



**“Human Security and Environment” Program  
The Graduate School of Environmental Studies  
Tohoku University**

**— Guidance for the Entrance Examination on October 2023 —**



**Application period: December 19, 2022 - January 27, 2023**

**Examination date: February 10 - 24, 2023**

**November 2022**

**Graduate School of Environmental Studies, Tohoku University**

## **“Human Security and Environment”**

———— Guidance for Entrance Examination ————

### **I. Aim**

While human activities have achieved a high degree of social and economic development, at the same time they have altered the global environment and are creating new challenges that cannot be completely solved without interdisciplinary and integrated perspectives from both social and natural sciences. Tohoku University established the “International Joint Educational Program in Human Security” from April 2005 to March 2019. This involved the cooperation of the Graduate School of Medicine, the Graduate School of Agricultural Science, the Graduate School of International Cultural Studies and the Graduate School of Environmental Studies. Our institute, the Graduate School of Environmental Studies, took part in this program to educate students from environmental perspectives.

Even though the original Human Security program was terminated in March 2019, the importance of this educational concept has not been extinguished. The Graduate School of Environmental Studies thus built on this predecessor by launching the “Human Security and Environment” program. This aims to give future students in this graduate school the opportunity to take lectures of multiple subjects provided by the International Joint Graduate Program in Resilience and Safety Studies (GP-RSS), which inherited the curriculum style of the Human Security. Like the previous Human Security program, GP-RSS involves collaboration across several graduate schools: the Graduate School of Medicine, the Graduate School of Agricultural Science, the Graduate School of Engineering, the Graduate School of International Cultural Studies, and the Graduate School of Environmental Studies.

All students entering the Graduate School of Environmental Studies through the entrance examination procedure of the “Human Security and Environment” program will acquire leadership in the field of human security and gain skills to address multiple global and anthropogenic issues.

### **II. Curriculum and degree**

#### **A. Curriculum**

Students applying for the “Human Security and Environment” program through this examination procedure need to belong to either of the departments indicated below:

- Department of Environmental Studies for Advanced Society
- Department of Frontier Sciences for Advanced Environment; Eco-materials and Processing
- Department of Frontier Sciences for Advanced Environment; Applied Environmental Chemistry
- Department of Frontier Sciences for Advanced Environment; Cultural Environmental Studies

The applicant must indicate the name of department and a possible supervisor in the

application form. Also, students need to complete the requirements of each department, in addition to some lectures provided by GP-RSS.

**Master's Course** (two-year course):

Interdisciplinary subjects:

Environmental Resilience and Energy Security (Environment)

Energy and Resource Resilience Strategies (Environment)

Transdisciplinary subjects:

Human Security and Global Health (Medicine)

Health and Social Resilience for Large-Scale Disasters (Medicine)

International Development Studies (Agriculture)

Food Economics (Agriculture)

Global Governance and Safety (Culture)

Environmental Resilience and Sustainability (Culture)

Hydro-Environmental Studies (Engineering)

Theory of Disaster Prevention Systems (Engineering)

**Doctoral Course** (three-year course):

Interdisciplinary development subjects:

Advanced Lecture on Environmental Resilience and Energy Security (Environment)

Advanced Lecture on Energy and Resource Resilience Strategies (Environment)

Transdisciplinary development subjects:

Advanced Lecture on Human Security and Global Health (Medicine),

Advanced Lecture on Health and Social Resilience for Large-Scale Disasters (Medicine)

Advanced Lecture on International Development Studies (Agriculture)

Advanced Lecture on Food Economics (Agriculture)

Advanced Lecture on Global Governance and Safety (Culture)

Advanced Lecture on Environmental Resilience and Sustainability (Culture)

Advanced Lecture on Hydro-Environmental Studies (Engineering)

Advanced Lecture on Theory of Disaster Prevention Systems (Engineering)

## **B. Degree**

Students must acquire the following credits at least to be awarded a degree.

