Guide for applicants

Deadline of the call for applications: Friday, the 12th of February 2022

Selection procedure

Eligibility criteria of the applicants

1. Applicants must have a master’s degree (or be in the process of obtaining one) or have a University degree equivalent to a European Master’s (5-year duration) to be eligible at the time of the deadline of the call;
2. There is no nationality or age criteria, but applicants must not have resided or carried out their main activity (work, studies, etc.) in France for more than 12 months in the 3 years immediately before the deadline of the call (MSCA Mobility rule), namely between the 11th of February 2019 to the 12th of February 2022;
3. Applicants must declare to be available to start the programme on schedule.

In order to comply with the eligibility criteria, the applicants will provide the following documents:

1. English translated transcripts from the master’s degree (or equivalent 5-year degree). A copy of the master's degree or a certificate of achievement will be required later on for the final registration;
2. International curriculum vitae and a cover letter explaining the reasons that lead him/her to prepare a PhD, why he/she applies to this offer and his/her professional project (guidelines will be given to the applicants in order to help him/her in the writing of his/her letter);
3. Two academic reference letters;
4. A statement duly signed on the mobility rules, availability and conflicts of interest (template to be signed at the end of the guide for applicants).

Application requirements:

The applicants are allowed to apply to only one PhD project among the available ones. Multiple applications of one candidate will automatically make all his/her applications ineligible. Applicants should commit in their application to following H2020 ethical principles and guidelines.

The criteria for the selection of the fellows are described in the table below. They will be used to establish a score that will serve as a basis for ranking applicants, according to specified scoring percentages.

Criteria for the Round 1: applicants’ pre-selection

<table>
<thead>
<tr>
<th>DETAILS</th>
<th>SCORING</th>
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<tbody>
<tr>
<td>Criterion 1: Academic excellence</td>
<td>60%</td>
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<tr>
<td>• Excellence of the Academic background, Academic records, Honors, Letters of support, Participation to international research projects, exchange programmes and conferences.</td>
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<tr>
<td>• Ability to be trained to AI techniques.</td>
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Criterion 2: Experience
• Training experiences: scientific & non-scientific courses, soft skills, work experiences. 10%

Criterion 3: Motivation and qualities

• Professional project.
• Motivation for the AI4theSciences programme, its 3i dimensions and to join the research environment of PSL University.
• Volunteering, community service, etc. 30%

Criteria for the Round 2: applicants’ selection

<table>
<thead>
<tr>
<th>DETAILS</th>
<th>SCORING %</th>
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<tbody>
<tr>
<td>Criterion 1: Academic excellence</td>
<td></td>
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<tr>
<td>Excellence of the Academic background, Academic records, Honors, Letters of support, Participation to international research projects, exchange programmes and conferences.</td>
<td>45%</td>
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<tr>
<td>Ability to be trained to AI techniques.</td>
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<tr>
<td>Criterion 2: Motivation and qualities</td>
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<tr>
<td>Academic maturity: appropriation of the thesis project (stakes and contexts)</td>
<td>30%</td>
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<td>Quality of the presentation (oral expression, skills for synthesis, English level)</td>
<td>20%</td>
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<tr>
<td>Maturity of the professional project: capacity to project her/himself within five years in terms of career development.</td>
<td>5%</td>
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Evaluation process

For each round (pre-selection and selection), a grade between 1 (lowest grade) and 5 (highest grade) will be given to each of the above items. These grades are given in respect to the weighted sum of the criteria, indicated in the table above. At each round, a general threshold of 3/5 will be given so that applications under this threshold will not be considered.

• **Round 1:** One general ranking with laureate and reserve list is made based on the grades of applications. All candidates are informed of their scores and ranking. Among the best applicants, a maximum of two candidates per proposed PhD subject are selected for an audition interview and, when possible, one is put on the waiting list. If the equality of grades of laureates does not allow to select only two candidates for a given PhD project, a vote of the Selection Committee is used to choose the two laureates for interview. Laureates are reminded of all necessary information to prepare for the interview. They have to confirm their participation to the interview. If a laureate cancel, then the one applicant of the waiting list of the same PhD project is called (if there is one).

• **Round 2:** The grading procedure mentioned above is used to grade each candidate after their interview. One general ranking is made with the notations of rounds 1 and 2 - considering a weighted sum of 20% of the grade of round 1 and 80% of the grade of round 2. If two candidates obtain the same score, priority will be given to the one having the best score in round 2 in Academic excellence, then Academic maturity, and then the Quality of the presentation. A vote of the Selection Committee is used if this procedure does not permit to rank the candidates. This provides the ranked list. The candidate ranked first is selected, then the candidate ranked second is selected if he/she did not apply to the same PhD project as the one on rank one. Then the candidate ranked third is selected if he/she did not apply to the same project as the ones on ranks 1 and 2, and so on until we select the number of laureates indicated in the call. The list obtained this way is called the main list. The selected applicants on the main list are informed of their selection. The others are set on a waiting list according to their rank and informed of their rank on the waiting list. If one of the selected candidates of the main list cancels, the first in the waiting list who did not apply to a project that is already present in the main list is called. The others on the waiting list are informed of their new rank in the waiting list. This procedure is
repeated until the number of laureates indicated in the call confirm their participation in the program or the end of the ranked list is reached.

