### **Academic Year 2024**

# Graduate School of Science Hokkaido University Department of Mathematics Department of Condensed Matter Physics Department of Cosmosciences

# **Master's Course**

(Former Period of Doctoral Program)

#### **Fall Selection**

# **Application Guidelines for the Entrance Examination**

(Admission for General Category)

September 2023

## Important Notice

#### I. General Category

Applicants for the general category must submit an English proficiency certificate (either TOEFL or TOEIC original scoresheet). See page 4 for details. Check the examination schedule, etc. on your own, based on the period during which application forms are accepted.

#### **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 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) the 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 by the University (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 of (4), only name and address may be used to contact from Hokkaido University Frontier Foundation, Hokkaido University Athletic Union, Alumni Association of the School of Science, and Alumni Association Elm of Hokkaido University under safety measure.

September 2023 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 Sciences, 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]

Written and oral examinations will be conducted in accordance to each department and field of study. In the written examination, particular emphasis will be placed on the evaluation of "knowledge and skills" and "ability to think, judge, and express".

In the oral examination, particular emphasis will be placed on the evaluation of "knowledge and skills," "ability to think, judge, and express,", "ability to work independently and cooperatively", "comprehension", "ability to identify problems", and "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 Category for International Students]

In the oral examination, particular emphasis will be placed on the evaluation of "knowledge and skills," "ability to think, judge, and express,", "ability to work independently and cooperatively", "comprehension", "ability to identify problems", and "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 Their Importance) [Master's Course]

G			3 Key Academic Eleme		Ability to	1	Cultural			
Category of Entrance Examination	Evaluation Element	Knowledge and Skills	Ability to think, judge, and express	Leaning Attitude (to take initiative, to cooperate with diverse people)	Comprehension	identify problems	Interest and motivation	knowledge		
	Writing Examination	0	0		0					
General Category	Oral Examination	0	0	0	0	0	0	0		
	Application Documents	Comprehensively evaluated								
Special Category for	Oral Examination etc. (%1)	0	0	0	0	0	0	0		
International Students	Application Documents	Comprehensively evaluated								

<sup>💥1:</sup> Examination will be carried out by using Online Meeting System, etc.

(Note) ◎···Key element we will give great importance on evaluation / O···Key element we will give importance on evaluation

#### **General Category**

#### 1. Admission Quota

Donautmant	Admission Quota	Website	
Department	April 2024		
Mathematics	A few students	https://www2.sci.hokudai.ac.jp/dept/math/en	
Condensed Matter Physics	A few students	http://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	

Notes:

- (1) For more details about each department, please contact the department concerned.
- (2) The entrance examination for the winter selection is scheduled in 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; or
- (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 at the point of entrance to the Graduate School of Science.

<sup>\*</sup> 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.")

#### 3. Pre-Assessment of Qualification

#### Application Period: September 8 – September 11, 2023

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 received by the deadline.)

#### Notes:

- \*The results of the pre-assessment will be sent to applicants around September 20, 2023 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 September 28, 2023. 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: September 25 – September 28, 2023

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 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, " $\bigcirc$ " indicates documents that must be submitted by all applicants, while " $\triangle$ " indicates documents that must be submitted by those who meet the definition in the "Remarks".