**Master's Course** (two-year course):

1. Credits required by each department
2. One interdisciplinary subject provided by the Graduate School of Environmental Studies in GP-RSS and two transdisciplinary subjects provided by the other departments (in total three subjects or more)

**Doctoral Course** (three-year course): at least 16 credits, including the followings:

1. Credits required in each department
2. Two transdisciplinary development subjects provided by GP-RSS. These subjects must be different from those taken in the master's course.

Master's degrees will be conferred with the title of "Master of Interdisciplinary Studies" or

“Master of Environmental Studies”. Doctoral degrees will be conferred with the titles “Doctor of Philosophy (Interdisciplinary Studies)” or “Doctor of Philosophy (Environmental Studies)”.

### **III. Admission**

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#### **1. Admission Policy**

##### **A. Tohoku University**

###### Philosophy & Mission

With over 100 years of history and distinguished traditions, Tohoku University has developed excellence in education and research under its principles of "Research First," "Open Doors," and "Practice-Oriented Research and Education" since its establishment in 1907. The university will maintain these traditions while looking toward even more dramatic progress in the future. As a world-leading center of education and research, it will contribute greatly to the human race by grappling with the difficult and complex issues facing the 21st century. Tohoku University will focus its efforts of its faculties, graduate schools, and research institutes to foster ethical international leaders who will carry humanity into the future, while expanding its globally renowned creative research for the benefit of society at large.

###### Characteristics

###### 1) Three Foundational Ideals

"Research First," "Open Doors," and "Practice-Oriented Research and Education" — soon after its founding, Tohoku University established this set of unique ideals, the substance of which it is continually developing in response to our changing times.

###### 2) Rich Educational Environment

Tohoku University has numerous research organizations and facilities, primarily comprising 10 undergraduate schools, 15 graduate schools, 3 professional graduate schools, and 6 research institutes. Research institute staff also participate in educational activities (there are approx. 3,000 instructors; enrollment limits are approx. 2,400 for undergraduates, 2,700 for graduate students).

###### 3) Research University

Tohoku University is a school that continuously produces numerous internationally recognized research results and concertedly pushes forward with leading-edge research and education.

###### 4) Active Regional/Industrial-Academic Ties

The university is actively working to expand its diverse regional and industrial ties.

###### 5) Globalizing Education and Research

Among Japan's national universities, Tohoku University is one of the top schools in terms of agreements with overseas universities. It is actively expanding exchange in education and research. The university strives to foster globally active individuals through strong support for studying abroad by Japanese students, as well as recruitment of numerous international students.

###### Ideal Tohoku University Applicants

Tohoku University seeks students who sympathize with the university's principles and who are motivated by:

- ① the desire to make outstanding contributions as world-class researchers by addressing the issues facing humanity in the 21st century, and
- ② the desire to make outstanding contributions to the development of society as highly specialized professionals who possess abundant knowledge and leadership.

To realize these ambitions, students should also have strength of will, academic curiosity, a broad perspective, and an excellent foundation of specialized knowledge and abilities.

#### Tohoku University Admissions Process (Graduate School)

Depending on the number and type of candidates sought, Tohoku University graduate schools provide multiple categories of, and opportunities for undergoing, entrance exams to meet the needs of candidates from diverse backgrounds. Schools may evaluate the candidate's qualifications, abilities, and specialization using interviews, application documents such as research plans, proficiency exams, and external tests.

### **B. Tohoku University Graduate School of Environmental Studies**

By bringing together the multidisciplinary knowledge of Tohoku University, the Graduate School of Environmental Studies (GSES) aims to establish environmental science as an integrated discipline that transcends the traditional divisions of the humanities and sciences in order to establish a culture supporting sustainable development as well as technologies and systems needed to establish resource-circulating societies. To achieve this goal, GSES has set the educational objective of fostering individuals equipped with a combination of broad knowledge and deep expertise relevant to the understanding and solving of environmental problems. By effectively integrating insights from existing academic fields while creating new frontiers of knowledge, GSES seeks to foster environmental professionals capable of playing an active role in the international community. GSES is looking for students who share these goals. We especially welcome applicants with a strong desire and ability to carry out study and research, and the fundamental academic skills needed to achieve their goals.

