

Academic Year 2022

**Graduate School of Science
Hokkaido University**

Doctoral Course

(Latter Period of Doctoral Program)

Winter Selection

**Guidelines for Application for the
Entrance Examination**

For enrollment April 2022 or October 2022

(Admission for International Students Residing in Japan)

November 2021

Notes

In order to prevent the spread of COVID-19, the examination may be conducted in a different way from the description on this guideline, or it will be postponed/cancelled.

For those who wish to enroll in April 2022, there is no supplementary examination individually under the influence of COVID-19 in the winter selection since the opportunity to take the examination had already been provided throughout the year.

Personal Information Management by Hokkaido University

- (1) In handling personal information obtained from applicants, Hokkaido University makes every effort to protect this information through appropriate management based on the “National University Corporation Hokkaido University Personal Information Management Rules” and the relevant laws and ordinances such as the “Protection Law for Private Information Held by Independent Administrative Corporations”.
- (2) Personal information, such as name, address, etc., provided by the applicant to the university in the process of applying for admission will be used only for: 1) assessment of applicants; 2) announcement of results; 3) enrollment procedures; 4) surveys and research on enrollee selection methods; and 5) business operations pertaining to 1)–4).
- (3) Companies commissioned by the University to engage in the relevant operations (hereafter called “commissioned companies”) may handle personal data. Part or all of the personal information submitted to the University by the applicant will be provided to the commissioned companies, to the extent necessary for them to carry out their duties.
- (4) After successful applicants are enrolled, personal information they provided on their application forms will be used for; 1) educational affairs (such as registration, educational guidance, etc.); 2) student support services (such as health administration, fellowship applications, etc.); 3) career support and 4) business operations related to their tuition fees and other expenses.
- (5) Among the personal information described in (4), only the name and address may be used for contact purposes from Hokkaido University Frontier Foundation, Hokkaido University Athletic Union, Alumni Association of the School of Science, and Alumni Association Elm of Hokkaido University by taking safety measures.

November 2021

Graduate School of Science,
Hokkaido University

Admission Policy for the Graduate School of Science

Applicants must have completed core subjects in the fields of Mathematics, Physics, Chemistry, Biological Sciences, Earth Science or related subjects. In order to engage in more specialized and advanced academic research, they must also have the ability, character and aptitude to study independently and to rigorously investigate the principles of nature as well as must have extensive knowledge and techniques.

▪ Principle Selection Policy (Multiple-layered Evaluation Method)

【General Category】

By written examination, applicants will be evaluated their levels of “knowledge and skills”, “ability to think/judge/ express” and “comprehension.”

By oral examination, applicants will be evaluated their levels of “knowledge and skills”, “ability to think/judge/ express”, “ability to work independently and cooperatively”, “comprehension”, “ability to identify problems”, “interest and motivation”

The Graduate School of Science will comprehensively assess applicants on the basis of the application documents (such as research plan, transcript, etc).

【Special selection for adults】

By written examination, applicants will be evaluated their levels of “knowledge and skills”, “ability to think/judge/ express” and “comprehension.”

By oral examination, applicants will be evaluated their levels of “knowledge and skills”, “ability to think/judge/ express”, “ability to work independently and cooperatively”, “comprehension”, “ability to identify problems”, “interest and motivation”

The Graduate School of Science will comprehensively assess applicants on the basis of the application documents (such as research plan, transcript, etc).

For applicants under the Special Category for Working Adults, academic skills may be judged by their research achievements in practice (through an interview), rather than knowledge on their specified field or foreign language skills. In addition, their levels of “knowledge and skills”, “ability to think/judge/ express”, “ability to work independently and cooperatively”, “comprehension”, “ability to identify problems”, “interest and motivation” are given a great importance.

【Special Category for International Students】

By oral examination, applicants will be evaluated their levels of “knowledge and skills”, “ability to think/judge/ express”, “ability to work independently and cooperatively”, “comprehension”, “ability to identify problems”, “interest and motivation”

The Graduate School of Science will comprehensively assess applicants on the basis of the application documents (such as research plan, transcript, etc).

