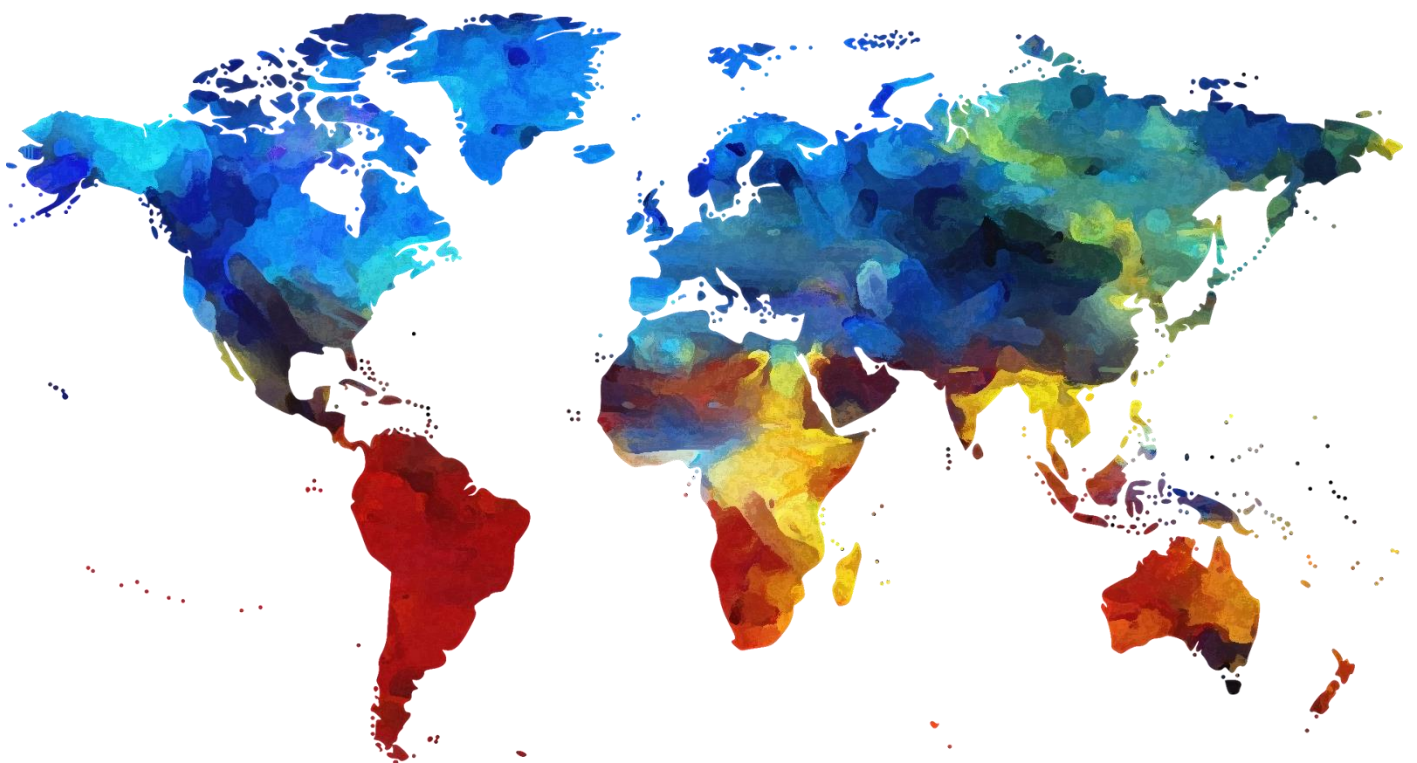


FREQUENTLY ASKED QUESTIONS

Information for International Master's and PhD Students
in Mathematics at Université Paris-Saclay



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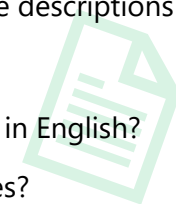
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WELCOME AND GENERAL INFORMATION



What do I need to know about my arrival and my stay in France?

You can find all the necessary information on housing, public transportation, administrative procedures (visa, residence permit), the French public health system, the Buddy Program, French language courses, welcome events, etc. on the Mathematics Graduate School's webpage.

