2020 Academic Year

Application Guide for International Students*

Doctoral Program

(Enrollment in April 2020)

*International students include Japanese returnees

November 2019
Graduate School of Science, Tohoku University

This is an unofficial translation edited by DiRECT; the official document you should refer to is the original one in Japanese, “令和2年度 博士課程後期3年の課程学生募集要項【一般選抜, 社会人特別選考, 外国人留学生特別選考】(令和2年4月進学・編入学)”. Should you have any inquiry regarding this translation, please contact DiRECT.

DiRECT: Division for International Research and Educational Cooperation, School of Science
Email: direct@mail.sci.tohoku.ac.jp
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 doing research on earthquakes, planetary science, giant molecules, belong to the School of Science. In addition, the Graduate School of Science has close relationships with some highly advanced research institutes at Tohoku University, such as the Institute for Materials Research and the Research Center for Neutrino Science. According to the QS World University Rankings 2018, Materials Sciences at Tohoku University is ranked 2nd in Japan and 23rd in the world and in the field of Physics and Astronomy, Tohoku University ranks 4th in Japan and 35th among universities across 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 all over 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 Graduate School of Science invites individuals with the scholastic abilities needed for performing advanced studies in science and a strong desire to earn a degree from Tohoku University.

Strong applicants will have the following:
- An ability to search for the truths in natural science and to carry out original research employing creative and logical thinking,
- A strong desire to learn the tools needed to conduct research that will help advance natural science and technology, and
- A desire to become a researcher or highly skilled professional who will contribute to the enhancement of culture and human welfare and clearly communicate their research results to society.
1. **Number of Recruitment at each Department**

<table>
<thead>
<tr>
<th>Department</th>
<th>Int'l Students Quota</th>
<th>Research Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>a few</td>
<td>Algebra, Geometry, Analysis, Manifold Theory, Applied Mathematics, Integrative Applied Analysis and Computation</td>
</tr>
<tr>
<td>Physics</td>
<td>a few</td>
<td>Theoretical Nuclear and Particle Physics, Experimental Nuclear and Particle Physics, Condensed Matter Physics, Quantum Condensed Matter Physics, Theoretical Condensed Matter and Statistical Physics, Strongly Interacting Many Particle Quantum Systems, Soft Matter and Biophysics, High Energy Physics, Nuclear Science, Nuclear Radiation Physics, Crystal Physics, Metal Physics, Solid State Spectroscopy, Accelerator Science, Strongly Correlated Electron Physics, Quantum Sensing and Measurement</td>
</tr>
<tr>
<td>Astronomy</td>
<td>a few</td>
<td>Astronomy, Theoretical Astrophysics, Space Science</td>
</tr>
<tr>
<td>Geophysics</td>
<td>a few</td>
<td>Solid Earth Physics, Planetary and Space Physics, Atmospheric Science, Physical Oceanography, Crustal Physics, Planetary Physics, Atmospheric and Oceanic Studies</td>
</tr>
</tbody>
</table>

[Note] Earth Science major applicants should choose one of the following research groups from (A) to (C) and it should be written on the application form as well.

- (A): Geosphere Evolution (Material Circulation in Geosphere), Natural History Science, Geoenvironmental Dynamics, and Natural Disaster Science
- (B): Environmental Geography, Geoenvironmental Dynamics, and Natural Disaster Science
- (C): Earth and Planetary Materials Science (Reaction and Kinetics in the Earth’s Interior), Petrotectonics, Natural History Science, and Comparative Solid Planetology
2. **Eligibility**

As a general rule, international students are admitted to apply for the Doctoral program only after enrolling as research students in the School of Science, Tohoku University. Exceptions will be made if the applicant is recognized by the Graduate School of Science to possess high academic ability.

Applicants for the program must fulfill one of the following conditions.

(1) A person who holds (or expects to hold) a master’s degree or professional degree by March 31, 2020;

(2) A person upon whom a degree equivalent to a master’s degree or professional degree was conferred (or is expected to be conferred) by a graduate school of a foreign university by March 31, 2020;

(3) A person who, in Japan, took the course subjects of a corresponding education course provided by a foreign school, and consequently upon whom a degree equivalent to a master’s degree or professional degree was conferred (or is expected to be conferred) by March 31, 2020;

(4) A person who completed (or will have completed) a foreign graduate course provided by an educational institution in Japan that is recognized, under the schooling system of the relevant foreign country, as a provider of graduate courses of the foreign country, and that is separately designated by the Minister of Education, Culture, Sports, Science and Technology, and thereafter upon whom a degree equivalent to a master’s degree or professional degree was conferred (or is expected to be conferred) by March 31, 2020;

