

Tohoku University



# WISE Program for Sustainability in the Dynamic Earth

## 2023 April Term Student Application Guidelines

Application period	Wednesday, December 21, 2022 to Friday, January 13, 2023
Oral exam period	Middle to late February 2023
Announcement of results	Thursday, March 16, 2023

December 2022



**SyDE**

WISE Program for  
Sustainability in the  
Dynamic Earth

変動地球共生学卓越大学院プログラム

## About the WISE Program for Sustainability in the Dynamic Earth

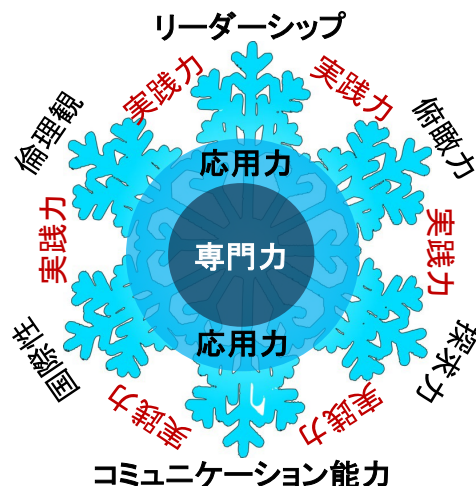
The WISE Program for Sustainability in the Dynamic Earth is an integrated Master's and Doctoral Degree Program that intends to explain the mechanisms by which disasters occur and improve techniques for predicting them in the context of various earth science phenomena of the dynamic earth, as well as to develop "knowledge professionals" who understand people and society and are equipped with the practical skills to deal preemptively with a variety of risks. In order to create a society that is safe and sustainable not just regarding disaster readiness, but also in a wide range of other fields, this program will cultivate expert talent capable of supporting specialists in those fields to pioneer cutting-edge knowledge, understanding people, and giving the fruits of our research back to society. It aspires to produce talent with diverse skills, such as the ability to see the big picture, communication skills, practical skills, a sense of ethics, intercultural adaptability, inquisitiveness, and leadership, through integrated arts and science education across seven graduate schools and collaborative education between private companies/organizations and research/international institutions. By doing so, this program aims to contribute to the Sendai Framework for Disaster Risk Reduction and other national initiatives across the globe.

Two program tracks are available:

1. **Basic Research Track:** Designed for graduate students who have a Bachelor's degree and want to acquire supplementary skills for their degree programs
2. **Practical Research Track:** Designed for those admitted through the Special Selection for Mature Applicants

As the program aims for a seamless fusion of expertise and real-world needs, students on both tracks will acquire broad perspectives by participating in the Integrated Science Lab (I-Lab), which is hands-on problem-solving training, and in industry-government-academia seminars. This program will cultivate "snow crystal-type" talent with the practical skills to tackle a variety of challenges, built on a foundation of leading expertise in graduate research.

Acquisition of the superior expertise to see the big picture of the Earth and visualize its future + 6 other diverse skills (Snow crystal-type talent)



## 1. The number to be admitted

- 1<sup>st</sup>-year Master's course: max. 15 students
- 2<sup>nd</sup>-year Master's course: approx. 8 students
- 1<sup>st</sup>-year Doctoral course: a few students

(The academic year above are as of April 2022.)

(Master course of the School of Medicine are included in the "Master's course" above. 1<sup>st</sup> and 2<sup>nd</sup>-year Doctoral courses of the School of Medicine are included as the 1<sup>st</sup>-year Doctoral course, the same applies hereafter)

## 2. Eligibility for application

To be eligible to apply for this program, a candidate must sufficiently understand its intent, be interested in obtaining a doctoral degree, have a strong recommendation from his/her intended supervisor or the head of his/her intended graduate school and major, and be one of the following:

- a. Entering the first year of a 2-year Master's course in one of the graduate schools and majors, as indicated in Table 1 in April 2023. (This includes those who entered the first year of a 2-year Master's course in October, 2022 and are already enrolled)
- b. Entering the first year of a 2-year Master's course in April, 2022 and enrolled in the second year of a 2-year Master's course in one of the graduate schools and majors, as indicated in Table 1 in April 2023. (This includes those who entered the second year of a 2-year Master's course in fall 2021 and are already enrolled)
- c. Progressing to or entering the first year of a 3-year Doctoral course in one of the graduate schools and majors, as indicated in Table 1 in April 2023.

\*Those whose graduate entrance exam results will not be announced until after this program's application deadline are still eligible to apply. However, a failing result will result in loss of eligibility.

Table 1. Graduate Schools and Majors in the WISE Program for Sustainability in the Dynamic Earth

Graduate School	Major
Science	Earth Science Geophysics
Engineering	Quantum Science and Energy Engineering Chemical Engineering Civil and Environmental Engineering Architecture and Building Science Management of Science and Technology
Information Sciences	Applied Information Sciences Human-Social Information Sciences
Environmental Studies	Frontier Science for Advanced Environment
Medicine	Medical Sciences
Arts and Letters	Japanese Studies Global Humanities Integrated Human Sciences
Economics and Management	Economics and Management

Other than those in the majors of study for eligible students, faculty members of the following research institutes at Tohoku University will be involved in this program:

- International Research Institute of Disaster Science
- Research Center for Prediction of Earthquakes and Volcanic Eruptions