- This procedure allows to focus on the excellence of the candidates first, and on the adequation with the PhD project they apply to.

The “AI4theSciences” principles

“Artificial intelligence for the Sciences” has embraced the MSCA principles.

The project will aim to foster excellence in the training, mobility and career development of researchers. It will have a very high level of requirement in terms of transparency in the selection, recruitment and career management of the young doctorates. It will offer attractive working conditions and promote gender equity and inclusiveness in the pursuit of excellence. It will include public actions and aims to inform the public about the societal challenges of research.

AI4theSciences will promote the “3i” rule, with interdisciplinary, international, and intersectoral (linked to the non-academic sector) PhD projects. In addition, all the candidates must respect the MSCA "mobility rule", i.e. not have lived more than 12 months in the project country since the last three years.

PSL University will strictly implement the principles of the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers promoting open recruitment and attractive working conditions. Being the only way to guarantee scientific excellence, ensuring equal opportunities will be a continuous imperative for PSL.

In the application process, there will be no limit on the graduation date for applicants, to integrate applicants who changed disciplines, or with career breaks for personal reasons such as health, personal issues or projects. Both our selection process and training programme respond with the needs of students with a limited financial capability to apply and study in our premises. All the timings give a perfect equality of treatment between candidates from all nationalities.

A request for MSCA Special Needs Allowance will be made by the beneficiary recruiting a PhD with disabilities. The allowance will cover the additional costs that PhD with disabilities face due to the increased costs of their mobility.

PSL will also promote gender balance during the selection process and will ensure equality of treatments during the three years of PhD study.

Condition of recruitment

- Type of contract: temporary (36 months) contract under the French labour legislation in force, respecting health and safety, and social security
- Job status: Full-time
- Hours per week: 35
- Annual leave: 25 days per year (“congés annuels”)
- Envisaged starting date: 01-09-2022
- Salary: 2 228 € (gross salary per month)
- Eventual complementary activities may be accepted or proposed by the co-supervisors (maximum of 64h/year for teaching, 32 day/year for specific missions).
- Short stay(s) or secondment in France or abroad may occur or are expected depending of PhD offers.
- Job contract will be delivered by the component school of PSL involved in the PhD project. PhD diploma are all prepared in the component school and delivered by PSL.
Frequently Asked Questions

How many PhD grant will be awarded in the second year?

For September 2022, 11 PhD grants will be awarded, following 2 rounds of selection (first via a written application and then an interview) taking place from February to March 2022, and following the publication of the unique ranking list of candidates. It is therefore the excellence of candidates, an essential Horizon 2020-MSCA principle, that will make possible to select the 11 thesis projects out of those proposed. 15 PhD grants were awarded in 2021. The full list can be found on the Cofund program webpage.

Is it possible to apply for more than one thesis project in the AI4theSciences program?

No, PhD candidates can only apply to one PhD project, among those listed in the program. Any multiple applications from the same candidate means an automatic ineligibility and exclusion from the selection process.

Can I apply if I am not an AI or mass data processing specialist?

Absolutely. In your application, you are asked to highlight your ability to be trained in AI or mass data processing techniques, and to detail your motivations. PhD students will receive at the very beginning of the 2022 academic year a dedicated introductory training on artificial intelligence and massive data processing techniques. This training is intended to give students from all disciplines the same knowledge on AI / massive data processing, and to give them the means to succeed in their dissertation.

During the thesis, a seminar will then be organized every week to allow students to improve their knowledge and to communicate about their work, especially on the technical difficulties encountered.

What are the selection criteria for the 1st pre-selection round?

The round 1 of pre-selection is based on 3 criteria:

- Academic excellence (60% of the notation): background, Academic records, Honors, Letters of support, Participation to international research projects, exchange programmes and conferences, ability to be trained to AI techniques.
- Experience (10%): Training experiences: scientific & non-scientific courses, soft skills, work experiences.
- The candidate's motivation and qualities (30%): the solidity of the professional project, the motivation to integrate the AI4theSciences program and the PSL research environment, the "3i" dimension of the program (international, interdisciplinary, intersectoral), Volunteering, community service, etc.

Full details are provided in the “Selection procedure of the “Guide for applicants”.

What are the selection criteria for the 2nd round of selection?

The 2nd round of selection is based on these criteria:

- Academic excellence (45% of the grade): Excellence of the Academic background, Academic records, Honors, Letters of support, Participation to international research projects, exchange programmes and conferences. Ability to be trained to AI techniques.
- The candidate's motivation and qualities (45% of the grade):
  - Academic maturity: appropriation of the thesis project (stakes and contexts) (30%)
  - Quality of the presentation (oral expression, skills for synthesis, English level) (20%)
- Maturity of the professional project: capacity to project themselves within five years in terms of career development (5%).

Full details are provided in the “Selection procedure of the "Guide for applicants".