▪ Principle Selection Policy (Evaluation elements and importance)

[Doctoral Course (Latter Period of Doctoral Program)]

Category of Entrance Examination	Evaluation Element	3 Key Elements of Academic Ability			Comprehension	Ability to identify problems	Interest and motivation	Cultural knowledge
		Knowledge and Skills	Ability to think, judge, and express	Learning Attitude (to take initiative, to cooperate with diverse people)				
General Category	Written examination	◎	◎		○			
	Oral examination※2	◎	◎	◎	◎	◎	◎	○
	Application Documents (Research Plan, Transcript, etc.)	Comprehensively evaluated						
Special category for working applicants	Written examination	◎	◎		○			
	The Graduate School of Science will assess applicants based on their master's thesis or equivalent (through an interview), knowledge on their specified field, foreign language skills, research plan after enrollment and other application documents submitted. For applicants under the Special Category for Working Adults, academic skills may be judged by their research achievements in practice (through an interview), rather than knowledge on their specified field or foreign language skills.	◎	◎	◎	○	◎	◎	
	Oral examination※2	◎	◎	◎	◎	◎	◎	○
	Application Documents (Research Plan, Transcript, etc.)	Comprehensively evaluated						
Special category for international applicants	Oral examination※1	◎	◎	◎	◎	◎	◎	○
	Application Documents (Research Plan, Transcript, etc.)	Comprehensively evaluated						

※1: Examination will be carried out by using Online Meeting System, etc.

※2: The Graduate School of Science will assess applicants based on their master's thesis or equivalent (through an interview), knowledge on their specified field, foreign language skills, research plan after enrollment and other application documents submitted.

(Note) ◎…Key element we will give great importance on evaluation / ○…Key element we will give importance on evaluation

General Category and Special Category for Working Adults

1. Admission Quota

Department	Admission Quota		Website's URL
	April, 2022	October 2022	
Mathematics	12		https://www2.sci.hokudai.ac.jp/dept/math/en
Condensed Matter Physics	8		https://phys.sci.hokudai.ac.jp/cond-mat/index_eng.html
Cosmosciences	A few students		https://www.ep.sci.hokudai.ac.jp/~cosmo/index-e.htm
Natural History Sciences	10		Earth and Planetary Dynamics / Earth and Planetary System Science / Seismology and Volcanology https://www.sci.hokudai.ac.jp/grp/epsdc/exam/ Biodiversity https://www.sci.hokudai.ac.jp/biodiversity_e/ Science Communication https://sc.sci.hokudai.ac.jp/
Total	Approximately 30		

[Important]

- ① For more details about each department, please contact the department concerned.
- ② Applicants to the Department of Natural History Sciences must choose from among the Divisions of 1) Earth and Planetary Science etc. (Earth and Planetary Dynamics/ Earth and Planetary System Science/ Seismology and Volcanology) 2) Biodiversity, or 3) Science Communication. Check the appropriate box on the application form.
- ③ The admission quota in the table above includes working adults and international students. Those who wish to enroll while continuing their employment may apply under the Special Category for Working Adults.

2. Eligibility

Applicants must fulfill one of the following criteria.

- (1) Received or are expected to receive a master's degree or a professional degree (refers to the professional degree stipulated in Article 5-2 of the Degree Regulations (Ordinance of the Ministry of Education, Science and Culture No.9 of 1953) in accordance with the provisions of Article 104 (3) of the School Education Act) prior to admission;
- (2) Received or are expected to receive a degree equivalent to a master's degree or a professional degree at a university outside Japan prior to admission;
- (3) Received or are expected to receive a degree equivalent to a master's degree or a professional degree by completing course subjects through a distance-learning course offered by a school of a foreign country while living in Japan prior to admission;
- (4) Received or are expected to receive a degree equivalent to a master's degree or a professional degree by completing a school education at an institution established in Japan that is recognized by the school education system of a foreign country as an equivalent of the graduate school of that country and is designated separately by the Ministry of Education, Culture, Sports, Science and Technology (MEXT);
- (5) Received or are expected to receive a degree equivalent to a master's degree by completing a course at the United Nations University which was established based on the United Nations General Assembly Resolution of December 11 of 1972, stipulated in Article 1(2) of the Act on Special Measures Concerning the Enforcement of the Agreement between the United Nations and Japan about the Headquarters of the United Nations University (Act No. 72 of 1976);
- (6) Are recognized as having academic aptitude equivalent or superior to those who hold a master's degree by completing a school education provided by a school of a foreign country, an educational institution designated

in (4) above, or the United Nations University, and by passing an examination or screening or equivalent specified in Article 16-2 of the Standards for the Establishment of Graduate Schools;

(7) Have been designated by MEXT (Ministry of Education Notification No. 118 of 1989), i.e.;

① Graduated from a university, engaged in research at a university or a research institute for two years or longer, and are recognized by the Graduate School of Science as having reached an academic level equivalent or superior to those who hold a master's degree, based on research results.

