUENTIN-EN-YVELINES

Located west of Paris, 10 min. from « the Château de Versailles » and 30 min. from the Eiffel Tower, the ESTACA-Paris Saclay engineering school offers a wonderful environment for students on international programs. Opened in 2015, this campus is 5 min. from the station Saint-Quentin-en-Yvelines, a town with ideal facilities for students in terms of accommodation, university restaurant, sports, culture, etc.

Saint-Quentin-en-Yvelines, located in the Paris-Saclay cluster, is the second economic hub west of Paris, and houses a great deal of industries in the transport sector and academic and scientific partners in phase with issues in the transport and mobility sectors. Many French «Grandes Écoles» and universities have set up here and together make up the Université Paris-Saclay, of international reputation, forming the training and research pole of the Paris-Saclay technological cluster, a sort of Silicon Valley «à la française».

PRACTICAL INFORMATION

Eligibility

This program is open to all foreign and French students holding a **Master Degree (preferably in scientific fields, business master may also apply)**. Applicants proving 3 years of professional experience should have completed four years of studies in an engineering program (Master Level or Advanced Bachelor). Applicants should have English language proficiency (TOEFL iBT: 91, TOEIC: 850 or IELTS: 6.5).

Location

ESTACA Paris-Saclay campus in Saint-Quentin-en-Yvelines

Tuition fees

13 000 € (reduced fees for students graduating in the year of enrollment and ESTACA Alumni: 10 000 €)

Admission process

Admission upon application, with an interview.

- Application Form available on the website:

www.admissions.estaca.fr

- Application period: admission board are held every month from January to August.

Degree accredited by the **Conférence des Grandes Ecoles***

www.cge.asso.fr

Keywords

Aircraft maintenance, aeronautics project management, airworthiness, fleet management, Aeronautics regulations, Airline operation, CAMO, FAA, EASA, ICAO

* The « Conférence des Grandes Ecoles » is a French national institution that represents the best Graduate Engineering Institutions accredited by the Commission des Titres d'Ingénieur (CTI) to deliver the French Graduate Engineer Diploma equal to a Master's degree.



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