(5) A person who completed (or will have completed) a course at the United Nations University and thereafter upon whom a degree equivalent to a master’s degree was conferred (or is expected to be conferred) by March 31, 2020;

(6) A person who studied on the basis of a curriculum of a foreign school, Educational Institution providing Foreign Graduate Courses, or the United Nations University, passed (or is expected to be passed) an examination and assessment equivalent to those prescribed in Article 16-2 of the Standards for the Establishment of Graduate Schools (Ordinance of the Ministry of Education, Science and Culture No. 28 of 1974), and is found to have academic abilities at least equivalent to those of master’s degree holders by March 31, 2020;

(7) A person designated by the Minister of Education, Culture, Sports, Science and Technology (Ordinance of the Ministry of Education, Science and Culture No.118 of 1989); or

① A person who graduated (or will have graduated) from a university, and thereafter engaged in the research activities at a university or a research institute, etc. for at least two years, who is deemed, based upon the research performance, etc., whom a degree equivalent to a master’s
degree or professional degree was conferred;
② A person who completed a 16-year curriculum of schooling abroad or completed a 16-year curriculum of schooling of a foreign country by taking course subjects in Japan through a correspondence education course provided by a school of such foreign country, and thereafter engaged in the research activities at a university or a research institute, etc. for at least two years, who is deemed, based upon the research performance, etc., whom a degree equivalent to a master’s degree or professional degree was conferred;

(8) A person who is deemed, through an individual university entrance qualification assessment, to have academic abilities at least equivalent to those of master’s degree holders or professional degree holders by the Tohoku University Graduate Schools, and also who has reached (or will be reached) the age of 24 by March 31, 2020.

[Note] Inquiry before Formal Application
Those who are applying for this program must find a prospective supervisor by themselves first. Visit faculty list of department to which you will apply at the website listed on the last page and contact them directly by email to obtain their consent to study under him/her. After obtaining consent from our faculty member, it is necessary to gain approval of your application from the Department Chair through the prospective supervisor.
1. Under the condition (1) - (6), it is required to inform your application to the Department Chair through the prospective supervisor no later than on Monday, December 2, 2019 to review your eligibility and follow their instructions before making an official application.
2. Under the condition (7) and (8), Preliminary Screening is mandatory (See “Section 3: Preliminary Screening” and follow the instructions). And please be sure to gain approval of your application from the Department Chair through the prospective supervisor after obtaining consent from your prospective supervisor.

3. Preliminary Screening
Those who apply under eligibility requirements (7) and (8) must undergo the following the preliminary screening procedure (1)-(3).

(1) Preliminary Screening Procedure
① Application Deadline: Monday, December 2, 2019
② For those bringing applications directly, the window is open between 9:00 am–4:00 pm except 12:45 pm–1:45 pm on weekdays.
③ Application by postal mail should be sent by registered express mail. Print “Doctoral Program Preliminary Screening Enclosed” on the envelope in red. Application reached after the deadline, Monday, December 2, 2019 will not be acceptable.

④ Applications that are lacking necessary documents, incomplete, or otherwise inadequate will not be acceptable.

⑤ For obtaining the prescribed forms and bringing/sending application documents, contact the Graduate Academic Affairs Section, Tohoku University. (See the last page)

(2) Preliminary Screening Results

[Applicants residing in Japan]
The preliminary screening results will be sent by postal mail by Wednesday, December 11, 2019.

[Applicants from overseas]
Your prospective supervisor will inform you of the results.

(3) If you successfully pass the preliminary screening, make sure to enclose the preliminary screening results notification in your formal application documents and submit them within the application period.
Those applying from abroad will have their application put together by their prospective supervisor. (You will not receive the preliminary screening results notification, unless requested. Please note that it is all in Japanese.)