Six entrance examination subject-groups are conducted to match the varying expertise of applicants. In each subject-group, students are selected through six different examination procedures: General Selection, Special Selection for Recommended Students, Special Selection for Working Persons, Special Selection for International Students, and Special Selection for Graduates of the Early Graduation System. Selection is made based on the applicant's motivation to conduct research in line with the educational goals of GSES, as well as academic knowledge and outstanding research capabilities.

(Master's course (2 years))

In the General Selection examination, applicants are required to take a written examination to evaluate their specialized knowledge in the relevant field, logical thinking, and ability to write an essay about a specific topic. In addition, applicants must sit an oral examination or interview (here in after referred to as the "oral examination") to evaluate their motivations and research ability as well as their capacity to carry out environmental science in an integrated setting. The selection process is based on a comprehensive evaluation that includes the results of both the written and oral examination, with emphasis placed on the written examination's outcome.

Although the content of the examinations for the Special Selection examinations differs according to the characteristics of the targeted applicants, the evaluation and scoring procedure is essentially the same as that of the General Selection examination. However, in the case of the examination for the Special Selection for Working Persons, the relevance of the applicant's professional experience to the proposed research topic is assessed during the oral examination. In the case of the Special Selection for International Students examination in the Humanities and Social Science Group, whether the applicant's Japanese proficiency is sufficient for research will also be assessed. In all fields, we expect applicants to have acquired the English language skills necessary for writing and discussing research papers as

well as understanding the fundamentals of each specialized field before entering the GSES master courses.

(Doctoral course (3 years))

The General Selection examination may include a written component to ascertain if applicants possess a high level of specialized knowledge in the relevant academic field. However, in particular, the oral examination will be used to comprehensively evaluate the applicant's ability to think logically and formulate a research plan based on a critical consideration of previous research.

In the same way, although the examinations of the Special Selection for Working Persons and the Special Selection for International Students may also include a written examination to assess the applicant's possession of specialized knowledge, selection will mainly be made on the quality of the research proposal along with the applicant's motivation and sense of mission to carry out academic research in a university setting. In the Special Selection for Working Persons and the Special Selection for International Students, while the applicant's expertise may be assessed through a written examination if necessary, selection is mainly based on the oral examination.

In all fields, we expect applicants to have acquired both advanced skills and fundamental knowledge in their respective fields of specialization as well as the ability to orally present research in academic conferences and publish academic papers.

## **2. Application procedure**

### **A. Conditions for application**

#### **1) Applicants for the Master's Course must be living outside Japan at the time of application and satisfy one of the following conditions:**

- (1) Have graduated from a university of Japan.
- (2) Have acquired a Bachelor degree from a higher education institution approved as a National Institution for Academic Degrees and Quality Enhancement of Higher Education of Japan.
- (3) Completed or expect to complete 16 years of education in a foreign education institution by September 2023.
- (4) Have completed 16 years of foreign education in Japan through a correspondent course of a foreign university or school while residing in Japan.
- (5) Have completed 16 years of a foreign education at an educational institution located in Japan.
  - ※ The educational institution shall be one that has been approved by the educational system of that country and designated by the Minister of Education, Culture, Sports, Science and Technology of Japan.
- (6) Be conferred or expect to be conferred a degree equivalent to a bachelor's degree upon completion of a curriculum that has a course term of three years or longer at a university or other school (limited to schools whose overall educational and research activities have been evaluated by the relevant country's government or a government-approved individual, or are designated separately as having met this requirement by the Minister of Education) in a foreign country (including cases in which the student completed the curriculum by taking subjects conducted via distance learning while the student resided in Japan, and cases in which the student has completed a curriculum at an educational facility that is positioned within that country's educational system as per the previous item) by September 2023.
- (7) Have graduated from a specialized course of a professional school designated by the Minister of Education, Culture, Sports, Science and Technology of Japan, on or after the date fixed by the Minister, or be expecting to graduate.

