

PhD Track regulations

Context

Université Paris-Saclay has set up the *PhD Track* programme to attract and support more students into doctoral studies. Doctoral study allows you to learn about research through research, increase your understanding of your chosen field of study, boost and diversify your skills, and develop a high level of scientific expertise in a given area. Doctoral study allows the acquisition of knowledge, know-how and interpersonal skills, all of which are essential in top-level professionals in academic institutions, companies and senior public service.

The PhD Track programme will begin on an experimental basis in 2023, using funding from the Structuring Education through the SFRI-FAIR project (Research in Initiatives of Excellence: Instruct, Learn, Innovate through Research) to support thirty students from 1st year Master's (M1) to PhD level over two sessions, one in 2023 and the next in 2024. The terms and conditions set out below could serve as a basis for other *PhD Tracks* funding programmes (*PhD Tracks* on a thematic programme such as quantum, for example), according to terms and conditions to be adapted to the context and targeted disciplinary field.

Article 1 - Objectives of the *PhD Track* programme

Université Paris-Saclay is setting up a programme to attract and, above all, support more top-level students wishing to develop a doctoral project on completion of their Master's degree.

The *PhD Track* combines a support programme, mentoring and financial support for the two years of the Master's programme and the three years of the PhD contract, in order to complete a thesis in a Université Paris-Saclay laboratory, provided that the application is favourably evaluated by the doctoral school in question.

The support programme is based on *graduate school* (GS) initiatives to strengthen education through and about research (the *PhD Master's programme*), to help students prepare for their entry into doctoral studies and build their thesis project.

In the experimental phase, the University wants to highlight some of the areas in which its research is particularly dynamic. For 2023 and 2024, these will be the following fields:

- Sustainable development
- health sciences

A description of what is expected in each field is given in Appendix 1.

Article 2 - Organisation of the *PhD Track* programme

The programme is open to first-year Master's students at Université Paris-Saclay wishing to undertake a thesis project in one of the declared themes.

It includes:

- one-to-one support during a Master's by a mentor from a Université Paris-Saclay research unit (scope at 14¹)

¹ These are the units that the institutions consider to be within the scope of Université Paris-Saclay.

- a support programme (the *PhD Master's programme*)
- a ten-month Master's scholarship, which can be renewed once on the recommendation of the monitoring committee
- a PhD contract subject to the favourable opinion of the relevant doctoral school
- a commitment from the student to be an ambassador for Université Paris-Saclay in their field of study

a/ One-to-one support by a mentor from a Université Paris-Saclay laboratory

Over the two years of the Master's programme, the *PhD Track* laureate is supported by a mentor whose mission is to help them build their pre-doctoral and thesis project at Université Paris-Saclay. For their interviews with the mentor, the student is accommodated in a research unit upon admission to the programme. This research unit is not necessarily the future host unit for the thesis.

In particular, the mentor assists the laureate in choosing seminars, events and other activities within or outside the unit that are relevant to their strategy under the *PhD programme*. At least three meetings a year with the mentor are required. The laureate is involved in the life of the unit.

b/ A support programme

The support programme is based on GS initiatives designed to strengthen education through and about research: the *PhD Master's programme*.

The *PhD Master's programme* can take different forms, depending on the laureate's scientific field, unit and GS (see Appendix 2).

The student must be given the opportunity to take part in a range of activities and events designed to help them build their research strategy and project: discovery of their research environment, scientific seminars, presentation seminars on research methodology, etc.

Their support programme is drawn up with the mentor at the start of the *PhD Track* programme and can be reviewed regularly depending on the direction taken by the project.

c/ A 10-month scholarship which can be renewed once

A €10k scholarship is awarded for one year and can be renewed once.

At the end of each of the two academic years of the programme, i.e. at the end of the 1st year Master's (M1) and the 2nd year Master's (M2), the student presents the progress of their project to their mentor. To this end, they produce a two- to three-page summary document. This document, signed by the mentor, is forwarded to the monitoring committee.

Based on the mentor's recommendations, the monitoring committee issues an opinion on whether or not to continue the programme. If the programme is discontinued, the student completes their project without financial support for the following year.

d/ A PhD contract subject to the favourable opinion of the relevant doctoral school

At the end of the two-year programme, the student is awarded a PhD contract to carry out their thesis in one of Université Paris-Saclay's research units, subject to the favourable opinion of the relevant doctoral school.

e/ A commitment to promote Université Paris-Saclay

The *PhD Track* laureate agrees to be an ambassador for Université Paris-Saclay. In this capacity, they will respond to various requests to promote education through and about research within their GS and

the University. They agree to pursue a PhD programme in a Université Paris-Saclay research unit in order to be able to benefit from the PhD contract.

Article 3 - PhD Track bodies

The *PhD Track* jury is made up of 20 members

- Two vice-presidents of the University or their representatives
- Two representatives from the Research and Higher Education (MRES) Graduate School
- Six representatives from other GS
- Five representatives from the Master's tracks
- Five representatives from the doctoral schools

The jury is appointed for each session (two years) by the President of Université Paris-Saclay.

The jury meets in plenary session for eligibility and for admission, based on the work of the audition committees.

The jury is divided into two committees for admission, one for each theme.

The audition committee is also the monitoring committee.

Article 4 - Selection and monitoring procedure

The timetable for the selection procedure for the 2023 session is set out in Appendix 3.

a/ Capacity and eligibility

For the 2023 session, the number of *PhD Tracks* is set at 15.

The programme is open to all students enrolled in one of Université Paris-Saclay's 1st year Master's programmes, with the aim of completing a 1st year Master's/2nd year Master's + PhD at Université Paris-Saclay.