◆ Application Documents for Preliminary Screening under the Eligibility (7) and (8)

<table>
<thead>
<tr>
<th>Application Documents</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Qualification Screening Application Form</td>
<td>Prescribed form with a description of your educational background and your research field</td>
</tr>
<tr>
<td>Academic Transcript</td>
<td>Latest transcript of educational institution you last enrolled. It should be issued by the appropriate office of the institution and should be sealed in an envelope.</td>
</tr>
<tr>
<td>Other Reference Materials</td>
<td>Thesis or an equivalent paper</td>
</tr>
<tr>
<td>Return Envelope for Preliminary Screening Results</td>
<td>[Applicants residing in Japan] A 23.5 cm×12 cm self-addressed envelope with 374 yen worth of postage</td>
</tr>
</tbody>
</table>
4. Applicants who need Special Assistance

Applicants who need special assistance or consideration either in taking the examination or after enrollment due to their particular conditions should consult the Graduate Academic Affairs Section (see the last page) by Monday, December 2, 2019. Please notify them as soon as possible so that they will have sufficient time to take necessary measures. Be assured that such a request will in no way influence the outcome of the selection process.

5. Application Procedure

(Note that formal application can be made only after obtaining an agreement by your prospective supervisor as described in the last part of “2. Eligibility”.)

(1) Application Period

① Application documents should be reached from Monday, January 6 to Friday, January 10, 2020.

② For those bringing applications directly, the window is open between 9:00 am–4:00 pm except 12:45 pm–1:45 pm on weekdays.

③ Applications by postal mail should be sent by registered express mail. Print “Doctoral Program Application Enclosed” on the envelope in red.

④ Applications that are lacking necessary documents, incomplete, or otherwise inadequate will not be acceptable.

⑤ Earth Science major applicants should choose one of the following research groups from (A) to (C) and it should be written on the application form as well.

· (A): Geosphere Evolution (Material Circulation in Geosphere), Natural History Science, Geoenvironmental Dynamics, and Natural Disaster Science

· (B): Environmental Geography, Geoenvironmental Dynamics, and Natural Disaster Science

· (C): Earth and Planetary Materials Science (Reaction and Kinetics in the Earth’s Interior), Petrotectonics, Natural History Science, and Comparative Solid Planetology

⑥ Making false or misleading statements on the application may result in cancellation of admission status.
(7) After submission, declining an application and amendment to written information on
the application documents cannot be allowed. The relevant application documents are
not returnable (except master’s thesis), and the examination fee is not refundable.
(8) If you are not able to submit the application documents during the designated
application period due to an inevitable reason, early submission may be admitted.
Please contact the Graduate Academic Affairs Section in advance.
(9) The documents should be submitted to:
Graduate Academic Affairs Section,
Graduate School of Science, Tohoku University (See the last page)
(10) The examination admission ticket will be sent by postal mail with examination fee receipt

(2) Required Application Documents
Applicant should submit the following items:

<table>
<thead>
<tr>
<th>No.</th>
<th>Necessary Items</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>Application Form for Doctoral Program</td>
<td>Prescribed form</td>
</tr>
<tr>
<td>2*</td>
<td>Photo ID Card, Examination Admission Ticket, and Examination Fee Receipt</td>
<td>Prescribed form with a photo (4 cm x 3 cm) showing upper body, facing front without wearing a hat, and taken within the last three months.</td>
</tr>
</tbody>
</table>
| 3   | Examination Fee                                      | 30,000 yen (It should be paid by Japanese postal money order and leave the entire sheet blank on the postal money order.)
Those living abroad who are unable to pay by Japanese postal money order should contact the Graduate Academic Affairs Section in advance.
[Note]
No need to pay examination fee for those with the following conditions:
- Those who expect to complete the master’s program or professional degree program of Tohoku University by March 31, 2020
- MEXT (Japanese Government) scholarship students |
|   | Academic Transcript | - Academic transcripts of undergraduate and graduate program. They should be issued by the appropriate office of the institution and should be sealed in an envelope.  
- Those who do not have any degrees including Bachelor’s, Master’s, or Professional degree should submit a transcript of educational institution you last enrolled. |
|---|---|---|
| 5 | Certificate of (expected) Graduation | - Certificate of (expected) Graduation of Master’s or Professional degree program. If the degree-awarding date appears on the academic transcript, the certificate is not required.  
- If you have any degrees other than the master’s, submit the degree certificate as well. |
| 6 | Academic Research Paper | - List of academic research papers  
- Master’s thesis or other equivalent papers (Copy version is acceptable and paper is returnable upon request.) |
| 7* | Return envelope for examination admission ticket | [Applicants residing in Japan]  
Self-addressed prescribed envelope with 374 yen postage  
[Applicants from overseas]  
Contact your prospective supervisor to address the prescribed return envelope for internal mail to his/her lab. |
| 8 | Photocopy of Passport OR Residence Card issued by Japanese Government | Required for foreign applicants.  
- Passport: pages with personal information  
- Residence Card: both front and back sides |
| 9* | Mailing labels | [Applicants residing in Japan]  
Self-address all the three labels on the sheet. In addition, fill in the top right part of the page.  
[Applicants from overseas]  
Contact your prospective supervisor to fill them in as a return label for internal mail to |
6. **Examination and Selection Method**
   Candidates are selected on the basis of evaluation of the submitted documents plus the performance in proficiency examinations.