② Completed 16 years of school education outside Japan, or completed 16 years of school education of a foreign country through a distance-learning course offered by a school of that country while living in Japan, and subsequently engaged in research at a university or a research institute for two years or longer, and are recognized by the Graduate School of Science as having reached an academic level equivalent or superior to those who hold a master's degree, based on research results.

(8) Are recognized as having academic aptitude equivalent or superior to those who have a master's degree or a professional degree through the screening for entrance eligibility conducted by the Graduate School of Science and have reached the age of 24.

* Applicants must contact their prospective supervisor and obtain his/her acceptance in advance. The approval from the prospective supervisor does not confirm the success in the entrance examination. Also, applicants must check a supplementary description of "Documents Specified by Each Department (List of preferred laboratories or fields.)"

3. Pre-assessment of Qualification

Application Period: November 26 – November 30, 2021

Applicants who fall under (7) or (8) in "2. Eligibility" must go through a pre-assessment of qualification prior to the application for entrance examination. Please submit "5. Application Documents" during the period described above. To receive the result, please enclose a self-addressed envelope with an 84-yen stamp affixed.

Applicants must not pay the entrance examination fee at the time of the pre-assessment. They should pay the entrance examination fee in accordance with the notes below.

Applications must be received by post during the application period.

[Important]

*The results of the pre-assessment will be sent to applicants around December 9, 2021, by post. Once their qualifications have been approved, applicants must pay the examination fee in accordance with "7. Entrance Examination Fee," and submit the payment certificate by January 7, 2022. Application will not be accepted if the payment certificate is not received during the specified period.

*Students who will receive the Japanese Government (MEXT) scholarship, the State-Sponsored Scholarship Program of the China Scholarship Council, or the Hokkaido University President's Fellowship (including those who are expected to receive these scholarships) are not required to pay the examination fee.

4. Application Period

Application Period: January 4 – January 7, 2022

Applicants who fall under (1) through (6) in "2. Eligibility" must submit "5. Application Documents" together with the payment certificate (see "7. Entrance Examination Fee") during the application period. Applications must be received by post during the application period.

5. Application Documents

(1) General Category

* Applicants who fall under (7) or (8) in "2. Eligibility" must submit the following documents during the application period described in "3. Pre-assessment of Applicants' Qualifications."

* In the following table, "○" indicates documents that must be submitted by all applicants, while "△" indicates documents that must be submitted by those who meet the definition in the "Remarks" .

Documents		Applicants		Remarks
		(1)(2) (3)(4) (5)(6)	(7)(8)	
1	Application Form, Resume, Admission Ticket and Photo Card.	○	○	[Specified form] Applicants who have completed a school education outside Japan or a distance-learning course offered by a foreign educational institution must fill out Resume B .
2	Research Plan after enrollment	○	○	Use specified form.
3	Copy of the thesis for master's degree	△		① Applicable to a master's or professional degree holder. ② Applicants from the Master's Course in the Graduate School of Science, Hokkaido University, are not required to submit this document.
4	Summary of research made during the Master's Course (within two pages in A4-sized paper).	△		Applicable to those who received or are expected to receive a master's degree. Applicants to the Department of Mathematics should submit a <u>summary of study and research</u> instead of a summary of research.
5	List of research accomplishments and copy of principal research paper		○	In any format.
6	Certificate of Research		○	[In any format] Documents to prove the topic and period of your research issued by the head of university or research institute or a supervisor.
7	Official transcript issued by the graduate school or similar institution	○	○	① Applicants from the Master's Course in the Graduate School of Science, Hokkaido University are not required to submit this document. ② Applicants under (6), (7) or (8) in "2. Eligibility" are required to submit a transcript issued by the academic institution or school they graduated most recently.
8	Official certificate of graduation (or expected graduation issued by the graduate school or similar institution	○	○	① An Official Certificate must be issued by the Head of the graduate school or similar institution. (Degree information should be contained if you have already graduated.) ◎ Applicants who graduated or are expected to graduate from a graduate school or similar institution in China (except Hong Kong and Macao) must submit the following document along with an official certificate of graduation (or expected graduation). Applicants who; -graduated ... (a) Online Verification Report of Higher Education Qualification Certificate (教育部学历证书电子注册备案表) -are expected to graduate ... (a) Online Verification Report of Student Record (教育部学籍在线验证报告) Document (a) can be obtained from the China Credentials Verification (中国高等教育学历证书查询 http://www.chsi.com.cn/xlcx/bgys.jsp) Please make sure the web authentication should be valid at least 15 days at the time of submission. ② Applicants from the Graduate School of Science, Hokkaido University are not required to submit this document. ③ Applicants under (7) or (8) in "2. Eligibility" are required to submit the certificate issued by the last academic institution or school they graduated. ④ Applicants under (6) in "2. Eligibility" are required to submit a document equivalent to the Qualifying Examination.
9	Documents specified by each department	△	△	See "(3) Documents Specified by Each Department" below.

