

Academic Year 2022

**Graduate School of Science
Hokkaido University**

Master's Course

(Former Period of Doctoral Program)

Summer Selection

**Application Guidelines for
Entrance Examination**

For enrollment October 2021 or April 2022

(Admission for General Category)

June 2021

Important Notice

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.

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.

June 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 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.

• 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 a transcript).

【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 a transcript).

• Principle Selection Policy (Evaluation elements and their importance)

【Master's Course (Former Period of Doctoral Program)】

Category of Entrance Examination	Evaluation Element	3 Key Academic Elements			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	Writing Examination	◎	◎		○			
	Oral Examination	◎	◎	◎	◎	◎	◎	○
	Application Documents	Comprehensively evaluated						
Special Category for International Students	Oral Examination etc. (※1)	◎	◎	◎	◎	◎	◎	○
	Application Documents	Comprehensively evaluated						

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

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

General Category

1. Admission Quota

Department	Admission Quota		Website
	October 2021	April 2022	
Mathematics	A few students	44	https://www2.sci.hokudai.ac.jp/dept/math/en
Condensed Matter Physics	A few students	24	https://phys.sci.hokudai.ac.jp/cond-mat/index_eng.html
Cosmosciences	A few students	20	https://www.ep.sci.hokudai.ac.jp/~cosmo/index-e.htm
Natural History Sciences	A few students	39	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	—	127	

Notes

- ① For more details about each department, please contact the department concerned.
- ② It is possible to apply to the Department of Condensed Matter Physics and the Department of Cosmosciences in the same year. In this case, write the names of both departments in the appropriate section on the application form.
- ③ Applicants to the Department of Natural History Sciences must choose from among the Divisions of 1) 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.
- ④ Some departments may conduct a fall selection and a winter selection. (The entrance examination for the fall selection is scheduled in mid-November, and for the winter selection, early February.)

2. Eligibility

Applicants must fulfill one of the following criteria:

- (1) Graduated or are expected to graduate from a university prior to admission;
- (2) Received or are expected to receive a bachelor's degree prior to admission in accordance with Article 104(7) of the School Education Act (Act No. 26 of 1947);
- (3) Completed or are expected to complete 16 years of school education outside Japan prior to admission;
- (4) Completed or are expected to complete 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 prior to admission;
- (5) Completed or are expected to complete education at an institution established in Japan that is recognized by the school education system of a foreign country as an equivalent to a university of that country (limited to individuals who are recognized as having completed 16 years of school education in that country) and that is designated by the Minister of Education, Culture, Sports, Science and Technology (MEXT) prior to admission;
- (6) Received or are expected to receive a degree equivalent to a bachelor's degree from a university or school outside Japan (limited to the university or school which has received evaluation from the person who is authorized by the government of that country or the relevant agencies regarding the overall performance of its education and research activities, or which has been separately designated by MEXT as equivalent to the aforementioned) by completing a program that requires three years or more of course work (including the case of completing a distance-learning course offered by a school of that country while living in Japan, and the case of completing a study at the institution recognized by the school education system of that country and designated by MEXT as referred to in (5));
- (7) Completed or are expected to complete a specialist training course at a vocational school (limited to a

- course with a period of four years or more and that satisfies the conditions set by the MEXT) that is designated separately by the MEXT after the date set by the MEXT;
- (8) Have been designated by the MEXT (Ministry of Education Notification No. 5, February 7 of 1953);
 - (9) Have attended a university for three years or more or completed 15 years of school education outside Japan, and are recognized by the Graduate School of Science as having earned the required number of credits with an excellent academic record; or
 - (10) Are recognized as having an academic aptitude equivalent or superior to university graduates through the screening for entrance eligibility conducted by the Graduate School of Science, and have reached the age of 22.

* Applicants can not apply for “I General Category” and “II Special Category for International Students” at the same time.

* 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 (Reason for application and List of preferred laboratories or fields.”)

* Applicants who wish to enroll in October 2021 must indicate so by checking the appropriate box on the application form.

