

2018 Enrollment
Hokkaido University
Graduate School of Agriculture
Master's Course

Application Guidelines

Graduate School of Agriculture, Hokkaido University

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Application Guidelines

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How to Request a Copy of the Application Guidelines (Master's Course)

Send a self-addressed stamped envelope to the address below. (The envelope should be 24 cm × 33.2 cm and have ¥205 worth of postage stamps affixed to it or ¥485 if you want express delivery. Be sure to write your name, address, and postal code on the envelope.) In the lower left portion of the front of the outer envelope, write in red letters “Request for Master’s Course Application Guideline.”

Where to submit requests:

Student Affairs Section, Administrative Office of Agriculture and Global Food Resources, Hokkaido University
Kita 9 Nishi 9, Kita-ku, Sapporo 060-8589

2018 Enrollment Hokkaido University Graduate School of Agriculture Master's Course Application Guidelines

Educational Philosophy of the Graduate School of Agriculture

The Graduate School of Agriculture aims to produce students who have both basic and specialized knowledge of agriculture by providing advanced, interdisciplinary, and comprehensive education and research opportunities that incorporate both the humanities and the sciences as well as students who have a diverse range of knowledge and the good judgment needed to respond to the various issues facing all of humankind today, including stable food supplies, food safety, the preservation of the global environment, and biomass uses.

1. Number of Students to be Admitted

Division of Bio-systems Sustainability*	40	
Division of Agrobiolgy*	42	
Division of Applied Bioscience*	18	
Division of Environmental Resources*	42	Total*: 142

*Please note that the total includes the number of openings for the 2nd -term exam for the 2018 enrollment master's course in the Hokkaido University Graduate School of Agriculture.

2. Examinations (Specialized Subjects and Foreign Language)

- Foreign-language exams are given by individual divisions.

The Division of Agrobiolgy (except the Chair of Applied Molecular Biology) will assess the English-language skills of applicants based on their TOEIC scores from tests taken on or after September 1, 2015.

However, applicants may still be required to take a separate written foreign-language (English and Japanese) exam. In such cases, applicants will be notified when their admission tickets are mailed to them. Applicants attending overseas universities who will apply without taking the TOEIC exam for scheduling reasons may be asked to submit TOEIC score documentation after taking the written foreign-language (English and Japanese) exam.

(Applicants of the Chair of Applied Molecular Biology are required to take a written English and Japanese exams.)

- Select two of the specialized subjects listed below for the exam (specialized subject 1 and specialized subject 2).
 - 1) For specialized subject 1, select one of the specialized subjects in your preferred chair that corresponds to the academic advisor you intend to work with on your graduate school studies.
 - 2) For specialized subject 2, select a specialized subject other than what was chosen for specialized subject 1. (Applicants may select subjects from other divisions or subjects common to all divisions.)
Please note that Applied Microbiology and General Microbiology cannot be selected at the same time.
 - 3) List of Academic Advisor and exam subjects

Division	Chair	Exam Subject		
		Academic Advisor	Specialized Subject	Remarks
Division of Bio-systems Sustainability	Chair of Agricultural and Resource Economics	Professor	Yasutaka Yamamoto	Agricultural Policy
		Lecturer	Daisuke Sawauchi	
		Professor	Shunsuke Yanagimura	Farm Business Management
		Lecturer	Tomomi Komatsu	
		Professor	Takumi Kondo	Agricultural and Rural Development Economics
		Associate Professor	Hideo Aizaki	
		Professor	Akihiko Sakashita	

Division of Agrobiology		Associate Professor	Park Hong	Agricultural Marketing	1
		Professor	Hiroshi Sakazume		
		Lecturer	Yoshiharu Shimizuike		
		Specially Appt.Associate Professor	Shin Dongcheol	Agricultural Cooperative	
		Specially Appt.Assistant Professor	Gao Huichen		
	Chair of Safety and Function of Food	Associate Professor	Shigenobu Koseki	Agricultural and Food Process Engineering	
		Associate Professor	Junichi Wakamatsu	Meat Science	
		Professor	Takanori Nishimura	Muscle Biology	
		Assistant Professor	Takahiro Suzuki		
		Professor	Haruhide Mori	Biochemistry	
		Professor	Atsushi Yokota	General Microbiology	
		Lecturer	Satoru Fukiya		
	Chair of Biomass Conversion	Associate Professor	Keita Arakawa	Woody Plant Biology	
		Associate Professor	Yukiharu Fukushi	Bioorganic Chemistry	
		Lecturer	Kosaku Takahashi		
	Chair of Sustainable Agro-science	Professor	Shinichi Akimoto	Insect Evolutionary Ecology	
		Associate Professor	Toshihiro Watanabe	Plant Nutritional Ecology	
		Assistant Professor	Hayato Maruyama		
		Associate Professor	Hiroshi Tani	Remote Sensing	
		Associate Professor	Wang Xiufeng		
Specially Appointed Professor		Nobutomo Osanai	National Land Conservation	2	
Specially Appointed Assistant Professor		Shinichiro Hayashi			
Affiliate Professor		Yutaka Sato	Crop Breeding Science for Cold Regions	3	
Affiliate Professor		Tomoyoshi Hirota	Agricultural Meteorology and Agricultural Physics	3	
Affiliate Associate Professor		Norikuni Oka	Plant Nutritional Ecology or Soil Science	3	
Chair of Applied Molecular Biology	Professor	Hisanori Bando	Applied Molecular Entomology		
	Associate Professor	Shinichiro Asano			
	Assistant Professor	Masanao Sato			
	Associate Professor	Hitoshi Onouchi	Molecular Biology		
	Assistant Professor	Yui Yamashita			
	Professor	Atsuo Kimura	Molecular Enzymology		
	Lecturer	Masayuki Okuyama			
	Assistant Professor	Takayoshi Tagami			
	Professor	Jun Abe		Plant Genetic Diversity and Evolution	
	Lecturer	Tetsuya Yamada			
	Chair of Plant Breeding Science	Professor	Yuji Kishima	Plant Breeding	
		Assistant Professor	Yohei Koide	Genetic Engineering	
		Professor	Tomohiko Kubo		
Lecturer		Yasuyuki Onodera			
Assistant Professor		Kazuyoshi Kitazaki			
Professor		Chikara Masuta	Pathogen-Plant Interactions		
Lecturer		Tatsuji Hataya			