   (1) **Schedule and Selection Method**
   Examination is scheduled between the late January and the mid-February 2020. Applicants will be informed of the specific dates for the examination and selection method.

   (2) **Location**
   The examination will take place at the Graduate School of Science, Tohoku University (Address: 6-3 Aramaki-Aza-Aoba, Aoba-ku, Sendai 980-8578, JAPAN) unless otherwise notified.
   * Detailed information on the examination room will be notified individually after the application procedures are completed.

   (3) **Disclosure of the Examination Score**
   Those who request their examination score to be disclosed should submit the statement of reasons (including the following information: Name, Phone number, Address, Reason for request) with a copy of your examination admission ticket to the Graduate Academic Affairs Section in person or via postal mail by Friday, March 27, 2020. The extent of disclosure depends on each department. Before submitting a request for disclosure, contact the Graduate Academic Affairs Section for details.

7. **Announcement of Selection Results**
   The selection results will be posted on the Graduate School of Science notice board at Kita-Aobayama Campus at 9:00 am on Friday, March 6, 2020.
   - **Successful applicants residing in Japan:** A letter of acceptance will be sent by postal mail after the selection results announcement.
   - **Successful applicants living overseas:** Your prospective supervisor will inform you the result.

8. **Admission Procedures**
   For admission procedures, prescribed papers must be submitted. In addition, the admission fee and tuition fee must be paid at this point of time, unless you have applied for waivers.
Detailed information about the admission procedure will be sent along with the letter of acceptance.

(1) Admission Procedure Period will be in the mid-March 2020.

(2) Admission Fee and Tuition Fee
   ① Admission Fee: 282,000 yen (as of 2019)
      [Note] Admission fee is not required for those who have completed the master’s program or professional degree program of Tohoku University in March 2020.
   ② Tuition Fee: 535,800 yen per year (as of 2019)
      (Tuition fee should be paid each semester; 267,900 yen per semester)
      [Note] The above amount is subject to change.

9. Miscellaneous Information

Privacy Policy
   ① Any personal information gathered by Tohoku University shall be treated with due care in compliance with the Act on the Protection of Personal Information Held by Independent Administrative Agencies, etc. and Regulations on Protection of Personal Information at National University Corporation Tohoku University, and security measures will be taken to protect personal information.
   ② Personal information, such as examination scores, used in selecting applicants will be used exclusively for educational purposes, such as selecting applicants, admission procedures, pre-admission instruction, follow-up surveys, and student support after enrollment (scholarships, tuition waivers, health management, etc.) and academic advising, or in connection with tuition collection, etc.
   ③ Applicants to this graduate school shall be deemed to have consented to the acts listed above.

【Reference】

Graduate School of Science
   http://www.sci.tohoku.ac.jp/juken/ (Japanese)
   http://www.sci.tohoku.ac.jp/english/prospective/ (English)

Mathematics
   http://www.math.tohoku.ac.jp/ (Japanese)
   http://www.math.tohoku.ac.jp/english/index-e.html (English)
Physics
http://www.phys.tohoku.ac.jp/ (Japanese)
http://www.phys.tohoku.ac.jp/en/ (English)

Astronomy
http://www.astr.tohoku.ac.jp/ (Japanese)
http://www.astr.tohoku.ac.jp/en/ (English)

Geophysics
http://www.gp.tohoku.ac.jp/ (Japanese)
http://www.gp.tohoku.ac.jp/index-en.html (English)

Chemistry
http://www.chem.tohoku.ac.jp/ (Japanese)
http://www.chem.tohoku.ac.jp/english/ (English)

Earth Science
http://www.es.tohoku.ac.jp/ (Japanese)
http://www.es.tohoku.ac.jp/EN/ (English)

【Inquiries】
Graduate Academic Affairs Section
Graduate School of Science, Tohoku University
6-3, Aramaki-Aza-Aoba, Aoba-ku, Sendai 980-8578 JAPAN
Email: sci-in@grp.tohoku.ac.jp
Phone: +81-22-795-6351

As of November 2019
Graduate School of Science, Tohoku University