IGPAS

理学研究科

2025 International Graduate Program for Advanced Science

Graduate School of Science, Tohoku University

ABOUT IGPAS

Tohoku University was founded in 1907 and is one of the oldest Universities in Japan. The School of Science began its history with the foundation of the University, and the Graduate School of Science started later in 1953. The Graduate School of Science is composed of six departments including Mathematics, Physics, Astronomy, Geophysics, Chemistry, and Earth Science. These departments cover the full spectrum of basic natural science. A number of research laboratories, including those on earthquake, planetary science, and giant molecule research, belong to the School of Science. In addition, it has a close relationship with some highly advanced research institutes at Tohoku University, such as Institute for Materials Research and Research Center for Neutrino Science. According to the QS World University Rankings 2024, the field of Materials Sciences at Tohoku University is ranked 4th in Japan and 50th in the world, and the field of Physics and Astronomy is ranked 5th in Japan and 50th in the world.

Tohoku University adopted an "Open-door" policy and was quick to invite students from foreign countries. One student from India and another from China enrolled as early as 1911. Moreover, Tohoku University was the first national university to admit women. The enrollment of international students has steadily increased, and now the University is internationally known as an institution providing extensive opportunities for the best and brightest students from around the world. Another policy of the University is "Research-first," which in our interpretation means performing high-level research at the University provides the best education for the students.

The International Graduate Program for Advanced Science (IGPAS) was initiated in October 2004 as one of the first International Priority Graduate Programs supported by the Ministry of Education, Culture, Sports, and Technology (MEXT). The lecture courses are taught in English, and the students are not required to learn the Japanese language, although they are encouraged to learn it for their daily life. From its establishment in 2004 to September 2023, IGPAS has conferred 191 master's degrees and 171 doctoral degrees to students from 37 countries and regions.

Student Voice



Kemal Aziez Rachmansyah 2021 IGPAS Student in Mathematics from Indonesia

I am very grateful and lucky to be able to come to Sendai for my graduate studies. It was around the end of 2020, just in the middle of the pandemic, when I was first introduced to the IGPAS program by my supervisor in Indonesia. Despite the border restrictions at that time, thanks to help from DiRECT office and my supervisor Motoko Kotani Sensei, I was able to come to Sendai in November 2021.

Tohoku University, as well as Sendai city, is a perfect place for being a researcher. Tohoku University provides an incredible amount of support and international events to get to know the locals better. The city is very well-developed while still retaining its beautiful nature. At times when I was stumped in my research (which was a LOT of times), I took a walk around the city to refresh myself. Since Sendai is also close to mountains and beaches, mini-vacations on the weekends are also very nice.

During my time as a Mathematics graduate student, I have had incredible experiences. My supervisors provided me with helpful guidance for shaping me to be a researcher. I even got the opportunity to do a project with some companies along with students from Japan and America in g-RIPS-Sendai 2022. The Mathematics department also often organizes seminars and talks

from many great mathematicians that I greatly enjoyed.

All in all, I wholeheartedly recommend the IGPAS program for students who want to continue their studies.

1. PROGRAM DETAILS

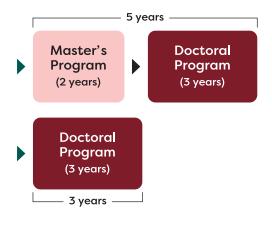
IGPAS is a five-year graduate program combining a two-year master's program and a three-year doctoral program. Admission only for the master's program, or admission only for the doctoral program, is also available.

Each student is affiliated with one of six departments: Mathematics, Physics, Astronomy, Geophysics, Chemistry, and Earth Science.

Each department determines its own curriculum and course requirements, and the availability of classes varies depending on the semester and/or departments. Students may consult their supervisor about their research plan each semester before registration.