		Lecturer	Kenji Nakahara	Cell Biology and Manipulation	
		Associate Professor	Masumi Yamagishi		
		Associate Professor	Akira Kanazawa		
		Lecturer	Tsuyoshi Inukai		
		Affiliate Professor	Takeshi Matsumura	Molecular Farming	4
		Assistant Professor	Maria Stefanie Dwiyanti	Applied Plant Genomics	
	Chair of Botany and Agronomy	Lecturer	Junichi Kashiwagi	Crop Science	
		Assistant Professor	Taiken Nakashima		
		Associate Professor	Takashi Suzuki	Horticultural Science	
		Lecturer	Yutaka Jitsuyama		
		Assistant Professor	Hanako Shimura		
		Associate Professor	Kaijen Fujino	Crop Physiology	
		Assistant Professor	Daisuke Tsugama		
		Professor	Norio Kondo	Plant Pathology	
	Lecturer	Seishi Akino			
	Chair of Animal Production	Associate Professor	Manabu Kawahara	Animal Breeding and Reproduction	
		Assistant Professor	Hanako Bai		
		Professor	Koichiro Ueda	Animal Production System	
		Professor	Yasuo Kobayashi	Animal Nutrition	
Associate Professor		Satoshi Koike			
Assistant Professor		Yutaka Suzuki			
Division of Applied Bioscience	Chair of Food Science	Professor	Haruto Kumura	Applied Dairy Food Science	
		Associate Professor	Ken Kobayashi	Cell and Tissue Biology	
		Assistant Professor	Toru Hayakawa	Meat Science	
		Associate Professor	Shigeharu Fukunaga	Science of Animal By-Products	
		Specially Appointed Professor	Hiroshi Hara	Nutritional Biochemistry	
		Associate Professor	Satoshi Ishizuka		
		Lecturer	Tohru Hira		
		Professor	Jun Kawabata	Food Biochemistry	
		Associate Professor	Kei Sonoyama		
		Lecturer	Eisuke Kato		
	Chair of Biomolecular Chemistry	Assistant Professor	Wataru Saburi	Biochemistry	
		Associate Professor	Masaru Wada	General Microbiology	
		Associate Professor	Tatsuhiko Ezawa	Rhizosphere Control	
		Professor	Hideyuki Matsuura	Biorganic Chemistry	
		Professor	Yasuyuki Hashidoko	Molecular & Ecological Chemistry	
		Associate Professor	Makoto Hashimoto		
		Lecturer	Yasuko Sakihama		
		Lecturer	Kengo Shigetomi	Wood Chemistry and Chemical Biology	
		Affiliate Professor	Tomohiro Tamura	Applied Microbiology, General Microbiology, or Biochemistry	4
Affiliate Professor		Yoichi Kamagata			
Affiliate Professor		Isao Yumoto			
Affiliate Associate Professor	Naoki Morita				
Affiliate Associate Professor	Wataru Kitagawa				

		Affiliate Associate Professor	Yoshitomo Kikuchi		
		Affiliate Associate Professor	Soichiro Kato		
Division of Environmental Resources	Chair of Ecology and Systematics	Professor	Hitoshi Araki	Animal Ecology	
		Associate Professor	Eisuke Hasegawa		
		Professor	Masahiro Ohara	Systematic Entomology	
		Associate Professor	Kazunori Yoshizawa		
		Specially Appointed Professor	Hideki Takahashi	Plant Systematics	
		Assistant Professor	Takayuki Azuma		
		Assistant Professor	Koh Nakamura		
		Professor	Hiroko Fujita	Plant Ecology	
		Assistant Professor	Masaru Kato	Museum Materials Management	
	Chair of Regional Environment	Lecturer	Tadao Yamamoto	Land Improvement and Management	
		Professor	Ryoji Sameshima	Ecological and Environmental Physics	
		Professor	Takashi Hirano		
		Lecturer	Keiji Okada		
		Lecturer	Hiroyuki Yamada		
		Professor	Munehide Ishiguro	Soil Physics	
		Professor	Ryusuke Hatano	Soil Science	
		Associate Professor	Osamu Nakahara		
		Lecturer	Kanta Kuramochi		
	Chair of Science of Forest Resources	Specially Appointed Professor	Takayoshi Koike	Silviculture & Forest Ecology	
		Associate Professor	Masato Shibuya		
		Lecturer	Hideyuki Saito		
		Professor	Yasumitsu Uraki	Forest Chemistry	
		Lecturer	Keiichi Koda		
		Associate Professor	Yutaka Tamai	Forest Resource Biology	
		Lecturer	Toshizumi Miyamoto		
		Professor	Akio Koizumi	Timber Engineering	
		Lecturer	Kei Sawata		
		Professor	Yuzou Sano	Woody Plant Biology	
		Assistant Professor	Yusuke Yamagishi		
	Chair of Integrated Forest-Landscape Management	Professor	Futoshi Nakamura	Forest Ecosystem Management	
		Associate Professor	Junko Morimoto		
		Professor	Takashi Yamada	Earth Surface Processes and Land Management	
Associate Professor		Mio Kasai			
Assistant Professor		Shin'ya Katsura			
Professor		Hiroaki Kakizawa	Forest Policy		
Associate Professor		Yasushi Shoji			
Professor		Tetsuya Kondo	Ornamental Horticulture		
Associate Professor		Tetsuya Aikoh			
Lecturer		Hajime Matsushima			
Professor		Tetsuya Kondo	Landscape Architecture		
Associate Professor		Tetsuya Aikoh			
Lecturer	Hajime Matsushima				
Chair of	Professor	Noboru Noguchi	Field Informatics		

