

# **Automotive Engineering for Sustainable Mobility**

## Master programme



# This FAQ addresses the primary concerns of international students, helping them make an informed decision about enrolling.

## **General Program Information**

#### What is the structure of the research master's degree?

This two-year automotive engineering programme in Europe at master level (3 semesters & 1 internship semester) is entirely taught in English in both European automotive engineering universities ISAT Nevers & Polytech'Orléans.

This programme aims at preparing future automotive student-engineers for a professional career with a broad knowledge in automotive systems adapted to the new trends (hybrid propulsion, electrical vehicle, bio-materials, alternative fuels, fleet management...) while offering specialisations central to the industry & research to meet these requirements.

Core teaching units with a choice of two specialised options:

- vehicle dynamics / intelligent vehicle
- energy management & control for sustainable mobility

The program is entirely taught in English. Syllabus here : https://www.univ-orleans.fr/fr/node/3670

#### Diploma

The official diploma for this master degree is delivered by the Université de Bourgogne, becoming Université Bourgogne Europe as of January 1<sup>st</sup>, 2025.

#### What qualifications will I receive upon completion?

- in-depth knowledge base in fluid mechanics, thermodynamics, electrical engineering and computer engineering

- in-depth knowledge of control-command methods
- ability to integrate new knowledge
- ability to analyse, reason logically and summarise
- capacity for systemic analysis
- mastery of the modelling/experimentation loop
- capacity for creativity and innovation
- good level of autonomy
- rigorous technical and human approach
- great intellectual curiosity
- openness to international issues and to different cultural approaches to the same problem.

#### Are internships or practical experiences included?

It is the student's responsibility to find an internship. The engineering schools however help the students. Students have access to the database of the alumni of both establishments. The department of the relationships with companies also receive offers that every student can review on the intranet of our engineering schools. You can find an internship in a company or in a laboratory all over the world, even in your home country.

If you find an internship in France, you will be paid at least about 578 euros per month. In the other countries, there is no minimum salary for internship.

If you find an internship in Europe (University labs or in research labs), you may get an Erasmus scholarship (about 120 €/month for NON-EU students & about 240 €/month for EU students).

If you find an internship abroad excluding France, you may get a scholarship amount of 240 €/month from the region of Bourgogne Franche Comté, FRANCE.

For internships in France or abroad, you may apply to a FISITA scholarship up to 2,000 € for (5~6 months).

## Eligibility and Admission

#### What are the eligibility criteria?

Enrolment is open to students with a bachelor's degree (at least first division or first class) in the branch of engineering (*mechanical, automotive, electronics, computer science, material, physics/chemical engineering, applied sciences, mathematics...*).

It is not compulsory to have taken a French course before applying, since it is a program taught in English, and you would be having French courses in your curriculum for both 1<sup>st</sup> & 2<sup>nd</sup> year. But if you have taken French intensive courses, life will be much more easier for you upon your arrival.

Ideally, a professional experience is always an added value but not compulsory for this program.

#### How do I apply?

No need to send your documents by post. Please fill in the application form and send us all required documents directly online: <u>https://www.univ-orleans.fr/fr/polytech/application-form</u>

The original documents are to be presented at your arrival for the registration at the university.

If you are selected, we will issue you a conditional letter of admission that allows you to join the program. However, prior to registration you must provide all the required documentation.

#### What are the English language proficiency requirements?

GRE is recommended for admission. Your application file could be examined without GRE, but GRE is an added value during the selection process. The certified photocopy of GRE will be enough. But TOEFL or IELTS is COMPULSORY (even if your previous Degree was in English) since this course is completely taught in English. And these exams should be taken at least 2 months prior to the application deadline.

English proficiency: TOEFL 550 (paper based) / TOEFL IBT 80/120 (computer based)/ IELTS 6.5, TOEIC 750.

All score sheets must be submitted with your application. We cannot upload or review score sheets sent separately by ETS, IELTS, TOEFL, the applicant or another organization. We can however receive the document directly from the IELTS organization for example.

## **Financial Aspects**

#### What are the tuition fees?

When the application is accepted by the selection committee, the student must settle a first payment for 1,000 euros for tuition fees as soon as possible as the seat is booked according to this first payment and students get an admission letter from the university after this first payment is received. We work on a first arrived, first served basis until our limited seats quota is not reached. The balance of the tuition fees must be paid by end of August or upon arrival as registration fees. Students cannot be registered as a student until the full payment of the tuition fees and cannot therefore be covered by the social security.

#### Working

Applicants should not count on financing their stay in France by working part-time during their studies.

International students with a student's visa are allowed to work up 964 hours per year outside the university without a work permit, but students rarely get jobs here, as they need to use this time to concentrate on their studies. It is, however, possible to work during summertime if students are ready to do manual or repeating jobs. Students from EU countries who would like to work are generally subject to the same rules as French students.