※ A specialized course shall be more than 4 years and meet other criteria stipulated by the Minister of Education, Culture, Sports, Science and Technology of Japan.

- (8) Have been designated as eligible by the Ministry of Education, Culture, Sports, Science and Technology of Japan.
- (9) Have entered a graduate school of another university according to Clause 2 of Article 102 of the School Education Law, and be deemed by the graduate school of Tohoku University to have a sufficient eligibility to study at that graduate school.
- (10) Be 22 years of age or older by the end of September 2023 and, through individual entrance qualification screening, be deemed by the Graduate School of Environmental Studies, Tohoku University to have achieved an academic standard equivalent to or more than those who have graduated from a university.

\*1 Applicants need to consult with a possible supervisor about the intended area of research prior to the application.

\*2 Applicants corresponding to (6) need to contact with the administration office by December 9, 2022 to check eligibility.

\*3. Applicants corresponding to (9) and (10) need to submit documents for application qualification to the administration office by December 9, 2022. The document format is provided by the administration office.

**2) Applicants for the Doctoral Course of the program must be living outside Japan at the time of application and satisfy one of the following conditions:**

- (1) Have acquired a Master or Professional degree.
- (2) Have acquired a degree on par with a Master or Professional degree abroad, or expect to acquire one, by September 2023.
- (3) Have acquired a Master or Professional degree abroad through a correspondent course while residing in Japan.
- (4) Have acquired a Master or Professional degree at educational institution located in Japan that is designated by the Ministry of Education, Culture, Sports, Science and Technology of Japan.
- (5) Have completed a course of the United Nations University, and have acquired or expect to acquire the degree equivalent to a Master degree by September 2023.
- (6) Have completed a course at an educational institution which runs courses from a foreign school or graduate school, or completed that of United Nation University, and be admitted to have achieved an academic standard equivalent to or more than those who possess a Master degree by passing the exam and eligibility screening in accordance with Clause 2 of Article 16 of the Graduate School Establishment Standards.
- (7) Be designated by the Minister of Education, Culture, Sports, Science and Technology of Japan as follows;
  - i. Engaged in research activities in universities or research institutes for more than 2-years after graduation, with an academic ability deemed by the eligibility screening of the Tohoku University to be equivalent to those who obtained a Master or Professional degree.
  - ii. Engaged in research activities in universities or research institutes for more than 2-years after completing a formal 16-year school education abroad or 16-year of foreign education in Japan through a correspondent course of a foreign university or school while residing in Japan, with an academic ability deemed by the eligibility screening of the Tohoku University to be equivalent to those who obtained a Master's or Professional degree.
- (8) Be 24 years of age or older by the end of September 2023 and, through individual entrance qualification screening, be deemed by the Graduate school of Environmental Studies, Tohoku University to have achieved an academic standard equivalent to or

more than those who obtained a Master or Professional degree.

- \*1 Applicants need to consult with a possible supervisor about the research plan in this program prior to the application.
- \*2 Applicants corresponding to (7) need to contact with the possible supervisor by December 9, 2022 to check eligibility.
- \*3 Applicants corresponding to (8) need to contact with the administration office by December 9, 2022 to check eligibility.

## **B. Documents required for application**

It is desirable that all university certifications and transcripts are issued in English. If not, they should be attached by an English or Japanese translation officially verified by the institute that the certification issued. If it is difficult to submit an officially verified translation, please consult with the administration office prior to the application.

- We cannot return any documents you submitted.
- We cannot accept any copies, digital files, or printouts from digital files of the certification.