	Bioproduction Engineering	Associate Professor	Hiroshi Okamoto		
		Professor	Yoichi Shibata	Crop Production Engineering	
		Professor	Kazunori Iwabuchi	Agricultural Bio-system Engineering	
		Associate Professor	Naoto Shimizu		
Subjects Shared by All Divisions (only for specialized subject 2)		Organic Chemistry			

¹ Endowed laboratory by The Norinchukin Bank

² Endowed laboratory by STC (Sabo & Landslide Technical Center)

³ Cooperative laboratory with the National Agricultural Research Center for Hokkaido Region, National Agriculture and Food Research Organization

⁴ Cooperative laboratory with Hokkaido Center, National Institute of Advanced Industrial Science and Technology (AIST)

Note: The academic advisors shown in the table are subject to change after the enrollment period.

◎The academic advisors shaded in the table do not recruit any new students this time but the subjects can be selected as the specialized subject 2.

3. Evaluation of Applicants

Admission decisions will be made based on an assessment of the applicant's written and oral exams and a review of his/her transcript submitted by the dean of the applicant's previous university or other educational institution. The Division of Agrobiolgy (except for the Chair of Applied Molecular Biology) will use the applicant's TOEIC scores in place of the written English exam. For applicants who are required to take the English and Japanese exams, these scores will be considered comprehensively with the applicant's exam results.

4. Application Qualifications

- (1) Individuals who have graduated or expect to graduate from a university in March 2018
- (2) Individuals who have been awarded or expect to be awarded a degree pursuant to Article 104, Clause 4, of the School Education Act
- (3) Individuals who have completed 16 years of school education in foreign countries
- (4) Individuals who have completed 16 years of education in a correspondence course subjects provided by foreign educational systems in Japan
- (5) Individuals who have completed their education at educational institutions in Japan recognized as an equivalent of a university by foreign countries (limited to individuals who have completed 16 years of education by foreign countries) and designated by the Minister of Education, Culture, Sports, Science and Technology
- (6) Individuals who have received a degree equivalent to a bachelor's degree from a university or a school in a foreign country (either which has been evaluated by an authority certified by the government of the country concerned or an authority concerned in regard to the overall performance of its education and research activities, or which has been separately designated by the Minister of Education, Sports, Science and Technology as an educational establishment equivalent to the above) upon completion of a program or a course of study requiring 3 or more years (including completion of a correspondence course of a foreign institute taken in Japan, and completion of a course of study designated as per (5) at a foreign educational establishment within the public education system of the country concerned)
- (7) Individuals who have completed a specialized course at a specialized training college on or after the date determined by the Minister of education, Culture, Sports, Science and Technology (The course is required to be designated by the Minister, and the course term needs to be four years or more [Also, the course has to meet other standards established by the Minister.]
- (8) Individuals designated by the Minister of Education, Culture, Sports, Science and Technology (1953 Notice

No. 5, Ministry of Education, Science and Culture)

- (9) Individuals who have attended a university for three years or more or individuals who apply to one of the following:
- Those who have completed 15 years of school education in foreign countries
 - Those who have completed 15 years of education in a correspondence course subjects provided by foreign educational systems in Japan
 - Those who have completed a foreign university's coursework at an educational institution in Japan that is positioned within the school education system of that foreign country as an educational body with a university course (The completion of the coursework needs to be considered equivalent to the completion of 15 years of school education in that foreign country. In addition, the educational institution is required to be designated by Minister of Education, Culture, Sports, Science and Technology.)

Furthermore, all individuals who apply to this qualification need to be deemed by this graduate school to have achieved excellent grades in the prescribed subjects

- (10) Individuals who are recognized by the graduate school as possessing the equivalent or greater academic skill as that of a university graduate based on an individual admission qualification screening and who will be 22 years of age as of March 31, 2018*

*This qualification applies to those who do not have the qualifications of a university graduate, such as graduates of a national college of technology, junior college, specialized training college, or other types of schools as well as graduates of Japanese branch schools of foreign universities or foreign schools

Note: Individuals applying based on qualification (9) or (10) are required to undergo a preliminary review of application qualifications, so be sure to submit the following documents between June 20 (Tue) and June 26 (Mon), 2017.

- ⇒ Individuals Applying Based on Qualification (9): Application form for the preliminary review of application qualifications, transcript, and statement of purpose
- ⇒ Individuals Applying Based on Qualification (10): Application form for the preliminary review of application qualifications, certificate verifying your research history, transcript, and statement of purpose
- The application form for the preliminary review of application qualifications, certificate verifying your research history, and statement of purpose are prescribed forms and must be requested from the graduate school.