3. Pre-Assessment of Qualification

Application Period: June 18 – June 22, 2021

Applicants who fall under (9) or (10) 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 shall pay the entrance examination fee in accordance with the notes below. (Application documents must be sent by mail and must be received by the deadline.)

Notes:

*The results of the pre-assessment will be sent to applicants around July 1, 2021 by mail. 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 July 20, 2021. 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: July 14 – July 20, 2021

Applicants who fall under (1) through (8) in “2. Eligibility” must submit “5. Application Documents” together with the payment certificate (see “7. Entrance Examination Fee”) during the application period. (Application documents must be sent by mail and must be received by the deadline.)

5. Application Documents

* Applicants who fall under (9) or (10) in "2. Eligibility" must submit the following documents during the application period described in "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)	(9)	(10)	
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 Official transcript issued by the last university or similar institution	○	○	○	②Applicants under (9) in "2. Eligibility" must submit a transcript issued by their current university.
3 Official Certificate of Graduation (or expected graduation) or Degree Conferral (or expected degree conferral) issued by the last university or similar institution	○	○	○	①An Official Certificate must be issued by the Head of the university or similar institution. (Degree information should be contained if you have already graduated.) ◎ Applicants who graduated or are expected to graduate from a university 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. ②Applicants under (2) in "2. Eligibility" must submit an Official Certificate of Degree Conferral (or expected degree conferral) issued by the National Institution for Academic Degrees and Quality Enhancement of Higher Education (NIAD-QE).
4 Documents certifying that the applicant has academic skills equal or superior to university graduates			○	[In any format] e.g., documents detailing international activities, work experience, language learning experience, research papers, patent publications, certificate of qualification, recommendation letter from faculty, etc.
5 Documents specified by each department	○	○	○	See "Documents Specified by Each Department" below.

6	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.
7	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.
8	Recommendation letter from the head of the undergraduate school or the university which an applicant graduated most recently (must be sealed up)	△	○	△	[A4-sized paper in any format] ① Applicants under (9) in “2. Eligibility” must submit this document. ② Applicants under (1)-(8) or (10) in “2. Eligibility” may submit this document only if applying to the Department of Mathematics, Condensed Matter Physics, or CosmoSciences (not mandatory).
9	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.

◎ Documents Specified by Each Department

Department		Documents to be submitted	Remarks
Mathematics		1. Reasons for application 2. Mathematics report and its outline (use specified form for the outline)	1. Provide the reasons for applying to this department. 2. Summarize the research field which you wish to pursue after enrollment and a “theorem” or “theory” in which you are particularly interested (must be 7-10 pages long in A4-sized paper). During the oral examination, an interviewer will ask questions based on this report. The outline of the report must also be provided in a specified form.
Condensed Matter Physics		1. List of preferred laboratories or fields (specified form)	Provide your first, second and third choices of laboratories from the List of Supervisors and Research Fields.
Cosmosciences		List of preferred laboratories or fields (specified form)	Provide your first, second and third choices of laboratories from the List of Supervisors and Research Fields.
Natural History Sciences	Earth and Planetary Dynamics	1. List of preferred laboratories or fields (specified form) 2. Statement of Purpose (specified form)	1. Provide your first and second choices of groups, laboratories or centers from the List of Supervisors and Research Fields. Leave the section blank if you do not have a second choice. 2. Applicants under (9) in “2. Eligibility” must submit a statement of purpose. Write about research experience, international activities, work experience, language acquisition, etc. in a specified form. Attach research papers, patent publications and certificates of qualification if necessary.
	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 in guidance from.
Science Communication		1. List of preferred laboratories or fields (specified form) 2. Reasons for application (specified form)	

*It is possible to apply to the Department of Condensed Matter Physics and the Department of Cosmo sciences in the same year. In this case, applicants must submit the “List of preferred laboratories or fields” for each department.

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

*Application documents must be sent by express registered mail. Please mark “Application for graduate student enclosed” in red on the front of the envelope.

7. Entrance Examination Fee: 30,000 yen

(1) 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) or who are enrolled in the Integrated Science Program (ISP) are not required to pay the examination fee.