➡ <https://www.universite-paris-saclay.fr/en/support-international-students-graduate-school-mathematics>

If you have questions about administrative procedures, especially regarding your visa or residence permit, please contact:

➡ **GATE** <https://gate.paris-saclay.fr/en/> (if you are a master's student)

➡ **Sciences Accueil** <https://www.science-accueil.org/> (if you are a PhD student)

The University also has a webpage with additional information on life in France and French culture.

➡ <https://www.universite-paris-saclay.fr/en/campus-life/international-welcome-desk>

Can I meet someone who speaks my native language to assist me during the first few days? Is there a community of international students to support my integration?

The Buddy Program is a free welcome program designed for international students. Depending on your background, nationality, and campus, the platform connects you with experienced international students already at Paris-Saclay to help answer your questions.

➡ <https://www.universite-paris-saclay.fr/en/news/registration-for-the-buddy-programme-an-international-mentoring-programme-are-open>

You can also join the Bureau des Étudiant.es de Mathématiques d'Orsay (Mathematics Student Office) on Discord at <https://discord.gg/deThU6y92U>. This will allow you to connect with French and international mathematics students at Paris-Saclay.



Where can I find detailed course descriptions, and are these course descriptions available in English?

I. You can find the webpages of the various Master's programs (M1 and M2) here:

➡ <https://www.universite-paris-saclay.fr/en/education/master/mathematics-and-applications#presentation>

II. You can find more information on the **Graduate School of Mathematics** webpage:

➡ <https://www.universite-paris-saclay.fr/en/education-graduate-school-mathematics>

You can also find information on the webpages of the mathematics departments involved in your master's program.

- **Département de Mathématiques d'Orsay:**

➡ <https://www.imo.universite-paris-saclay.fr/en/students/masters-programs/>

- **Département de Mathématiques de l'Université de Versailles (UVSQ):**

➡ <http://www.departement.math.uvsq.fr/formations>

- **Département de Mathématiques de l'Université d'Evry:**

➡ <http://www.math-evry.cnrs.fr/departement/doku.php?id=formation:homef>

Please note that some webpages may be out of date, and not all of them are available in English.

What courses are taught in English?

Only the **M2 in Optimization** and the **M2 in Quantitative Finance** programs are entirely taught in English. The following programs offer certain courses in English.

M1 – Applied Mathematics (Evry)

M1 – Jacques Hadamard (Orsay)

M2 – Analysis, Number Theory, and Geometry

M2 – Data Sciences: Health, Insurance, and Finance

M2 – Mathematics of Randomness

M2 – Mathematics, Vision, Learning

M2 – Mathematics and Artificial Intelligence

M2 – Jacques Hadamard (Orsay)

Language of instruction is often determined case by case, considering the number of international students in the course. You can request the lecturer to teach in English at the course's outset.

Are there English learning resources available?

Some teachers provide handouts in English, but this varies on a case-by-case basis. You can ask the lecturers for handouts in English or relevant study books.

Can I find books in English in Paris-Saclay's University Libraries?

Of course! The following webpage lists all the libraries on campus.

➡ <https://www.universite-paris-saclay.fr/vie-de-campus/bibliotheques>

FOCUS is the online catalog of the Paris-Saclay libraries. It contains all the books, e-books, scientific journals, articles, databases, and digital documents available in the libraries and documentation centers of Paris-Saclay.

3 FRENCH LANGUAGE COURSES

Is it possible for me to enroll in French Language courses?

Find out more about learning French (before or during your stay) on the following website:

➡ <https://www.universite-paris-saclay.fr/en/campus-life/international-welcome-desk/learning-french>

The **language center located at CentraleSupélec** offers French language courses, and access conditions may vary depending on your institution/enrollment component (UFR des Sciences d'Orsay, Université d'Evry, Université de Versailles, etc.). For more details, please visit:

➡ <https://www.sciences.universite-paris-saclay.fr/formation/service-des-langues/nos-formations/cours-de-fle-francais-langue-etrangere>

You can request the person in charge of your master's program to credit your French language course toward your degree. In some M1 and M2 programs, French language courses are mandatory and carry 2.5 ECTS credits.

If you are an **FMJH scholarship holder**, these courses are compulsory, and you will be automatically enrolled. For further details, please contact Alexandra Genesco. <alexandra.genesco@fondation-hadamard.fr>

4 CHOOSING MY COURSES



How do I choose my optional courses, and whom may I ask for help?