5. Application Materials

<input type="checkbox"/> Application form	Use the prescribed form. Affix a photo of yourself (taken within 3 months of application, 4 cm high × 3 cm wide, upper body, facing front, no hats) to the appropriate spot on each form.
<input type="checkbox"/> Admission ticket	
<input type="checkbox"/> Photograph ticket	

□	<p>Examination fee: ¥30,000</p> <p>Note: Government-funded international students, China Scholarship Council (CSC) supported students and Hokkaido University President's Fellowship international students are exempt from this fee.</p>	<p>(a) Pay the examination fee at a post office or bank using the attached payment slip and then affix the validated portion to the designated section of the sticking form.</p> <p>(b) Upon payment of examination fee, the post office or bank will validate the payment slip. Be sure this portion is stamped with the payment date. Applications with receipts that are not date-stamped will not be processed.</p> <p>(c) Examination fees cannot be paid in cash or by regular money order, so be sure to complete the bank transfer procedure at a post office or bank. You may not make your payment at an ATM.</p> <p>(d) Once application materials have been accepted, the examination fee will not be refunded for any reason except those listed below.</p> <p>Situations Warranting a Refund of the Examination Fee.</p> <p>A. If an individual paid the examination fee but did not apply for admission (did not submit an application or submitted an application that was not accepted)</p> <p>B. If the examination fee was accidentally paid twice</p> <p>C. If a person who is exempt from the fee paid the fee</p>
□	Transcript	Issued by the dean of your university, etc.
□	Certificate of graduation (expected graduation)	Issued by the dean of your university, etc.
□	Certificate of degree conferment (expected conferment)	Must be submitted by individuals applying based on qualification (2)
□	TOEIC score sheet (Applicants to the Division of Agrobiography (except the Chair of Applied Molecular Biology) only)	<p>Submit a copy of the official score sheet.</p> <p>If the score sheet is not available at the time of application, submit a copy of the examination admission card and take the written foreign-language (English) exam.</p> <p>However, in such case, submit a copy of the official score sheet by July 27 (Thu), 2017.</p>
□	Elective exam subject form	Fill out and submit the prescribed form provided.
□	Envelope in which your admission ticket is to be mailed	Write your name, address, and postal code on the envelope provided, affix ¥362 worth of postage stamps to it, and submit it. Please do not put a line through the honorific ending 様 (<i>sama</i>) already printed.
□	Contact information stickers	Fill out and submit the prescribed form provided.

- Notes: 1. Individuals applying based on qualification (9) or (10) will receive separate instructions about application materials when they receive the results of their preliminary review.
2. International students applying based on qualifications (3) through (6) will receive separate instructions.
3. Special accommodations need to be made to enable physically handicapped applicants to take the entrance examination and attend university classes. Thus, physically handicapped applicants should contact the Student Affairs Section, Administrative Office of Agriculture and Global Food Resources.

6. Application Period, etc.

- (1) Period: July 10 (Mon) through 14 (Fri), 2017
Hours: 9 : 00 to 17 : 00

If mailing your application, mark the outside of the envelope "Graduate School Admission Application" in red ink and send it by simplified registered mail so that it arrives at the university during the application period.

- (2) Place: Student Affairs Section, Administrative Office of Agriculture and Global Food Resources, Hokkaido University

7. Examination Dates and Place

Date	Time	Exam Category		Place
August 17 (Thu)	10:40 to 12:00	Foreign language	Conducted by division (In the Division of Agrobiolgy (except the Chair of Applied Molecular Biology), only those applicants who have been specifically notified and those attending overseas universities who are unable to take the TOEIC exam for scheduling reasons will have to take the written foreign-language [English and Japanese] exam.)	Graduate School of Agriculture, Hokkaido University Kita 9 Nishi 9, Kita-ku, Sapporo
	13:00 to 15:30	Specialized subjects		
August 18(Fri)	<ul style="list-style-type: none"> •13:00 •15:00 (only for applicants to the Division of Bio-systems Sustainability) 	Oral interview		

8. Announcement of Exam Results

Results will be posted in the front entrance hall of the Graduate School of Agriculture at 16:00 (subject to change) on September 1 (Fri), 2017. At the same time, results will be mailed to applicants individually. Information about whether an applicant has passed or failed the exam will not be provided over the phone.

9. Enrollment Fee and Tuition

- (1) Enrollment fee: ¥282,000
 (2) First-semester tuition: ¥267,900 (annual total: ¥535,800)

Note: The above amounts are estimates. If these figures are revised at the time of admission or during enrollment, the new amount will apply as of the time of revision.

10. Notice of Application Form

For the “Academic Background and Work History” section of the application form, be sure to list information for all time periods since graduating from high school. Do not leave any periods of time unaccounted for. If an applicant has been accepted but is found to have provided false or incomplete information, that applicant’s enrollment may be canceled.

11. Privacy Policy

Names, addresses, and other personal information provided to the university on application documents will be used solely for enrollee selection, the announcement of exam results, and admission procedures. The personal information of those who are accepted for admission shall also be used for administrative purposes after enrollment (student registration, academic counseling, etc.), student support services (health management, scholarship applications, etc.), and administrative tasks related to tuition, etc.

Only the names and addresses of applicants will be used to facilitate communications from the Hokkaido University Frontier Foundation and an organizations associated with the university: the Hokkaido University Athletic Union. The information will not be used for any purpose other than those mentioned above.

Notice: Graduate School of Agriculture is planning to restructure the faculties in 2019 academic year. The detailed information will be uploaded on a website once finalized.

May 2017

Graduate School of Agriculture, Hokkaido University
 Kita 9 Nishi 9, Kita-ku, Sapporo 060-8589
 Tel: 011-706-4041/2422
 E-mail: kyomu@agr.hokudai.ac.jp

Release of Examination Results

In response to student requests, the Graduate School of Agriculture will release results attained by students who fail the examination for 2018 Master's Course as described below.