### **< Two-year Master's Course >**

1. An application form and curriculum vitae (using the prescribed format)
2. An official grade transcript issued by the applicant's home university
3. An official graduate certification issued by the applicant's home university
4. A certificate of the applicant's Bachelor degree issued by the applicant's home university
5. A formal certificate of TOEFL<sup>®</sup> test/ TOEIC<sup>®</sup> test score
  - Valid official tests: TOEFL-iBT<sup>®</sup>, TOEFL-PBT<sup>®</sup>, TOEIC<sup>®</sup> (Listening & Reading Test)
  - It is necessary to submit the certificate by 10:00 AM (Japan time) of 27 January 2023. We cannot accept certificates of TOEFL<sup>®</sup>/ TOEIC<sup>®</sup> test scores obtained before 2020.- The DI code for sending the TOEFL<sup>®</sup> test (Official Score Certificate) directly to the Graduate School is "C648".
  - We only accept TOEFL iBT<sup>®</sup> scores from a single test date, not MyBest<sup>™</sup> scores.
  - We cannot return the certificate of the TOEFL<sup>®</sup>/ TOEIC<sup>®</sup> score. However we will return the Test Taker Score Report if requested.
6. A research proposal
7. A letter of reference
  - This should be written by an academic advisor who can evaluate the applicant's research ability through previously conducted academic activities (there are no specific format requirements for this letter).
8. Examination fee of 30,000 Japanese yen
  - Please make payment at the following website. (Credit card payment)  
<https://e-shiharai.net/ecard/index.html>

### **< Three-year Doctoral Course >**

1. An application form and curriculum vitae (using the prescribed format)
2. An official grade transcript issued by the applicant's home graduate school
3. An official grade transcript issued by the applicant's home university
4. An official graduate certification issued by the applicant's home graduate school
5. A certificate of the applicant's Master's degree issued by the applicant's home graduate school
6. A formal certificate of TOEFL<sup>®</sup> test/ TOEIC<sup>®</sup> test score
  - Valid official tests: TOEFL-iBT<sup>®</sup>, TOEFL-PBT<sup>®</sup>, TOEIC<sup>®</sup> (Listening & Reading Test)
  - It is necessary to submit the certificate by 10:00 AM (Japan time) of 27 January 2023.

We cannot accept certificates of TOEFL®/ TOEIC® test scores obtained before 2020.

- The DI code for sending the TOEFL® test (Official Score Certificate) directly to the Graduate School is "C648".
- We only accept TOEFL iBT® scores from a single test date, not MyBest™ scores.
- We cannot return the certificate of the TOEFL®/ TOEIC® score. However we will return the Test Taker Score Report if requested.

7. A research proposal

8. A letter of reference

- This should be written by an academic advisor who can evaluate the applicant's research ability through previously conducted academic activities (there are no specific format requirements for this letter).

9. Thesis or essays published by the applicant

10. Examination fee of 30,000 Japanese yen

- Please make payment at the following website. (Credit card payment)

<https://e-shiharai.net/ecard/index.html>

**The application documents should be sent by registered mail to the following address with "Human Security and Environment Application Documents" written in red on the envelope:**

Academic Affairs

Graduate School of Environmental Studies, Tohoku University

Aoba 468-1, Aramaki Aoba-Ku, Sendai, Miyagi 980-8572 Japan

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### **3. Entrance Examination**

#### **1) The number of students to be admitted:**

Quotas for the Master's course and Doctoral course are highly limited. The entrance date will be in October.

#### **2) Application period: Entrance Examination for October 2023.**

Applications for the **Master's course** and **Doctoral course** will be accepted **from December 19, 2022 to January 27, 2023**. In the event that posted applications arrive after the deadline they will not be accepted.

#### **3) Examination date and details**

The oral entrance examination (i.e. the interview) will take place remotely (via Skype etc.) during the period February 10 to 24, 2023. Precise dates and details of this exam will be informed by the applicant's requested supervisor.

**Note:** It is necessary for applicants to communicate with prospective supervisors before submitting application documents.

### **4. Screening**

Successful applicants will be decided in accord with the tallied scores from the oral examination (i.e. the interview), language ability and submitted documents. During the interview, applicants must make a 20-minute presentation of their previous and intended research. This will then be followed by 40-minutes of Q&A in order to gauge the research ability of applicants.