* MEXT scholarship students recommended by 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 the entrance examination (oral and written), official transcript and other application documents submitted.

9. Examination Dates (oral and written)

August 19 (Thu) and 20 (Fri), 2021

Department		August 19 (Thu)		August 20 (Fri)	
		AM	PM	AM	PM
Mathematics		Oral examination (Online) (9:00-)		/	
Condensed Matter Physics		Specialized subjects (9:00 - 11:30)	Specialized subjects (13:00 - 15:30)	Oral examination (9:00-)	
Cosmosciences		Specialized subjects (9:00 - 11:30)	Specialized subjects (13:00 - 15:30)	English (16:00 – 17:30)	Oral examination (9:00-)
Natural History Sciences	Earth and Planetary Dynamics Earth and Planetary System Science Seismology and Volcanology	English (11:00 –12:00)	Specialized subjects (13:00 - 16:00)	Oral examination (9:00-)	

	Biodiversity	English (9:00–11:00)		Specialized subjects (13:00–16:00)		Oral examination (13:00–)
	Science Communication	English (9:30– 11:00)	Essays (11:10– 12:40)	Oral examination (14:00–)		

Notes

- ① English examination will be conducted as follows:
 - i) Those who apply to CosmoSciences are required to translate from English into Japanese and Japanese into English. Applicants are not allowed to bring a dictionary.
 - ii) Department of Natural History Sciences
 - Those who apply to “Earth and Planetary Dynamics, Earth and Planetary System Science, Seismology and Volcanology” are required to translate from English into Japanese and Japanese into English. Applicants are not allowed to bring a dictionary.
 - Those who apply to “Biodiversity” are required to take an English composition examination. Applicants are not allowed to bring a dictionary.
 - Those who apply to “Science Communication” are required to take an English comprehension examination. Applicants may bring English-Japanese dictionary (excluding electronic devices) and refer to it.
- ② Those who apply to Condensed Matter Physics may be examined English language proficiency during the oral examination.
- ③ Those who apply to both Condensed Matter Physics and CosmoSciences are required to take a written examination (specialized subject (physics) and English.)
- ④ Out of the applicants to the Department of CosmoSciences, those who apply to the Observational Astronomy Laboratory, Theoretical Astrophysics Laboratory, Theoretical Particle Physics Laboratory, Theoretical Nuclear Physics Laboratory, Information Media Science Laboratory, or Nuclear Reaction Data Science Laboratory must choose physics as a specialized subject. Applicants to the Astrophysical Chemistry Group, Planetary and Space Group, Phase Transition Dynamics Group, or Spacecraft Observation Group may choose two questions from among: physics; physical mathematics; cosmos and planets as specialized subjects in the afternoon exam on August 19, 2021.
- ⑤ Out of the applicants to the Department of Natural History Sciences, those who apply to the Division of: Earth and Planetary Dynamics; Earth and Planetary System Science; or Seismology and Volcanology are required to choose two subject areas from among five specialized subject areas, i.e., mathematics, physics (including the topic of earth and planetary physics), chemistry (including the topic of earth and planetary chemistry), earth science I (earth history, tectonics, and sedimentology), and earth science II (lithology, mineralogy, and volcanology).
- ⑥ For the Division of Biodiversity in the Department of Natural History Sciences, a list of keywords indicating the scope of questions covered in the specialized subject will be sent to the applicants along with the admission ticket for entrance examination. The list of keywords can also be obtained from the following website: http://www.sci.hokudai.ac.jp/biodiversity_e/
- ⑦ In the essay examination for the Division of Science Communication in the Department of Natural History Sciences, applicants must choose two topics out of eight listed on the following website: <http://sc.sci.hokudai.ac.jp/examination/thesis> (provided in Japanese)

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 Thursday, September 2, 2021. In addition, 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)

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

* 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 9, 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 Thursday, July 29, 2021 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 Website
<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 (2 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 4 years for the master'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 the period of adding 2 years to the Extended Period of Registration.

Students may take a temporary leave of absence from school for up to 2 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 (2 years).

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 (2 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.