Release method	In writing based on postal requests
Release details	Examination results <ul style="list-style-type: none"> • Overall points total • Points awarded in each subject • Results of interview examination
Individuals eligible to make requests	Examinees (Students failing to take any of the examination subjects may not request the release of results).
Identity confirmation	Based on examination admission tickets
Request method	By post (to include a Kaku-2 size (24 x 33.2 cm) self-addressed return envelope and the student's examination admission ticket) *The return envelope must bear the student's name, address, postal code and a 550-yen stamp (which also covers the registration fee). **"Request for Master's Course examination results" should be written in red on the front bottom left of the envelope.
Request period	October 2 (Mon) – October 13 (Fri), 2017 (postmark effective)
Address for requests	Student Affairs Sections, Administrative Office of Agriculture and Global Food Resources, 3 Hokkaido University Kita 9 Nishi 9, Kita-ku, Sapporo, 060-8589, Japan

Long-Term Study System

1. Purpose of the Long-Term Study System

The long-term study system is available to students who would not be able to complete the program within the standard course term (two years for a master's course and three years for a doctoral course) due to full-time employment or other circumstances (including responsibilities related to the care of elderly or disabled family members or the raising of children) and therefore want a longer period of time to conduct their studies systematically. Students must file an application and may be approved for a systematically planned course of study (hereinafter referred to as "long-term study") after an individual review.

2. Eligibility for the Long-Term Study System

Individuals applying for the long-term study system must qualify as one of those listed below, be unable to make a commitment to full-time studies as a consequence of the circumstances described, and would therefore like to extend in advance the number of years over which they will conduct their studies (research).

- (1) Individuals who are engaged in full-time employment, such as those currently employed by government agencies or companies (excluding those who will continue to receive salaries while being relieved of their work duties), and self-employed individuals
- (2) Individuals who are engaged in temporary or part-time employment that adversely affects their studies
- (3) Individuals whose responsibilities, such as raising children or caring for other family members, adversely affect their studies to the same degree as the responsibilities listed in item (2) above
- (4) Individuals who have disabilities such as visual, hearing and orthopedic impairments, etc. and such disabilities are recognized as having a significant impact on their study at the Graduate Schools over a long period of time.

3. Long-Term Study Period

The allowable length of period under the long-term study system is up to four years for a master's course and up to six years for a doctoral course. Study periods for long-term study applicants are approved in one-year increments.

The maximum length of enrollment for a student who has been approved for long-term study is up to an additional two years beyond the approved long-term study period in the master's course and six years in the doctoral course, the same maximum length of time as students under the standard term of study.

The period of time off that the Graduate School of Agriculture will allow is the same for students under either the standard term of study or long-term study program, i.e., two years for master's students and three years for doctoral students.

4. Application Procedures for the Long-Term Study System

(1) Application Deadline

Those wishing to apply for the long-term study system should apply at the time they submit their admission applications. Application forms for the long-term study system are available at the Students Affairs Section, Administrative Office of Agriculture and Global Food Resources

(2) Submission of Documents

Submit the following documents to the Students Affairs Section, Administrative Office of Agriculture and Global Food Resources:

- (a) Application for long-term study (form 1)
- (b) Long-term study plan (form 2)
- (c) Materials verifying your reasons for needing long-term study approval

(3) Notification of Review Results

The dean of the graduate school will notify applicants of the results of their reviews.

5. Contraction or Extension of the Long-Term Study Period

If deemed necessary by the Graduate School of Agriculture, approval may be granted for a contraction or extension of the long-term study period once, and only once, during the student's period of enrollment.

For more information, contact the Students Affairs Section, Administrative Office of Agriculture and Global Food Resources.

6. Tuition Adaptations

The tuition of students who have been approved for the long-term study system shall be calculated in annual amounts by dividing the total tuition for the standard term of study (master's course: annual tuition \times 2 years; doctoral course: annual tuition \times 3 years) by the number of years for which the long-term study has been approved. In cases where the tuition amount is revised or a change to the long-term study period is approved, tuition will be recalculated at that time. However, any tuition already paid will not be adjusted retroactively.

Be sure not to pay the tuition for your current term of study until you are notified of whether your application for the long-term study system or a change thereof has been approved.

Educational Philosophy and Specialized Curriculum of Each Division and Chair

1. Division of Bio-systems Sustainability

This division covers food safety, production environments and living environments, biomass use, and the symbiosis between living organisms. Specifically, topics will include the social scientific analysis of the most essential food for survival and environments used as the production bases of such food; the pursuit of functionality for ensuring the safety of food and food products and building a healthy society; the environment-friendly use of biomass production, including food; and ways to achieve a balance between humans and the earth, humans and other living beings, and humans and other humans to achieve a sustainable existence.

- (1) **Chair of Agricultural and Resource Economics:** This chair covers socioeconomic problems related to food, resources, and environments that affect the social infrastructure for human survival. The chair fosters an understanding of food system development and food safety; the construction of sustainable agricultural and fisheries production systems; the formation of a recycling-oriented society that takes environmental problems into consideration and building a partnership in that society; the formation of landscapes that can accommodate many agricultural functions and the tourism development of farming villages; and global population and food problems.
- (2) **Chair of Safety and Function of Food:** This chair covers food safety; the establishment of safe food storage methods; the search for safe food product ingredients and the development of functional food that uses enzyme reactions, etc.; the search for microorganisms that have new functions, that live in the gastrointestinal tracts of animals and humans; and so forth.
- (3) **Chair of Biomass Conversion:** This chair analyzes the basis of the living environments from the perspectives of physics and chemistry to mitigate the increase in CO₂ in the air due to the consumption of fossil fuels and to reduce associated global warming. The chair also covers the development of new resource plants, environmental adaptation mechanisms of resource plants, the process control of biomass-based products and the conversion to energy using physical and biochemical methods, and the provision of added value to biomass resources through chemical conversion.
- (4) **Chair of Sustainable Agro-science:** This chair identifies the mechanisms of mutual interaction between living organisms—including animals, plants, and microorganisms—and the symbiotic relationships between them and integrates those relationships into systems that have allowed for the achievement in recent years of innovative technological developments in stable, safe, and environmentally focused primary production. To this end, students learn about the predation chain and symbiotic relationships between living beings as well as the principles at work therein by analyzing the patterns of behavior of animals. They analyze the rhizosphere environments of plants from the perspectives of biology, microbiology, and chemistry and develop the skills to comprehensively understand complex systems and analyze, restore, and preserve the relationships between production systems and their peripheral environments.