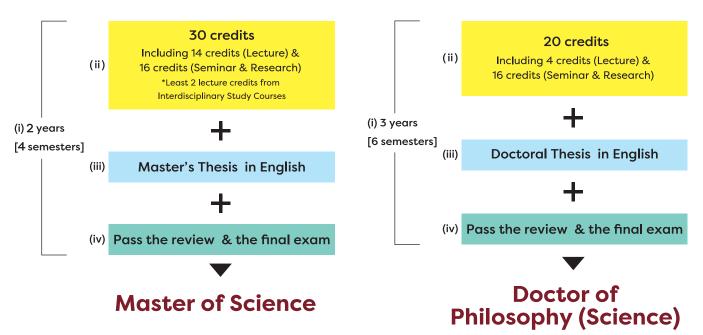
(Master's Program)

The master's program consists of a series of lectures, seminars, and thesis research. To complete the program and to be awarded a Master of Science degree, students must fulfill the following requirements under the supervision of an academic advisor: (i) two years of enrollment, (ii) completion of 30 or more academic credits, including at least two credits from interdisciplinary study courses and 16 credits from seminars and research. In addition, it is required to (iii) submit a master's thesis in English and (iv) pass the review and final examination. In regards to (i), however, students who receive approval from their supervisor and department may complete the program in less than the stipulated period of time.



Doctoral Program

The doctoral program focuses more on research than the master's program does. To complete the program and to be awarded a Doctor of Philosophy (Science) degree, students must fulfill the following requirements under the supervision of an academic advisor: (i) three years of enrollment, (ii) completion of 20 or more academic credits, including 16 credits from seminars and research. In addition, it is required to (iii) submit a doctoral thesis in English, and (iv) pass the review and final examination. In regards to (i), however, students who receive approval from their supervisor and department may complete the program in less than the stipulated period of time.



2. ELIGIBILITY FOR IGPAS

Applicants for IGPAS must satisfy ONE of the following conditions.

However, those who are applying using conditions (ii) or (iii) may be required to take a preliminary screening, depending on their situation. Therefore, they should contact the IGPAS Admissions Office before the application.

(Master's Program)

- (i) Those who (will) have graduated from a university [*] by September 30, 2025.
- (ii) Those who (will) have been conferred a degree equivalent to a bachelor's degree upon completion of a three-year program at a university, or those who (will) have completed 15 years of school education by September 30, 2025, and have been recognized by the Graduate School of Science, Tohoku University as having obtained the necessary credits with excellent grades.
- (iii) Those who will reach 22 years of age by September 30, 2025, and have been recognized by the Graduate School of Science, Tohoku University through an individual qualification examination to have a scholastic ability equivalent or superior to those who have graduated from a university.

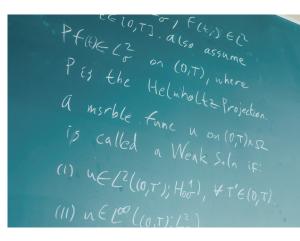
(Doctoral Program)

- (i) Those who (will) have earned a master's degree by September 30, 2025.
- (ii) Those who (will) have engaged in research activities for at least two years at an educational or research institution after their graduation from a university [*] and have been recognized by the Graduate School of Science, Tohoku University on the basis of their research performance to have a scholastic ability equivalent or superior to those who have earned a master's degree.
- (iii) Those who will reach 24 years of age by September 30, 2025, and have been recognized by the Graduate School of Science, Tohoku University through an individual qualification examination to have a scholastic ability equivalent or superior to those who have earned a master's degree.

Footnote

e.g. [*] The term "graduated from a university" means a total of **16 years** of educational programs, which consists of **12 years** of school education and a four-year undergraduate (bachelor) program.

Educational programs in Japan:		
Elementary (primary) school 6 years		
Junior high (secondary) school	12 years	
Senior high (higher secondary) school		total 16 years
University (undergraduate) 4 years	_	





3. APPLICATION AND SELECTION

Application

Step 1 Find a potential supervisor among the faculty members in the field of your interest.

Applications will not be accepted without the consent of a faculty member as a prospective supervisor. The supervisor must be a professor, an associate professor, or a lecturer (senior assistant professor) who is affiliated with or has eligibility to accept students of the Graduate School of Science, Tohoku University. To search for faculty members, refer to the following websites:

- Graduate School of Science, Tohoku University

https://www.sci.tohoku.ac.jp/english/

- Departmental websites

 Mathematics
 http://www.math.tohoku.ac.jp/english/index-e.html
 Physics
 https://www.phys.tohoku.ac.jp/en/

 Astronomy
 https://www.astr.tohoku.ac.jp/english/
 Geophysics
 https://www.gp.tohoku.ac.jp/index-en.html

 Chemistry
 http://www.chem.tohoku.ac.jp/english/
 Earth Science
 https://www.es.tohoku.ac.jp/EN/

Step 2 Contact the faculty members directly via email to obtain their consent.