Documents		Applicants				
		(1)(2) (3)(4) (5)(6) (7)(8)	(9)	(10)	Remarks	
1	Application Form, Resume, Admission Ticket and Photo Card	0	0	0	[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 <b>Resume B</b> .	
2	Official transcript issued by the last university or similar institution	0	0	0	Applicants 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.	0	0	0	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.)  ② 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 <a href="https://www.chsi.com.cn/xlcx/bgys.jsp">https://www.chsi.com.cn/xlcx/bgys.jsp</a> ) 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			0	[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	0	0	0	See "Documents Specified by Each Department" below.
6	Self-addressed envelope to receive an admission ticket for entrance examination	0	0	0	[Specified envelope] Write your name, mailing address and postal code on the specified envelope with a 400-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	0	0	0	[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)	Δ	0	Δ	[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 or Cosmosciences (not mandatory).
9	English proficiency certificate. (An original score sheet of TOEFL or TOEIC)	0	0	0	Score sheets that can be submitted are as follows.  The score sheets must be the originals. (See *[Important] below.)  (1) TOEIC Public Testing 【Listening & Reading Test only】 (must have been taken in or after July 2021)  *In the case of taking TOEIC (Public Testing) after April 2023, a printed Digital Official Score Certificate could be submitted instead of the original Official Score Certificate.  (2) TOEFL-iBT (Home Edition is accepted) (must have been taken in or after July 2021)  TOEFL-ITP, TOEIC-IP, and TOEIC-Bridge are not accepted. However, TOEFL-ITP [Paper based test only] (must have been taken in or July 2021) is accepted for the department of Mathematics.  Those who took this year's examination (summer selection held on August 9 and 10, 2023) and already submitted the score sheet may apply for an exemption (or you may submit a new score sheet). If you wish to apply for an exemption, check the appropriate box in the application document.
10	Self-addressed envelope to receive the result of pre-assessment		0	0	Write your name, mailing address and postal code on a standard envelope with an 84-yen stamp attached.

#### \* [Important] Submission of the English Proficiency Certificate (scoresheet)

Submission of the English proficiency scoresheet during the application period is final. No additional scoresheets will be accepted to replace the original submission.

A printed version of the proficiency test results, available online is acceptable for the application <u>if a hardcopy of the original scoresheet can be submitted in person or by postage by October 30, 2023.</u>

If a hardcopy of the original scoresheet is not submitted by October 30, 2023, the proficiency test results will be considered invalid and regarded as a "score of zero". In this case, the entrance examination fee will not be refunded.

#### O Documents Specified by Each Department

Department	Documents to be submitted	Remarks		
Mathematics	Reasons for application (specified form)      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  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. When filling in the form, be sure to contact the supervisor in charge of the laboratory of your choice in advance to obtain permission to accept you into the laboratory and to fill in the survey form.		
Cosmosciences	1. List of preferred laboratories or fields (specified form) 2. Cosmosciences report (any format in A4-sized paper)	1. Provide your first, second and third choices of laboratories from the List of Supervisors and Research Fields. When filling in the form, be sure to contact the supervisor in charge of the laboratory of your choice in advance to obtain permission to accept you into the laboratory and to fill in the survey form.  2. Summarize the research theme which interested you most about your thesis or study related to cosmosciences within two pages in A4-sized paper.		

#### 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 required to send your application documents by mail. Please mark "Application Enclosed" in red on the envelope and send it by express registered mail. Prepare an envelope by yourself, do not use the "Envelope for Admission Ticket" in the application guideline.

#### 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, the Hokkaido University President's Fellowship (including those who are expected to receive these scholarships), or students who are currently enrolled in the ISP program of School of Science 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 exam), official transcript and other application documents submitted.

#### 9. Examination Date and Venue (oral exams)

Date: October 31 · November 1, 2023

Venue: Graduate School of Science, Hokkaido University (Kita-10 Nishi-8 Kita-ku, Sapporo) \*Excluding online examination

Donoutmont	October 31	November 1	
Department	A.M. • P.M.	A.M. • P.M.	
Mathematics		Oral examination through online (9:00-)	
Condensed Matter Physics	Oral examination (9:00-)		
Cosmosciences	Oral examination (9:00-)		

<sup>\*</sup> Details of the exam including time and venue will be notified when sending the admission ticket.

#### 10. Announcement of Results

The successful examinee's number will be posted on the website of the Graduate School of Science around 4:30 PM on November 16, 2023. 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 8, 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 October 11, 2023 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://www2.sci.hokudai.ac.jp/gs/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.