

Admission Guidelines for the Academic Year 2022 for the World-leading INnovative Graduate Study Program (WINGS), Frontiers of Mathematical Sciences and Physics (WINGS-FMSP)

The University of Tokyo conducts the World-leading *INnovative Graduate Study Program* (WINGS) that is Doctoral Programs cooperated by several graduate schools and institutes in order to foster doctoral personnel who contribute to human society with high research power and expertise. The Graduate School of Mathematical Sciences conducts the *Frontiers of Mathematical Sciences and Physics* (WINGS-FMSP) and recruits course students.

Prospective profile of FMSP course graduates

The key to innovation in sciences and society is the construction and renewal of the underlying mathematical theory. We aim to foster the next generation of mathematical science leaders who can create research areas that are centered on mathematics and spread in various sciences and deepen and create novel mathematical theories.

The WINGS-FMSP website <https://www.ms.u-tokyo.ac.jp/wings-fmsp/>

1. Application requirements

To apply for this program under the following guidelines, you must fulfill all of the requirements listed below.

- You must be a 1st-year student at the University of Tokyo enrolled in the Master Course of one of the following eight Graduate Schools as of October 2022 (*1): *Mathematical Sciences, Science, Economics, Frontier Sciences, Engineering, Information Science and Technology, Medicine, and Arts and Sciences*, the University of Tokyo.
- You aim to acquire a PhD degree in fields related to mathematical sciences, in a broad sense of the term.
- You are interested in the social/industrial applications of science, and eager to actively learn about them.
- You fully understand the purpose of the WINGS-FMSP course, as well as its rules, such as course requirements.
- You intend to enroll in the Doctoral program at one of the above-listed eight graduate schools (*2).

- You agree to apply for DC1/DC2 in the JSPS Research Fellowship for Young Scientists, and should you be accepted, you also agree to stay in the WINGS-FMSP course. (This requirement does not apply for government-sponsored foreign students.)
- You understand and agree to the fact that your PhD diploma will bear a note saying that you have completed the WINGS-FMSP course.

(*1) You may not simultaneously apply for WINGS-FMSP and another WINGS program.

(*2) You may not enroll in the WINGS-FMSP program if you are planning to find business employment when you finish your Master's program.

2. Selection method

Selection will be based on the prospective students' application documents (Applicant Information, Research Proposal, Essay, and Supervisor's Letter of Opinion), their scores in the graduate school entrance examination and their scores in the graduate course.

3. Enrollment period

New WINGS-FMSP course students will be enrolled in the program from October 1, 2022 to March 31, 2024. In February 2024, a Qualifying Examination will take place to select those to be permitted to stay on the program through their Doctoral years. Students who are selected will be enrolled in the WINGS-FMSP course up to March 31, 2027.

4. Financial support

Master's course: WINGS-FMSP course students may be appointed as TAKUETSU (Excellence) Research Assistants (TRAs) and be paid 120,000/150,000 yen per month as a *salary* in their master's program (*1). The amount of a TRA salary for the first year is 120,000 yen per month and we decide by review in March 2023 whether the amount is increased to 150,000 yen per month from April 2023.

Students who receive Japanese Government (Ministry of Education, Culture, Sports, Science and Technology, MEXT) Scholarships or any scholarships from the University of Tokyo cannot be appointed as TRAs, but may apply for WINGS-FMSP. Students who do not wish to be appointed as TRAs, for example, because they are receiving other scholarships or have concerns about dependent exemption, may also apply for

the program.

Doctor's course: WINGS-FMSP course students may receive a monthly grant of 200,000 yen as a *scholarship* in their doctor's program.

When a WINGS-FMSP student is accepted as a JSPS Research Fellow for Young Scientists, you are required to stay in WINGS-FMSP, while not receiving this scholarship.

(*1) Income tax will be deducted from your TRA salary every month. You must therefore make a year-end adjustment or file a final tax return.

5. Seats available

Graduate Schools	Number of new students to be admitted
Mathematical Sciences Science Economics Frontier Sciences Engineering Information Science and Technology Medicine Arts and Sciences	12 (approximately)

6. Selection announcement and enrollment procedures

- The results of the admission selection will be posted in the WINGS-FMSP website Monday, August 29, 2022 around 13:00. The applicants will also receive their results by email.
- Enrollment documents will be emailed to successful applicants with the selection results. Those who have been accepted must finish the necessary procedures (submitting the enrollment documents) by **13:00 on Monday, September 5, 2022**. Those who fail to hand in the necessary documentation by the deadline will be treated as having declined to enroll in the WINGS-FMSP program.

7. Application procedures

(1) Application documents

- a. The *WINGS-FMSP Course Application* form: Fill out the form by the applicant (yourself) and save it as a *pdf* file.
- b. The *Letter of Opinion on the Applicant* form: Ask your supervisor at your current university to fill out the form and save it as a *pdf* file.

Those forms are available on the WINGS-FMSP webpage.

(2) How to apply

- a. The applicant must send the *WINGS-FMSP Course Application* form by email to the following address. The name of the applicant should be clearly written on the email subject.
- b. The applicant's supervisor must send directly the *Letter of Opinion on the Applicant* form by email to the following address. The name of the applicant should be clearly written on the email subject.

The application will not be considered unless all of the necessary documents (including the supervisor's letter of opinion) are submitted by the deadline.

(3) Application period

The application period opens on Monday, July 11 and ends on Friday, July 15, 2022.

(4) Email address

fmsp-group@g.ecc.u-tokyo.ac.jp

8. Notes

- Only applications for which all of the necessary documentations are submitted by the deadline will be considered.
- Under no circumstances may an applicant change the contents of their application, once it has been submitted.
- There may be changes made to this guideline or the application procedure due to unforeseen reasons. In such cases, an announcement will be made for potential applicants.
- The personal information made known to the WINGS-FMSP program through the application process will be used for the following purposes: (i) selection of WINGS-FMSP course students (application processing and selection), (ii) announcement of selected applicants, and (iii) enrollment procedures. For the selected applicants only, the information will further be used for administrative duties relating to: (i) academic affairs (e.g. registration, enrollment), and (ii)

student support (e.g. employment assistance, tuition waiver applications).

- A student who has made a false statement in their application, even after being selected to join the program, may have their status as a WINGS-FMSP student taken away from them retroactively.

9. Contact information

The WINGS-FMSP Desk, the Graduate School Office of the Graduate School of Mathematical Sciences, the University of Tokyo

E-mail: fmsp-group@g.ecc.u-tokyo.ac.jp

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