10	Self-addressed envelope to receive the admission ticket for entrance examination.	○	○	[Specified envelope] Write your name, mailing address and postal code on an envelope with a 430-yen stamp attached. If you need to change your address afterwards, notify the Graduate School Educational Affairs Section immediately.
11	Stickers to receive application results and to be used for communication purposes	○	○	[Specified sticker] Write your name, mailing address and postal code on each sticker. If you need to change your address afterwards, notify the Graduate School Educational Affairs Section immediately.
12	Recommendation letter from the president or a faculty member of the most recent academic institution	△	△	[A4-sized paper in any format] Applicants to the Department of Mathematics, Condensed Matter Physics, or CosmoSciences may submit this document (not mandatory).
13	Self-addressed envelope to receive the result of pre-assessment		○	Write your name, mailing address and postal code on a standard envelope with an 84-yen stamp attached.

(2) Special Category for Working Adults

* Applicants under (7) or (8) in “2. Eligibility” must submit the following documents during the application period for “3. Pre-assessment of Qualifications.”

* In the following table, “○” indicates documents that must be submitted by all applicants, while “△” indicates documents that must be submitted by those who meet the definition in the “Remarks”.

Documents		Applicants		Remarks
		(1) (2) (3) (4) (5) (6)	(7) (8)	
1	Application Form, Resume, Admission Ticket and Photo Card.	○	○	[Specified Form] Applicants who have completed a school education outside Japan or a distance-learning course offered by a foreign educational institution must fill out Resume B .
2	Certificate of employment issued by a person with authority over personnel administration in the applicant's workplace.	○	○	[In any format] Successful applicants will be required to submit a written consent on enrolling in the doctoral course while continuing their employment issued by the person who has authority over personnel management. All applicants are advised to obtain the consent in advance.
3	Research Plan after enrollment.	○	○	Use specified form.
4	List of research accomplishments and copy of principal research paper	○	○	In any format.
5	Certificate of research	○	○	[In any format] Documents to prove the topic and period of your research issued by the president of a university, head of a research institute or a supervisor.
6	Official transcript issued by the most recent graduate school or similar institution	○	○	① Applicants from the Master's Course in the Graduate School of Science, Hokkaido University are not required to submit this document. ② Applicants under (6), (7) or (8) in “2. Eligibility” are required to submit a transcript issued by the academic institution or school they graduated most recently.
7	Official certificate of graduation (or expected graduation) issued by the most recent graduate school or similar institution	○	○	① An Official Certificate must be issued by the Head of the graduate school or similar institution. (Degree information should be contained if you have already graduated.) ◎ Applicants who graduated or are expected to graduate from a graduate school or similar institution in China (except Hong Kong and Macao) must submit the following document along with an official certificate of graduation (or expected graduation).