- Center for Northeast Asian Studies
- Graduate School of Law (Public Policy Major)
- Institute for Excellence in Higher Education
- Institute for International Initiatives

Be mindful of the following when applying:

1. This program is an integrated educational program that includes a 2-year Master's course (after this "Master's course") with a 3-year doctoral course (after this "Doctoral course"). Those who do not wish to advance to a Doctoral course cannot apply for this program.
2. Those entering Doctoral course of the School of Medicine without entering a Master's course will only be eligible if they will be able to complete a this 5-year program within the standard period of study of the Doctoral course (4 years)

#### Applying to multiple programs:

It is possible to apply to other degree programs in conjunction with this one. If an applicant intends to do so, the applicant should understand each program thoroughly and discuss his/her plans with his/her intended host faculty/advisor. Then, on the application, the order of preference should be written (this will not affect your exam results). However, this program cannot be taken simultaneously with other degree programs, so if the applicant passes the exam for this program as well as others and they wish to enroll in this program, the applicant must withdraw from the other(s).

### **3. Application procedure**

#### In-person drop-off hours:

Wednesday, December 21, 2022 to Friday, January 13, 2023,  
between 9 a.m. and 4 p.m. (excluding lunch break, 12:45 p.m. to 1:45 p.m.)

#### Drop-off Location:

Office for the WISE Program for Sustainability in the Dynamic Earth  
**Graduate School of Science, Tohoku University**  
(2nd floor, Graduate School of Science Building, Tohoku University)  
6-3 Aramaki-Aza-Aoba, Aoba-Ku, Sendai, Miyagi 980-8578, JAPAN

#### If sending by mail or campus mail:

Applications must be received by January 13, 2023.

Please write "WISE Program for Sustainability in the Dynamic Earth application inside" on the envelope **in red** and send it by mail or campus mail.

Address: Office for the WISE Program for Sustainability in the Dynamic Earth  
**Graduate School of Science, Tohoku University**  
(Campus mail: 青-A5)  
(Regular mail: 6-3 Aramaki-Aza-Aoba, Aoba-ku, Sendai, Miyagi 980-8578, JAPAN)

#### If sending by email:

Applications must be received by January 13, 2023

Please follow the instruction and send the documents to the email address below:

WISE program for Sustainability in the Dynamic Earth,  
Tohoku University: syde-office@grp.tohoku.ac.jp

### **4. Application documents**

Please gather all of the following documents and submit them within the application period.

- a. Application Form (Form A) \*Please paste a portrait picture
- b. Statement of Purpose (Form B)
- c. Letter of Recommendation by intended host faculty (enclosed in an envelope and tightly sealed) (Form C)
- d. University (Undergraduate) Academic Transcript

Please download Forms A–C (MS Word files) from the WISE Program for Sustainability in the Dynamic Earth website: <https://www.syde.tohoku.ac.jp/>

- An English proficiency test score (TOEFL®, TOEIC®, IELTS™) or another document that certifies your English proficiency could be submitted. It may be referred to in evaluating the application but will not be counted against you. Also, neither will non-submission count against you.
- An applicant that does not yet have an intended supervisor could get a letter of recommendation from the head of their graduate school/major.
- Incomplete applications will not be accepted.
- Application materials will not be returned.
- TOEFL, TOEFL iBT, TOEFL ITP, and TOEIC are registered trademarks of Educational Testing Service (ETS).

Email application:

1. Application form (Form A): Fill out the form and print it to PDF file.

\*Photo: please insert a photo into the form.

2. Statement of Purpose (Form B): Fill out the form and print it to PDF file

3. Letter of Recommendation (Form C): Please ask your academic advisor (as of April 2021) to fill out and print it to PDF file and send the file to the email address below.

※The Form C sent from an applicant cannot be accepted.

※The form C without a seal or sign of academic advisor can be accepted.

4. University academic Transcript: Scan it to create a data file.

5. Copy of English proficiency test score: Scan it to create a data file.

Please send the documents above (1.,2.,4) (5.is optional)

## 5. Selection process

Applicants will be chosen based on their applications and an oral exam. Details about the oral exam will be sent to applicants separately by email.

Oral exam period: Middle to late February 2023

## 6. Announcement of results

Announcement of results: Thursday, March 16, 2023.

Successful applicants will be notified individually.

## 7. Orientation and beginning of classes

Orientation and beginning of classes: Early April 2023, on the Aobayama North Campus.

\* Successful applicants will be notified of further details.

## 8. Financial support

We will provide financial support to the excellent students that are chosen for this program. The amount of support is decided each academic year. If you are receiving public scholarships or other financial support, please discuss with us in advance.

## 9. Requirements for completion

In addition to the requirements of the graduate school in which you are enrolled, fulfilling this program's requirements is required for completion. A Qualifying Examination (QE) encompassing academic performance, credits earned, and English proficiency will be carried out during a specified period. Failing the exam will disqualify you from the program, so please make sure you fully understand the intent and objectives of this program before applying.

Please see the WISE Program for Sustainability in the Dynamic Earth website for details about the curriculum: <https://www.syde.tohoku.ac.jp/>

## 10. Other

- a. As a rule, students selected for this program must apply for the Japan Society for the Promotion of

Science Special Research Fellowship for the Doctoral Course (DC).  
b. Photographs, videos, names, and majors of students selected for this program may be published in brochures, on the website, and other promotional materials of this program and Tohoku University for promotional purposes.

December, 2022

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