Your course selection should align with your scientific interests and career goals. You can seek advice from the lecturer, the person in charge of your master's program, or your advisor if you hold an FMJH scholarship.

The Jacques Hadamard and Mathematics and Artificial Intelligence masters have mentoring programs. Feel free to reach out to your mentors for advice!

How are students graded at Paris-Saclay, and where can I find information on grades?

Details about grading can be found in the course descriptions. Additionally, you can inquire about grades and evaluation from the lecturer or your program manager (secrétariat pédagogique).

Are international students eligible for PhD scholarships?

Of course! Information on funding is available on the **EDMH webpage** ("Thesis subjects" tab > Founding sources):



<https://www.universite-paris-saclay.fr/en/doctoral-schools/hadamard-doctoral-school-mathematics#edit-group-home>

Are there programs that lead to jobs requiring French or European nationality?

The Formation à l'enseignement supérieur en Mathématique and MEEF master programs prepare students for competitive national high-school teaching exams, some of which may have nationality clauses.

Do master's students have access to Institut de mathématique d'Orsay?

Yes, master's students have access to and can borrow books from the Mathematics research library at Institut Mathématique d'Orsay, which is also equipped with computers, scanners, and printers.

Additionally, the **IMO Parity Committee** has a laptop available for borrowing by female master's students in need of computer equipment.

Can I switch from one master's program to another in the second year (M2)?

If you find that your master's program is not well suited to your interests or career plans, you have the option to switch programs between year 1 and year 2. If you wish to switch programs during year 2, please contact the director of your program.



What is a TER (travail encadré de recherche)?

The **TER (Travail Encadré de Recherche – Independent Study)** module is a course consisting of a supervised study or research project that can be done in groups of two or three. Students must write a mathematical paper on a specific problem or topic with guidance from their academic advisor.

How do I find a TER supervisor, and when should I start looking for one?

A list of possible TER topics will be provided by email or posted on e-campus in due course. Alternatively, you can contact a mathematician whose research aligns with your interests.

➤ *Local requirements:*



At the UFR des Sciences d'Orsay

In M1 programs led by the UFR des Sciences d'Orsay, the TER can be supervised by any mathematician affiliated with Université Paris-Saclay. If you wish to work on a specific topic not included in the list of suggestions, you are responsible for finding your supervisor independently.

If you cannot find a supervisor at Paris-Saclay, you may collaborate with a mathematician from another university, but your proposal must be approved by the director of your master's program. The following master programs offer the TER module :

M1 – Applied Mathematics

M1 – Mathematics of Artificial Intelligence

M1 – General Mathematics (Mathématiques fondamentales)

M1 – Parcours Jacques Hadamard (ENS Paris-Saclay and Orsay)

You cannot do both a TER and an internship. Depending on your program, you must choose one or the other. In the **M1 FES** (preparation for the agrégation), students have the option to choose an internship in some high school (collège ou lycée).



At the Université d'Evry

In the **M1 Mathématiques et interactions** program, students typically choose between two options:

1. They can undertake an internship in the industry, lasting 2 to 4 months (which can be longer) and starting around mid-April. This internship involves preparing a written project report and delivering an oral presentation at the end of August.

2. Students interested in pursuing an academic career can opt for a research project at LaMME (TER) with approval from the director of LaMME, provided they apply early. In this case, they are required to write a mathematical paper and give an oral presentation at the end of August.



In the **M1 Analysis, Modeling, Simulation** program, the TER is part of the Introduction to Scientific Calculation module (UE - Unité d'Enseignement). Additionally, the optional Introduction to Formal Calculus module may also require students to work on an independent study project. Some students may need to complete two independent study projects if they choose both modules in their curriculum. In both cases, the independent study is supervised by the person in charge of the course.

What is a “stage” (research internship)?

A “stage” involves a supervised research project in mathematics, typically undertaken in either the industry, at a university, or a research lab. The “stage” usually runs from March to the end of August.

➤ *Local requirements:*



The internship is mandatory for students at ENS Paris-Saclay, and they must complete it in an academic or non-academic research laboratory in France or abroad. It's a full-time commitment for at least 14 weeks, spanning from mid-April to mid-August. Students are required to prepare a project report and deliver an oral presentation of their work, both at the company and the university.