2. Division of Agrobiology

This division covers basic and applied research on food development and production. Specifically, it teaches students about the development and use of crops as well as plant and animal resources. It also teaches them to develop technologies that enable sustainable production. It covers the prevention of pests and weeds using environmentally sound means; the preservation and functional analysis of genetic resources; the analysis of the gene expression mechanisms and functions of proteins in animals and plants; and animal nutrition and production systems, from the molecular level to actual production.

- (1) **Chair of Applied Molecular Biology:** Living organisms are living systems, the characteristic of which is that they can self-replicate. Various types of living organisms engage in self-replication and metabolism, while adapting to their environments. Students analyze complex gene expression mechanisms that play important roles in the maintenance of these living systems and apply their findings to the context of crop production.
- (2) **Chair of Plant Breeding Science:** Using methods that range from basic biology to molecular and cellular biology, students will implement the development of materials ranging from advanced plants to viruses while analyzing their functions and comprehensively breed new plant varieties that aim for the genetic control of environmentally sound living organisms.
- (3) **Chair of Botany and Agronomy:** Students will analyze the production functions of plants, particularly those used in food and horticultural crops, under diverse environmental conditions using techniques from the fields of physiology, pathology, and ecology. They will study the development of sustainable food production premised on the efficient use of resources and environmental preservation.
- (4) **Chair of Animal Production:** Students will study principles that are common to livestock production systems, whose foundation is the soil, and will study livestock production comprehensively from the molecular level to the individual animal and herd level, including the symbiotic relationship between livestock and production environment factors.

3. Division of Applied Bioscience

In this division, students gain a basic understanding of biofunctions and learn about the applied development of that knowledge. Specifically, using recently developed techniques in the fields of bioscience and biotechnology, students learn about macro-level identification and systems involved in the use of biological functions and bio-resources from the micro-level viewpoint, such as molecules.

- (1) **Chair of Food Science:** Students will study the diversity and functionality of animals, plants and microorganisms as food sources and their effective use. More specifically, students will take a comprehensive look at animals, plants and microorganisms as food sources and gain a comprehensive understanding of their nutritional physiology and biological regulatory functions that occur when food is in their digestive tracts, when it moves from the digestive tract into the body, and while it is in the body. In addition, potential of their materials for biological modulation on the cutaneous appendages is to be evaluated. They will also learn about the reuse of the inedible portions of food resource biomass in products that are used in everyday life.
- (2) **Chair of Biomolecular Chemistry:** Students will study microorganisms, plants, and animal cells and use methods from biochemistry, microbiology, protein engineering, genetic engineering, and organic chemistry to discover their functions and complex mutual interactions. Using this knowledge, students will explore the control of biological functions, discover new functions, and seek applications in bioproduction, useful substance production through bioprocesses, environmental control, and substances and materials with new functions.

4. Division of Environmental Resources

This division offers basic and applied education and research for achieving a balance between the environment and biological production. Specifically, it covers the understanding of the diversity, use, and management of biological resources; the management and control of environmental resources, primarily air, soil, and water; the understanding of the physiology and ecology of living organisms in forests, the sustainable use of them, and technological development for such use; the management, preservation, planning, multipurpose use, and ecosystem restoration of forests and green spaces; and environmentally sound food production and substance recycling systems.

- (1) **Chair of Ecology and Systematics:** Students gain an understanding of the diversity of living organisms through their patterns (ecology and taxonomy) and development (evolution). From these perspectives, the chair will explain the conditions of living beings in natural outdoor environments and in such man-made environments as farms and cities. Also, it will cover the preservation and management of species and ecosystems in danger of extinction.
- (2) **Chair of Regional Environment:** Students study the preservation and advanced use of the basic elements of the natural environment, that is, soil, water, and air; the substance recycling and energy flow between elements; the mutual interactions between elements, including living beings; and the efficient acquisition and analysis of comprehensive information on the natural environment. Through these studies, students will develop capabilities so that they will contribute to the creation of high-quality local environmental foundations and the formation of sustainable local communities.
- (3) **Chair of Science of Forest Resources:** Students examine the various phenomena of forests and the physiological phenomena specific to timber using theories and techniques from related fields, such as ecology, physiology, genetics, anatomy, molecular biology, structural mechanics, and biochemistry. They will apply this knowledge to the preservation and sustainable use of forest resources, striving to develop new effective uses and advanced processing technologies for timber resources and exploring and developing uses for currently unused forest resources, such as fungi.
- (4) **Chair of Integrated Forest-Landscape Management:** Students study the functions of forests and green spaces, which are the greatest natural inland resources, using methods from the natural and social sciences and learn about the development of new methods for multipurpose management, preservation, and planning. They will also learn about natural disaster mitigation measures, groundwater environment preservation, nature revitalization, and ecosystem restoration technologies in the watershed zones that surround forests and green areas.
- (5) **Chair of Bioproduction Engineering:** Students study food, from food production to use, mainly from physiological perspectives. With the goal of building sustainable systems of agricultural production and use that to address issues related to the environment, people, and society, students study and work to develop new technologies related to the means of food production, processing and storage methods for agricultural products, and the use and disposal methods of organic waste from the perspectives of the environment, energy, human labor, food safety, sustainable food supplies, substance recycling, and so forth.