#### **IV. Selection and Announcement of Results**

Results of the entrance examination will be posted on the website ([www.kankyo.tohoku.ac.jp](http://www.kankyo.tohoku.ac.jp)) of the Graduate School of Environmental Studies at approximately 17:00 (Japan time) on March 10, 2023. The acceptance letter will also be mailed to successful applicants two days after the online announcement. Please note that we do not accept any phone calls or e-mails for inquiries regarding results.

#### **V. Fee**

##### 1) Entrance Fee and Tuition Fee (in 2023)

Entrance fee	282,000 Japanese yen
Tuition fees	535,800 Japanese yen per year (267,900 for each 1 <sup>st</sup> and 2 <sup>nd</sup> semester)
Others	Fees for student insurance and texts

##### 2) Exemption and postponement of the entrance fee and tuition fee

Students facing financial difficulties or suffering from illness, an accident or special circumstances may apply for exemption or postponement of the entrance fee and tuition fee. Students applying for these waivers must submit the prescribed application forms during the period of acceptance. Please ask the administration office about the details of this scheme.

#### **VI. Administration Office**

The Graduate School of Environmental Studies, Tohoku University  
Address: Aoba 468-1, Aramaki Aoba-Ku, Sendai, Miyagi 980-8572 Japan

**E-mail: [kankyo.kyomu@grp.tohoku.ac.jp](mailto:kankyo.kyomu@grp.tohoku.ac.jp)**

Please refer to the following websites for further information about this program.

- [www.kankyo.tohoku.ac.jp](http://www.kankyo.tohoku.ac.jp)
- [www2.kankyo.tohoku.ac.jp/human-security](http://www2.kankyo.tohoku.ac.jp/human-security)

2023

**“Human Security and Environment”**  
 Graduate School of Environmental Studies, Tohoku University  
**APPLICATION FOR ADMISSION**

Please type or neatly print in English  
 Please Use CAPITAL LETTERS

Examinee's seat number (for official use)					<b>Photograph</b> 4×3cm (1.6"×1.2") Write your LAST name on the back side
<input type="checkbox"/> Master's course	<input type="checkbox"/> Admission for October/2023				
<input type="checkbox"/> Doctoral course					
<b>Name in English</b>					
<b>In Chinese Characters</b> (if applicable)					
<b>Date of Birth</b>	Year	Month	Day	<b>Nationality</b>	
<b>Gender</b>		<input type="checkbox"/> Male <input type="checkbox"/> Female			
<b>Present Status</b> (with name and address of university or employer)					
<b>Present mailing Address</b>	Phone number _____ Fax number _____ E-mail address _____				
<b>Permanent Address</b> (if different from above)	Phone number _____ Fax number _____				
<b>Expected Laboratory</b>					
<b>Expected Supervisor</b>					



2023

**“Human Security and Environment”**

Graduate School of Environmental Studies, Tohoku University

**RECOMMENDATION LETTER**(to be filled out **by a faculty member** familiar with applicant’s aptitude)

Name of applicant	Family name	First name	Middle name

I. How long and how well have you known the applicant and in what capacity?

II. Please evaluate the applicant’s previous accomplishments, intellectual independence, capacity for analytical thinking, and state reasons for you’re supporting this application. (Please do not hesitate, if necessary, to use a separate sheet).

Faculty Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Contact information (E-mail/ Telephone)

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\* This is only used for the applicants living in Japan.

**2023**

**“Human Security and Environment”  
ADMISSION TICKET TO EXAMINATION**

<b>Examinee’s seat number</b> (for official use)	
<b>Name</b>	

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\* This is only used for the applicants living in Japan.

**2023**

**“Human Security and Environment”**

**PHOTO ID**

Photograph 4cm×3cm  Write your LAST name on the back side  .
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<b>Examinee’s seat number</b> (for official use)	
<b>Name</b>	