				<p>Applicants who;</p> <p>-graduated ... (a) Online Verification Report of Higher Education Qualification Certificate (教育部学历证书电子注册备案表)</p> <p>-are expected to graduate ... (a) Online Verification Report of Student Record (教育部学籍在线验证报告)</p> <p>Document (a) can be obtained from the China Credentials Verification (中国高等教育学历证书查询 http://www.chsi.com.cn/xlcx/bgys.jsp)</p> <p>Please make sure the web authentication should be valid at least 15 days at the time of submission.</p> <p>② Applicants from the Master's Course in the Graduate School of Science, Hokkaido University are not required to submit this document.</p> <p>③ Applicants under (7) or (8) in "2. Eligibility" are required to submit the certificate issued by the last academic institution or school they graduated.</p> <p>④ Applicants under (6) in "2. Eligibility" are required to submit a document equivalent to the Qualifying Examination.</p>
8	Documents specified by each department	△	△	See "(3) Documents Specified by Each Department" below.
9	Self-addressed envelope to receive an admission ticket for entrance examination	○	○	[Specified envelope] Write your name, mailing address and postal code on the specified envelope with a 430-yen stamp attached. If you need to change your address afterwards, notify the Graduate School Educational Affairs Section immediately.
10	Stickers to receive application results and to be used for communication purposes	○	○	[Specified sticker] Write your name, mailing address and postal code on each sticker. If you need to change your address afterwards, notify the Graduate School Educational Affairs Section immediately.
11	Recommendation letter from a person with authority over personnel management in the workplace, or by a (prospective) supervisor at the university or research institute	△	△	[A4-sized paper in any format] Applicants to the Department of Mathematics, Condensed Matter Physics, or CosmoSciences may submit this document (not mandatory).
12	Self-addressed envelope to receive the result of pre-assessment		○	Write your name, mailing address and postal code on a standard envelope with an 84-yen stamp attached.

(3) Documents Specified by Each Department

Department	Documents to be submitted	Remarks
Mathematics	Reasons for application (specified form)	Provide the reasons for applying to this department.
Condensed Matter Physics	N/A	
CosmoSciences	List of preferred laboratories or fields (specified form)	Provide the name of one laboratory you wish to choose from the List of Supervisors and Research Fields.

Natural History Sciences	Earth and Planetary Dynamics	List of preferred laboratories or fields (specified form)	Provide the name(s) of supervisor(s) you wish to seek guidance from the List of Supervisors and Research Fields.
	Earth and Planetary System Science		
	Seismology and Volcanology		
	Biodiversity	List of preferred supervisors (specified form)	Provide the name(s) of supervisor(s) you wish to seek guidance from.
Science Communication	1. List of preferred laboratories or fields (specified form) 2. Reasons for application (specified form)		

6. Where to Submit

To: Graduate School Educational Affairs Section
 Science and Life Science Administration Department
 Hokkaido University
 Kita-10 Nishi-8, Kita-ku, Sapporo 060-0810, Japan

*You are requested to post the application documents. Please mark “Application Enclosed” in red on the envelope and send it by express registered mail.

7. Entrance Examination Fee: 30,000 yen

(1) Students who are expected to complete the Master’s Course offered by the graduate schools of Hokkaido University, or who will receive the Japanese Government (MEXT) scholarship*, the State-Sponsored Scholarship Program of the China Scholarship Council, or the Hokkaido University President’s Fellowship (including those who are expected to receive these scholarships) are not required to pay the examination fee.

* MEXT scholarship students recommended by Japanese Embassies/Consulates, authorities, or universities other than Hokkaido University are required to submit a copy of the letter proving that they will receive this scholarship.

(2) Remit the examination fee through a bank or a post office by using the payment slip for entrance examination fee which is enclosed in the application package and attach the payment certificate to the appropriate section on the application form.

(3) The examination fee is not refundable except for the following cases:

- The applicant has decided not to submit an application after examination fee was remitted, or the application was not accepted.
- The applicant paid the examination fee twice by mistake.

8. Screening Method

The Graduate School of Science will assess applicants based on their master’s thesis or equivalent (through an interview), knowledge on their specified field, foreign language skills, research plan after enrollment and other application documents submitted.

For applicants under the Special Category for Working Adults, academic skills may be judged by their research achievements in practice (through an interview), rather than knowledge on their specified field or foreign language skills.

For applicants to the Department of Mathematics and Department of Condensed Matter Physics, online examination will be conducted.

9. Examination Dates

February 9 – February 10, 2022

* The Graduate School of Science will send detailed information on the entrance examination, including the exam time and place, and oral examination by using Online Meeting System when sending the administration ticket.