Programme laureates cannot:

- take a gap year during the *PhD track* programme
- combine the funding from the programme with other excellence scholarships
 - If the student has been awarded an Idex or Hadamard scholarship or another excellence programme, they must complete their 1st year Master's with the scholarship already obtained. Financial support then starts in the 2nd year Master's. However, the student benefits from the PhD Programme.
 - All other situations will be reviewed on a case-by-case basis.

The following are not eligible for the programme:

- Trainee civil servants

b/ Eligibility

Applications for eligibility must include the following documents:

- a Curriculum Vitae
- a document presenting the student's project and motivations; in particular, the following should be developed:

- a project for the educational *PhD Track* (the planned M2 or M2s), for the research PhD Track in the chosen theme (prospects for the PhD) and its inclusion in the professional project
- the motivation for the research
- transcripts from undergraduate study
- the opinion of the 1st year Master's course or platform manager or their representative
- a letter of recommendation from the future mentor (potential host team) or the GS programme contact

The criteria for assessing applications are:

- the excellence of the education
- the candidate's project, their motivations for the research and how the project fits in with the chosen theme
- the match between the project and the candidate's previous experience

c/ Admission

Admission to the programme is based on an oral presentation (5 minutes) followed by an interview (15 minutes) during which the student must:

- highlight previous experience consistent with their education and professional project
- describe in greater detail their 2nd year Master's project and prospects for a PhD

Applications will be assessed based on the quality of the arguments put forward, the relevance of the project to the student's professional project, and more specific criteria related to the chosen theme.

d/ Programme monitoring

The monitoring committee meets at the end of each academic year to review the programme. Based on the mentors' recommendations, it decides whether to continue or discontinue the programme. It discusses changes in support methods with the mentors.

Appendix 1 - PhD Track themes

Theme 1: Health sciences

The results of scientific research have led to major advances in the field of health, due to a better understanding of pathologies and improved therapeutic management. Artificial intelligence applications and the processing of big health data are opening up new perspectives, enabling us to contribute to the development of evidence-based "5P" medicine: preventive, predictive, personalised, participatory and population. Due to its high-level, multidisciplinary research and the wealth of its healthcare infrastructure, combined with an ecosystem conducive to innovation, Université Paris-Saclay intends to continue its role as a major player in biomedical innovation to meet the major challenges and issues of tomorrow's healthcare, in terms of prevention, care and patient follow-up. Advances in healthcare will require the emergence of disruptive concepts and technologies, as well as the development of new diagnostic and theranostic tools and innovative therapeutic approaches and medical devices. Such progress will also require strengthening the continuum of fundamental, clinical and translational research, and promoting interdisciplinarity and acculturation, processes that are central to Université Paris-Saclay's strategy.

In this context, the student can register their project in one of the following major areas:

- new healthcare technologies, i.e. all the technological developments essential to biomedical progress, both at the fundamental level (observing and understanding the mechanisms of living organisms) and at the clinical level (transferring knowledge to therapeutic solutions).
- new approaches to public health, i.e. issues surrounding the state of health, well-being, disability or loss of autonomy of populations, as well as the factors that determine these states (referred to as "health determinants"), whether biological, behavioural, social or environmental in nature.)
- digital health, i.e. the application of digital sciences to complex medical data, which is revolutionising the processing of health data, promising multiple benefits for patients: diagnostic assistance, analysis of health data, biological data, optimisation and personalisation of treatments, screening of molecules with biological activity, etc.

Theme 2: Sustainable development

Sustainable development must be central to the research and teaching mission of a research-intensive university. Embarking on sustainable development strategies will require far-reaching transitions in all areas of human activity (energy production, infrastructure and land use planning, food production, industrial processes, etc.). Different levers of action need to be implemented in these transitions. These can be both technological and nature-based, but must be accompanied by effective resource management, with ethical, equity and justice considerations for each solution to be implemented, which are essential for resilient and sustainable development.

The University is involved in a wide range of projects designed to address the challenges of environmental issues. Furthermore, the student can register their project in one of the following major areas:

- environmental changes and the associated risks of such changes for human societies and living organisms
- the means of transformation for sustainability
- Resource sharing and equity

Appendix 2 - The *PhD Master's programme*

The *PhD Master's programme* is a support programme designed to help Master's students build their thesis project and prepare for their entry into doctoral studies.

Support is open to all students and can take various forms:

- presentation seminars on the research environment: gaining a better understanding of the French research system, the different types of funding, the role of each player, etc.
- discovery of research structures through immersive experiences in a variety of formats, access to seminars, etc.
- presentation seminars on research methodology (acquisition of research methods, bibliographic or archive studies, etc.) and scientific production (role of publications, how to build them, conferences or reviews, awareness of research ethics and scientific integrity, open science).

For students who want to make a stronger commitment, the GS can offer a *PhD Master's programme* with mentoring:

- One-to-one support by a scientific mentor (post-doctoral student, researcher or lecturer from a research unit of interest to the student) to help build the student's project, career path, etc.
Please note: Mentoring can be financed by the SFRI-FAIR project, particularly for new students. Mentoring also makes it possible to involve researchers who are familiar with the courses.
- Support for international experience (excluding international students)
 - mobility to international research laboratories for students who have an appropriate project, for example through outgoing index scholarships
 - international summer schools as part of the SFRI-FAIR project

Appendix 3 - the Timetable

- The official launch of the first call (session 2023) will take place via a webinar in mid-September.
- The timetable is as follows:

Applications	20 November to 11 December 2023
Review of applications	mid-December to early January
Eligibility	10 January 2024
Oral presentations/interviews	16 to 23 January 2024
Admission	26 January 2024 at the latest