When contacting the faculty members, be sure to:

- gather information on faculty members and their field of research in advance by checking out their publications, research papers, and personal websites.
- include "IGPAS 2025" in the subject line of your email.
- provide your academic background, interest, and goal in detail.
- **Step 3** Register online via IGPAS Pre-Application Form.

The online form opens from October I to November 15, 2024.

Step 4 Prepare the required documents for the application. See 4. APPLICATION DOCUMENTS

The reference letter(s) should be directly sent to the IGPAS Admissions Office from the referee(s) via email.

Step 5 Send your application via the IGPAS Online Application Form.

The online form is open from October 15 to November 15, 2024.

If you are unable to access the online form, please send your application documents to the IGPAS Admissions Office via email.

[NOTE]

* Some documents sent for IGPAS 2025 application need to be submitted in original at the time of the admission procedures in September 2025.

* The IGPAS Admissions Office will email you to inform the receipt of the documents along with your application number.

Selection

Applications will be forwarded to the examining committee of each department. The examiner will inform you of the method and schedule for the examination via email by the middle of December 2024. The examination will be in the form of a written examination and an interview. The results of admission to IGPAS will be announced on January 23, 2025 on the website. Note that the examination will be conducted online for those applicants who reside outside of Japan.



*Dates are subject to change.

4. APPLICATION DOCUMENTS

- **Download** the forms marked with " \star " from the IGPAS website.
- Each document should be written in English. Attach an English translation of the documents if written in a language other than English.
- Submitted materials will not be returned.
- Making any false statement(s) on the application may result in cancellation of acceptance even after admission.

1	★ Form 1: Application for Admission
2	★ Form 2: Statement of Reason for Applying for the Program
3	★ Form 3: Research Proposal
4	★ Form 4: Summary of Past Research
5	★ Form 5: Referees' List
6	Reference Letter <u>At least one</u> reference letter is required. The reference letter(s) should be directly sent to the IGPAS Admissions Office from the referee(s) via email.
7	Official academic transcript(s) From undergraduate and graduate programs; if each transcript does not show the definition of its grading scale, attach any material (appendix, web information, etc.) that can substitute. [Note] The original document needs to be submitted at the time of the admission procedure in September 2025.
8	Certificate(s) of (expected) graduation From undergraduate and graduate programs (due graduation date must be stated) [Note] The original document needs to be submitted at the time of the admission procedure in September 2025.
9	Document(s) to prove academic ability issued/written within the last five years (NOT more than three materials) e.g. bachelor and/or master thesis in full with an English abstract, research papers published in journals or conference proceedings, papers submitted in coursework related to the field of research, GRE® Test score report ^{*1} ,
	and/or equivalent materials [Geophysics Applicant] The GRE® subject test score either in Mathematics or Physics is mandatory to submit.
10	[Geophysics Applicant] The GRE® subject test score either in Mathematics or Physics is mandatory to submit. Document(s) to prove English ability : ONE from 1) & 2), if unavailable, choose TWO from i) - iii) 1) Score report of TOEFL iBT® Test ¹¹ or IELTS 2) Certificate to prove that the medium of instruction is/was English
10	[Geophysics Applicant] The GRE® subject test score either in Mathematics or Physics is mandatory to submit. Document(s) to prove English ability : ONE from 1) & 2), if unavailable, choose TWO from i) - iii) 1) Score report of TOEFL iBT® Test ¹¹ or IELTS
10	[Geophysics Applicant] The GRE® subject test score either in Mathematics or Physics is mandatory to submit. Document(s) to prove English ability : ONE from 1) & 2), if unavailable, choose TWO from i) - iii) 1) Score report of TOEFL iBT® Test ¹¹ or IELTS 2) Certificate to prove that the medium of instruction is/was English i) Score report of English tests other than TOEFL iBT® Test or IELTS ¹² ii) Thesis/research paper in English (can be the same document for the item 9)
	[Geophysics Applicant] The GRE® subject test score either in Mathematics or Physics is mandatory to submit. Document(s) to prove English ability : ONE from 1) & 2), if unavailable, choose TWO from i) - iii) 1) Score report of TOEFL iBT® Test ¹¹ or IELTS 2) Certificate to prove that the medium of instruction is/was English i) Score report of English tests other than TOEFL iBT® Test or IELTS ¹² ii) Thesis/research paper in English (can be the same document for the item 9) iii) Letter of English proficiency from an English instructor who is affiliated with your university