10. Announcement of Results

The examinee's number of successful applicants will be posted on the website of the Graduate School of Science around 4:30 PM on February 17, 2022. All applicants are notified of their results individually.

11. Procedures for Enrollment and Payment of Fees

All successful applicants are notified of the registration procedure at the time of notification of results.

Enrollment Fee: 282,000 yen (estimated)

* Applicants who are expecting to complete a Master's Course in the graduate schools of Hokkaido University are not required to pay the enrollment fee.

Tuition Fee: 267,900 yen for the first semester [Total annual tuition fee = 535,800 yen] (estimated).

*If the tuition fee is revised during the period of your enrollment, the revised fee becomes effective immediately.

12. Important Notice

- (1) Make sure to bring your admission ticket on the day of examination and put it on your desk.
- (2) After submitting the application documents, applicants are not allowed to change their selection of department for any reason.
- (3) If you need special assistance in taking the examination due to physical difficulties, consult with the Graduate School Educational Affairs Section at the time of application.

13. Extending the Period of Registration

It is possible to extend the standard years of study at the Graduate School of Science. Read "Extending the Period of Registration" on page 10 and submit an application if you wish to take advantage of this system.

14. Other Information

The admission ticket for entrance examination will be sent around January 17, 2022 to all applicants whose application document is accepted.

◎ If you have any questions about the application procedure, please contact the following:

Graduate School Educational Affairs Section
Science and Life Science Administration Department
Hokkaido University
Kita-10 Nishi-8 Kita-ku, Sapporo 060-0810, Japan
E-mail: r-gakuin@sci.hokudai.ac.jp
Graduate School of Science, Hokkaido University
<https://www.sci.hokudai.ac.jp/graduateschool/en/>

Extending the Period of Registration

1. Aims

When students under special circumstances such as having a job, etc. (including child and nursing care) have asked for an extension to complete the program for a period exceeding the standard years of study (3 years) with a scheduled plan of study, such scheduled study (hereinafter referred to as “Extended Period of Registration”) may be approved after reviewing their application.

2. Intended Students

Students who fall under one of the criteria below and for that reason, wish to set the study period longer than the standard period to complete an academic (research) course:

- (1) Have a full-time job in a public office or company (excluding those who are exempt from job duty but receive a salary), or are self-employed;
- (2) Have a part-time job that has a significant influence on the full-time academic work;
- (3) Are taking care of children or other family members, which has a significant influence on the full-time academic work; or
- (4) Are visually impaired, hearing impaired, physically handicapped, etc., which are deemed to have a significant influence on the academic work for an extended period of time.

3. Attendance Period

The period approved for the Extended Period of Registration is up to 6 years for the doctor’s degree program, and a student can apply for extension by the year. Students who have been approved of Extended Period of Registration may not continue their study beyond 6 years.

Students may take a temporary leave of absence from school for up to 3 years, the same as the students under the standard period of study.

4. Application Procedure

(1) Application Period

As a general rule, application documents for Extended Period of Registration should be submitted at the time of application for entrance examination.

(2) Required Documents

- ① Application Form for Extended Period of Registration (Form 1).
- ② Research Plan Under Extended Period of Registration (Form 2).
- ③ Documents to prove that an applicant needs to apply for Extended Period of Registration

(3) Announcement of Results

The Graduate School of Science reviews each application individually and will notify the results to all the successful applicants of the entrance examination.

5. Reducing or Extending the Period of Extended Period of Registration

When regarded as necessary, the Graduate School of Science may approve of reducing or extending the Extended Period of Registration only once. The period of reducing the Extended Period of Registration may not exceed the period of adding one year to the standard period of study (3years).

6. Annual Tuition Fee

The tuition fee for students approved to study for an extended period will be calculated by multiplying the annual tuition fee by the number of years equivalent to the standard period of study (3 years), then dividing the resulting amount by the number of years approved for extended study. If the revision is made to the annual tuition fee or the changes to the Extended Period of Registration are approved, the fee will be calculated accordingly. However, the adjustment will not be made to the tuition fee which has already been paid.

Students who are waiting for results of application for Extended Period of Registration must not pay the tuition fee before they receive the official notification of results.

7. Other Information

For more details about Extended Period of Registration, please contact the Graduate School Educational Affairs Section, Science and Life Science Administration Department, Hokkaido University.