#### **Proof of Financial Ability**

Before coming to France: in some cases, the French embassy in your home country may require proof that you have enough money to support yourself in France. See the information under Campus France Visa Requirement (at least 615 euros per month for 10 months).

#### Bank loan

Many students take a bank loan to finance their studies and they can reimburse it quickly when they get a job as an engineer.

#### Are there scholarships or financial aid options?

**Our universities do not provide any scholarships**. Here are some of the common financial aids subsidised by the French government and the Region Centre:

- Students usually receive a financial aid from the French government for their accommodation from the 2nd month of their stay in France. France is the only country in Europe to grant such a financial aid for the accommodation. This financial aid is subject to review by French law. It can represent maximum about 35 % of your total monthly accommodation's rent in a university hall, but you must advance the money as the CAF may give the financial aid only at the end of the first semester or at the end of the academic year sometimes. For more Information about CAF, please visit the website <a href="http://www.caf.fr/">http://www.caf.fr/</a>
- The region "Centre" offers SPECIAL scholarships on merit for the two students who obtain best results during the first semester. The amount of this scholarship may vary yearly but is usually around 2,000 euros. The continuing of this scholarship is depending on political decision and therefore, we cannot guarantee its existence next year.
- The University of Burgundy offered a scholarship for the best student of AESM of an amount of 4,600 € in 2012/2013. The scholarships mentioned totally depend on political and financial decisions.
- For students from India, Campus France India offers Scholarship for this course. For more detailed information, please visit: <u>Charpak Master's Scholarship | Campus France</u>
- Contact Campus France office in your home country for information's on the scholarships offered or visit the following website: <u>CampusBourses v1.3.5 (campusfrance.org)</u>.
- Erasmus+ Master Loans allow students to apply for financial support for their master's studies abroad. Loans will be offered by participating banks and student loan agencies on favourable conditions to mobile students, including better than market interest rates and up to two years to allow graduates to get into a job before beginning repayment <u>Erasmus+ Master Degree</u> <u>Loans | Erasmus+ (europa.eu)</u>.

#### What are the living costs in France?

Approx. 900 Euros per month. https://www.campusfrance.org/fr/node/2155

## Visa and Immigration

See the information under Campus France Visa Requirement.

## Living in France

The international relations office of the University of Orléans can help you find student accommodation. They are in touch with the CROUS, an establishment managing the university halls. You make an online registration and provide a list of required documents. Some of the students housing can be found in and around the Campus controlled by the CROUS mostly preferred by the students at the university (i.e., walkable distance). **They work on a <u>first arrived, first served basis</u>. The prices of the room vary according to the room's sizes (Simple, Comfort, studio).** 

For more information in Orléans: http://www.crous-orleans-tours.fr/logements/nos-residences/orleans

and in Nevers: https://www.nevers.fr/se-loger

The secretaries of our MSc. Automotive Engineering for Sustainable Mobility of Polytech and ISAT will help you find an accommodation in Nevers. We have contacts and addresses for the students.

#### What's the cost of healthcare?

All students in France are required to have health insurance coverage. This insurance must include the following services: medical and dental treatment, treatment with medication, hospital treatment, medical services for rehabilitation and services for pregnancy and birth. This insurance can be done after enrolment in the university which will be guided by the staffs of Polytech Orleans & also in Nevers.

# Registration to the French "Sécurité sociale" is mandatory and free of charge and will entitle you to reimbursement of your health care expenses throughout your time in higher education.

The registration process can take several months; therefore, it is essential to start it as soon as you arrived. The registration must be done on the health insurance website dedicated to foreign students: <u>Inscription</u> <u>des étudiants étrangers et des collectivités d'outre-mer à la Sécurité Sociale (ameli.fr)</u>.

A complementary health insurance is strongly recommended as well as medical repatriation to cover your medical expenses in case the French healthcare process takes time.

## **Post-Graduation Opportunities**

Alumni easily find a position as an engineer or as a PHD after their master's degree. They can work in R&D departments or laboratories all over the world.

It is of course the student's responsibility to find a job. Our two engineering schools have collaborations with many very well-known companies such as Renault, Peugeot, Citroën, Valéo, Faurecia, Volvo Trucks, LMS, Bosch, etc.

### Networks to keep in touch

LinkedIn group: M.Sc. in Automotive Engineering for Sustainable Mobility (AESM)

https://www.linkedin.com/grps/MSc-in-Automotive-Engineering-Sustainable-8442320/about?

Facebook group: https://www.facebook.com/groups/MasterAESM

Students' associations: <u>https://www.facebook.com/polytechorleansBDE/?locale=fr\_FR</u> <u>https://www.instagram.com/bde.polytech.orleans/</u> <u>https://www.instagram.com/bde.isat/</u>

#### Still not finding answers for your questions?

Please send a mail to: master.aesm.polytech@univ-orleans.fr