List of Academic Advisors in the Graduate School of Agriculture

Division of Bio-systems Sustainability

Chair	Academic Advisor in Charge (Field of Specialization [Name of Unit])
Chair of Agricultural and Resource Economics	<p>Professor: Yasutaka Yamamoto (Agricultural and Environmental Policy) Shunsuke Yanagimura (Farm Business Management) Akihiko Sakashita (Regional Alliances Economics Agricultural Organizations) Takumi Kondo (Agricultural Development) Hiroshi Sakazume (Food and Agricultural Marketing)</p> <p>Associate Professor: Hideo Aizaki (Agricultural Development) Park Hong (Regional Alliances Economics Agricultural Organizations)</p> <p>Specially Appointed Associate Professor: Shin Dongcheol⁴ (Cooperative's Raison D'être)</p> <p>Lecturer: Daisuke Sawauchi (Agricultural and Environmental Policy) Yoshiharu Shimizuike (Food and Agricultural Marketing) Tomomi Komatsu (Farm Business Management)</p> <p>Specially Appointed Assistant Professor: Gao Huichen⁴ (Cooperative's Raison D'être)</p>
Chair of Safety and Function of Food	<p>Professor: Takanori Nishimura (Muscle Cell Molecular Science) Haruhide Mori (Chemistry of Functional Foods) Atsushi Yokota (Gastrointestinal Microbiology)</p> <p>Associate Professor: Shigenobu Koseki (Comprehensive Technical Management for Foods) Junichi Wakamatsu¹ (Meat Science)</p> <p>Lecturer: Satoru Fukiya (Gastrointestinal Microbiology)</p> <p>Assistant Professor: Takahiro Suzuki (Muscle Cell Molecular Science)</p>
Chair of Biomass Conversion	<p>Associate Professor: Keita Arakawa (Plant Resource Invention) Yukiharu Fukushi (Chemical Biology)</p> <p>Lecturer: Kosaku Takahashi (Chemical Biology)</p>
Chair of Sustainable Agro-science	<p>Professor: Shinichi Akimoto (Insect Evolutionary Ecology)</p> <p>Specially Appointed Professor: Nobutomo Osanai⁴ (National Land Conservation)</p> <p>Affiliate Professor: Tomoyoshi Hirota² (Regional Agricultural Bioscience) Yutaka Sato² (Regional Agricultural Bioscience)</p>

	<p>Associate Professor: Hiroshi Tani (Bio-environmental Informatics) Wang Xiufeng (Bio-environmental Informatics) Toshihiro Watanabe (Plant Nutritional Ecology)</p> <p>Affiliate Associate Professor: Norikuni Oka² (Regional Agricultural Bioscience)</p> <p>Assistant Professor: Hayato Maruyama (Plant Nutritional Ecology)</p> <p>Specially Appt. Assistant Professor: Shinichiro Hayashi⁴ (National Land Conservation)</p>
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Division of Agrobiolology

Chair	Academic Advisor in Charge (Field of Specialization [Name of Unit])
Chair of Applied Molecular Biology	<p>Professor: Hisanori Bando (Applied Molecular Entomology) Atsuo Kimura (Molecular Enzymology)</p> <p>Associate Professor: Shinichiro Asano (Applied Molecular Entomology) Hitoshi Onouchi (Molecular Biology)</p> <p>Lecturer: Masayuki Okuyama (Molecular Enzymology)</p> <p>Assistant Professor: Masanao Sato (Applied Molecular Entomology) Takayoshi Tagami (Molecular Enzymology) Yui Yamashita (Molecular Biology)</p>
Chair of Plant Breeding Science	<p>Professor: Jun Abe (Plant Genetics and Evolution) Yuji Kishima (Plant Breeding) Chikara Masuta (Pathogen-Plant Interactions) Tomohiko Kubo (Genetic Engineering)</p> <p>Affiliate Professor: Takeshi Matsumura² (Molecular Farming)</p> <p>Associate Professor: Masumi Yamagishi (Cell Biology and Manipulation) Akira Kanazawa (Cell Biology and Manipulation)</p> <p>Lecturer: Tatsuji Hataya (Pathogen-Plant Interactions) Tsuyoshi Inukai (Cell Biology and Manipulation) Tetsuya Yamada (Plant Genetics and Evolution) Yasuyuki Onodera (Genetic Engineering) Kenji Nakahara (Pathogen-Plant Interactions)</p> <p>Assistant Professor: Yohei Koide (Plant Breeding) Kazuyoshi Kitazaki (Genetic Engineering) Maria Stefanie Dwiyantri (Applied Plant Genomics)</p>

Chair of Botany and Agronomy	<p>Professor: Norio Kondo¹ (Plant Pathology)</p> <p>Associate Professor: Kaiken Fujino (Crop Physiology) Takashi Suzuki (Horticultural Science)</p> <p>Lecturer: Junichi Kashiwagi (Crop Science) Yutaka Jitsuyama (Horticultural Science) Seishi Akino (Plant Pathology)</p> <p>Assistant Professor: Hanako Shimura (Horticultural Science) Taiken Nakashima (Crop Science) Daisuke Tsugama (Crop Physiology)</p>
Chair of Animal Production	<p>Professor: Yasuo Kobayashi (Animal Nutrition) Koichiro Ueda (Animal Production System)</p> <p>Associate Professor: Manabu Kawahara (Animal Breeding and Reproduction) Satoshi Koike (Animal Nutrition)</p> <p>Assistant Professor: Hanako Bai (Animal Breeding and Reproduction) Yutaka Suzuki (Animal Nutrition)</p>