- There is no mandatory internship in the **Applied Algebra M1** program.
- In the **Statistical Engineering, Actuarial Science, and Data Science M1** program, students are required to complete a 6-month internship in a company starting from March 1st. They must produce a project report and will be evaluated by their internship supervisor.
- In the **Statistical Engineering, Actuarial Science, and Data Science M2** program, students split their time between industry and university throughout the year. They attend classes on specific weekdays and work in their company during the remaining time. At the end of the year, they make an oral presentation on their industry work, evaluated by their industry supervisor.

- In the **Mathematics and Statistical Learning M1** program, students typically undertake an internship in the private sector. However, those aiming for an academic career may seek a TER supervisor instead. Courses conclude on March 1st, allowing students to start a full-time 6-month internship. They are responsible for finding their internships, but can seek help and advice from professors. The oral presentation of the internship project report occurs at the end of August or the first week of September.



There is no TER module in the **Applied Mathematics M1**. Students are required to make an industry internship of at least 10 weeks. Students are required to turn in a written project report, and to make an oral presentation.

How can I find an internship in the private sector?

- ➔ You can find an internship in the private sector by searching for internship offers online (on platforms like LinkedIn, for example) or through your family network.
- ➔ Additionally, you can reach out to the various **career centers** on campus for assistance:
 - Université Paris-Saclay Career Center: <https://universite-paris-saclay.jobteaser.com/fr/dashboard>
 - Université d'Evry Career Center: <https://www.univ-evry.fr/vie-de-campus/job-stage-emploi.html>
 - Université de Versailles Career Center: <https://www.uvsq.fr/rechercher-un-emploi-ou-stage>

Some companies have their own job platforms, so be sure to regularly check their websites!

- ➔ There are useful job fairs and forums such as the [Forum Emploi Maths \(FEM\)](https://2022.forum-emploi-maths.com/public/pages/index.html) <https://2022.forum-emploi-maths.com/public/pages/index.html>
- ➔ Get in touch with your professors! They can help you find an internship that corresponds to your professional project, and may have links with the industry.
- ➔ For M2 students, an info meeting is scheduled for early December in Orsay to discuss potential PhD theses and internships in more detail. More information will be provided in due time on the following website:
<https://www.universite-paris-saclay.fr/la-communaute-etudiante-graduate-school-mathematiques>.

How can I find an internship in academia?

- ➔ The same tips as for an internship in the industry apply.

Some laboratories and NROs (INRIA, CEA, etc.) also have their own internship platforms, or publish job offers on their website. Be sure to regularly check their websites!

- ➔ Get in touch with your professors, share your project with them, and inquire about potential opportunities. They may have colleagues seeking students for supervision. Some professors also regularly send out job offers by e-mail.

➔ For M2 students, an info meeting is scheduled for early December in Orsay to discuss potential PhD theses and internships in more detail. More information will be provided in due time on the following website.

<https://www.universite-paris-saclay.fr/la-communaute-etudiante-graduate-school-mathematiques>.

The list of internships undertaken by students from previous years is available on Moodle and can also be obtained upon request at the DER (Département d'Études et de Recherche de Mathématiques – Department of Mathematics Studies and Research) of ENS Paris-Saclay. This list is a valuable resource for finding an internship, so be sure to check it out!

How do I find an internship supervisor in academia, and when should I start looking for one?

To find an internship supervisor, search for a mathematician whose research aligns with your interests and reach out to them. If they are available, they may agree to supervise you. If not, they might be aware of a colleague seeking students. It's advisable to begin searching for a supervisor in November-December.

Does my internship topic have to relate to my future thesis topic?

Not necessarily, but we recommend choosing a topic that could potentially lead to a PhD project since your supervisor may help you find one.

It's worth noting that PhD advisors often prefer students they've supervised for an M2 project. This M2 project is also an excellent opportunity for students to begin building a trusted relationship with a potential future PhD supervisor.

Can I make my internship abroad, and is there funding available to do so?

Yes, you can. The Graduate School's website has a page dedicated to internships abroad, with information on the various programs, scholarships, useful contacts, and ways to find an internship, etc.

➔ <https://www.universite-paris-saclay.fr/graduate-schools/graduate-school-mathematiques/quel-type-dinformation-cherchez-vous-graduate-school-mathematiques/la-communaute-etudiante-graduate-school-mathematiques/trouver-un-stage-linternational>