**How does the recruitment process work?**

PhD candidates can apply from November 15, 2021, to February 12, 2022. After submitting their application, a message acknowledging receipt of the application will be sent within two days by email. Before the launch of the pre-selection (round 1), all applications will be examined to verify their eligibility. Candidates will receive during the first week of March a confirmation of the eligibility of their application.

The pre-selection phase (round 1) will last 2 weeks, from February 14 to 28, 2022, and will focus on the evaluation of the written applications submitted by applicants.

The selection phase (round 2) will last from March 1 to April 24, 2022, and will take the form of interviews, either physical or remote. All candidates who are interviewed will receive feedback on their file, based on the selection and evaluation criteria. Unsuccessful candidates will also be informed of their ranking on the waiting list. The final list of successful candidates will be published on the PSL website.

Full details are provided in the “Selection procedure of the "Guide for applicants".

**Will there be trainings shared by all the PhD students of the AI4theSciences programme?**

PhD students will be invited to participate in the everyday life of AI4theSciences and to receive shared trainings (especially in AI). They will also be delivered courses on career management and cross-disciplinary skills useful to the career of a researcher (communication, outreach, fundraising, etc.). Finally, PhD students will also participate in the outreach activities of the programme.

**Are there any prerequisites related to age or nationality?**

There is no age or nationality requirement for applicants. Nevertheless, the “MSCA-COFUND mobility rule” must be respected. Any candidate who has lived in France for less than 12 months in the three years following the closing date of the call for applications, i.e. between February 11, 2019 and February 12, 2022, is eligible.

To give a concrete example, an international student who has arrived in France for his Master 2 in September 2021, can apply to be an AI4TheSciences doctoral student for the beginning of the 2022 academic year. To give another example, a French person living in Germany for 3 years is eligible, while a German person living in France for a lifetime is not.

Researchers may not have resided or carried out their main activity (work, studies, etc.) in the country of the beneficiary/partner organisation (or — in case of international European interest organisations — with this organisation) for more than 12 months in the 3 years immediately before the co-funded programme's call deadline or the date of recruitment unless otherwise specified in Annex 1 for existing programmes. Time spent as part of a procedure for obtaining refugee status under the Geneva Convention 1, compulsory national service and/or short stays such as holidays are not considered.

This rule resolutely reinforces the European dimension of AI4TheSciences.
Can I apply if I obtain my master’s degree in September 2022?

Yes, students who will have their master’s degree in June 2022 will be able to apply and start their theses at the beginning of the 2022 academic year. They will have to provide a certificate of achievement at the time of registration.

Do I have to speak French to apply?

No, only a good command of English is required. Courses in French as a Foreign Language (FLE) will be offered, to help the integration and cross-disciplinary skills of doctoral students. Research activity can be done in English.

Where can I find practical information about living and working in France?

To discover the PSL environment, we invite you to read the « PSL Student Handbook ». To prepare for your arrival, you will be monitored by the Program’s Project Manager and the services of the PSL Welcome desk, for your administrative and practical procedures.

Will the process be changed as a result of the pandemic?

The admission process is designed to run with the pandemic. If necessary, solutions will be suggested on a case-by-case basis (remote interviews, flexibility in the event of late arrivals in France, etc.).

Why is AI4theSciences an "inclusive" project?

AI4theSciences decisions, processes and committee membership are transparent. The scheduling of the selection process ensures that candidates of all nationalities are treated equally. During the call for applications phase, there will be no deadline for graduation, in order to enroll candidates who have changed concentration or had a personal interruption in training. Our selection process and training are in line with the needs of students with limited financial capacity. PhD students with disabilities may be supported and receive additional financial assistance from Horizon 2020-MSCA. The wages are meant to be attractive, in order to attract the best profiles and to create good working conditions during the three years of the thesis.

Are there partners in the AI4theSciences programme?

Yes, AI4theSciences has many academic and non-academic partners in France and Europe. Some will provide trainings for all the PhD students of the programme, others will participate in outreach events (such as The Conversation and 100,000 Entrepreneurs), others will co-fund specific PhD projects. All of them will contribute to an AI4theSciences ecosystem capable of boosting the careers of PhD students.

Who will deliver the employment contract of the AI4theSciences PhD students?

Doctoral students admitted on COFUND will have an employment contract from the host institution that is a member of PSL.

To whom may I ask questions before applying?

Any questions can be asked to the project team: ai-for-the-sciences_team@psl.eu.
Statement of the ‘AI4theSciences’ applicant

To whom it may concern,

I, …………………………………………………………,

hereby certify that I apply for a PhD project of the AI4theSciences programme, after having taken into knowledge and accepted the following:

- Being available to participate to auditions (round 2) and to start the training programme in France, at the beginning of September 2022.

- Respecting the MSCA “mobility” rule and conflicts of interest principles.

- Being committed to Horizon 2020 principles and ethical expectations.

Kind regards,

Date:

Signature
Contact information

For any additional information and to submit final application, candidates are invited to write to the AI4theSciences team PSL: ai-for-the-sciences_team@psl.eu

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