Note Supporting materials (ONLY if you would like to present any: NOT more than three materials) e.g. certificate(s) of honor, president/dean's list, and/or scholarship certificate

*1 The institution codes (or DI code) of the Graduate School of Science, Tohoku University are 7115 for GRE® TEST and 0373 for TOEFL® Test. The official test score reports sent directly from the testing center is acceptable.

*2 Tests conducted at your university, organized locally, TOEFL ITP® Test, and TOEIC® Test fall into this category. TOEFL, TOEFL iBT, TOEFL PBT, TOEFL ITP, TOEIC, and GRE are registered trademarks of Educational Testing Service (ETS).

» Upload the application documents (except for No 6: Reference Letter) via the IGPAS online form during the application period.

IGPAS Admissions Office will contact you via email (direct@mail.sci.tohoku.ac.jp) if we have any questions about your application.

5. FEES AND EXPENSES

Tohoku University's application, admission, and tuition fees are shown in the table. Students who find it difficult to pay the admission fee and/or tuition fee for economic reasons may be granted a waiver on application and screening. Overall living expenses in Sendai, including apartment rent, utilities, food, transportation, and so forth, may range from 80,000 to 150,000 JPY per month depending on conditions.

Application Fee	30,000 JPY
Admission Fee	282,000 JPY
Tuition	267,900 JPY (535,800 JPY per year)

(as of August, 2024)

6. FINANCIAL SUPPORT

MEXT (Japanese Government) Scholarship

7 Master's program students for 2 years

Support Period

• For two years from October 2025 to September 2027

Benefits

- Monthly Stipend: 146,000 JPY/month (including the Sendai regional allowance of 2,000 JPY)
- Flight tickets for coming to Japan for admission and for returning to the home country after completing the master's program
- $\boldsymbol{\cdot}$ Exemption from application, admission, and tuition fees

Eligibility

- Those who were born on/after April 2, 1990
- Those who meet the application requirements designated by the MEXT.

Tohoku University Special Incentive Stipend

Several Doctoral and 4 Master's program students for 3 years

- Support Period
 - For three years from October 2025 to September 2028
- **Benefits** *The information below may be subject to change.

For Doctoral Students

- Incentive Stipend: 180,000 JPY/month
- Research Grant: 340,000 JPY/year
- Tuition Fee Waiver: 267,900 JPY/semester
- *For Doctoral Students, the tuition fee will be fully waived by the "Waivers for Exceptional Students" frame. (As of August 2024)
- The number of recipients varies each year and those who successfully pass the entrance examination with excellent performance have opportunities to be granted.
- [Reference] Previous Results: 4 in 2024, 2 in 2023

For Master's Students (those who strongly wish to go on to the Doctoral Program)

• Incentive Stipend: 130,000 JPY/month (average) for the first two years (in the master's program) and 180,000 JPY/month (average) for the third year (in the doctoral program)

*Other means of financial support are expected to be available for the fourth and fifth years.

• Research Grant: 340,000 JPY/year for the third year (in the doctoral program), it is NOT available for the first two years in the master's program.

Remarks for the Special Incentive Stipend Recipients

- For both doctoral and master's recipients, the examination fee of 30,000 JPY cannot be waived and the admission fee of 282,000 JPY may be waived if you apply for the admission fee waiver. For master's recipients, the tuition fee of 267,900 JPY/semester may be partially or fully waived by applying for the fee waiver.
- · For the special incentive recipients, the travel cost for admission will not be paid by the Graduate School of Science.
- The incentive stipend is, unlike "scholarship," considered income and is therefore taxable (various tax procedures will be explained to you after admission).

KEY DATES

Online Pre-Application Period October 1–November 15, 2024 Application Period October 15–November 15, 2024

Notification of Results

January 23, 2025

First Day of Fall Semester 2025

October 1, 2025

*Dates are subject to change.

CONTACT INFORMATION

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6-3 Aramaki-Aza-Aoba, Aoba-ku, Sendai 980-8578 JAPAN

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