Division of Applied Bioscience

Chair	Academic Advisor in Charge (Field of Specialization [Name of Unit])
Chair of Food Science	<p>Specially Appointed Professor: Hiroshi Hara (Food Science for Health)</p> <p>Professor: Haruto Kumura (Applied Food Science) Jun Kawabata (Food Biochemistry)</p> <p>Associate Professor: Shigeharu Fukunaga (Animal By-product Science) Kei Sonoyama (Food Biochemistry) Satoshi Ishizuka (Nutritional Biochemistry) Ken Kobayashi (Functional Histocytology)</p> <p>Lecturer: Tohru Hira (Food Science for Health) Eisuke Kato (Food Biochemistry)</p> <p>Assistant Professor: Toru Hayakawa (Applied Food Science)</p>
Chair of Biomolecular Chemistry	<p>Professor: Yasuyuki Hashidoko (Molecular & Ecological Chemistry) Hideyuki Matsuura (Natural Products Chemistry)</p> <p>Affiliate Professor: Tomohiro Tamura² (Molecular Environmental Microbiology) Yoichi Kamagata² (Molecular Environmental Microbiology)</p>

	<p>Isao Yumoto² (Molecular Environmental Microbiology)</p> <p>Associate Professor: Masaru Wada (Microbial Physiology) Tatsuhiko Ezawa (Rhizosphere Control) Makoto Hashimoto (Molecular & Ecological Chemistry)</p> <p>Affiliate Associate Professor: Naoki Morita² (Molecular Environmental Microbiology) Wataru Kitagawa² (Molecular Environmental Microbiology) Yoshitomo Kikuchi² (Molecular Environmental Microbiology) Soichiro Kato² (Molecular Environmental Microbiology)</p> <p>Lecturer: Yasuko Sakihama (Molecular & Ecological Chemistry) Kengo Shigetomi (Wood Chemistry & Chemical Biology)</p> <p>Assistant Professor: Wataru Saburi (Biochemistry)</p>
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Division of Environmental Resources

Chair	Academic Advisor in Charge (Field of Specialization [Name of Unit])
Chair of Ecology and Systematics	<p>Specially Appointed Professor: Hideki Takahashi³ (Plant Systematics)</p> <p>Professor: Masahiro Ohara³ (Entomology) Hitoshi Araki (Animal Ecology and Evolution) Hiroko Fujita¹ (Plant Ecology and Systematics)</p> <p>Associate Professor: Eisuke Hasegawa (Animal Ecology) Kazunori Yoshizawa (Phylogenetic Systematics)</p> <p>Assistant Professor: Takayuki Azuma¹ (Plant Ecology and Systematics) Koh Nakamura¹ (Plant Ecology and Systematics) Masaru Kato¹ (Museology and Museum Materials Management)</p>
Chair of Regional Environment	<p>Professor: Ryoji Sameshima (Ecological and Environmental Physics) Munehide Ishiguro (Soil Physics) Ryusuke Hatano (Soil Science) Takashi Hirano (Ecological and Environmental Physics)</p> <p>Associate Professor: Osamu Nakahara (Soil Science)</p> <p>Lecturer: Tadao Yamamoto (Water and Soil Environmental Science) Keiji Okada (Ecological and Environmental Physics) Kanta Kuramochi (Soil Science) Hiroyuki Yamada (Ecological and Environmental Physics)</p>
Chair of Science of Forest Resources	<p>Specially Appointed Professor: Takayoshi Koike (Silviculture and Forest Ecology)</p>

	<p>Professor: Yasumitsu Uraki (Forest Chemistry) Yuzou Sano (Woody Plant Biology) Akio Koizumi (Timber Engineering)</p> <p>Associate Professor: Masato Shibuya (Silviculture and Forest Ecology) Yutaka Tamai (Forest Resource Biology)</p> <p>Lecturer: Hideyuki Saito (Silviculture and Forest Ecology) Keiichi Koda (Forest Chemistry) Toshizumi Miyamoto (Forest Resource Biology) Kei Sawata (Timber Engineering)</p> <p>Assistant Professor: Yusuke Yamagishi (Woody Plant Biology)</p>
Chair of Integrated Forest-Landscape Management	<p>Professor: Futoshi Nakamura (Forest Ecosystem Management) Hiroaki Kakizawa (Forest Policy) Tetsuya Kondo (Environmental Horticulture and Landscape Architecture) Takashi Yamada (Earth Surface Processes and Land Management)</p> <p>Associate Professor: Mio Kasai (Earth Surface Processes and Land Management) Yasushi Shoji (Forest Policy) Tetsuya Aikoh (Environmental Horticulture and Landscape Architecture) Junko Morimoto (Forest Ecosystem Management)</p> <p>Lecturer: Hajime Matsushima (Environmental Horticulture and Landscape Architecture)</p> <p>Assistant Professor: Shin'ya Katsura (Earth Surface Processes and Land Management)</p>
Chair of Bioproduction Engineering	<p>Professor: Noboru Noguchi (Vehicle Robotics) Yoichi Shibata (Crop Production Engineering) Kazunori Iwabuchi[‡] (Agricultural Bio-system Engineering)</p> <p>Associate Professor: Hiroshi Okamoto (Vehicle Robotics) Naoto Shimizu¹ (Agricultural Bio-system Engineering)</p>

Notes:

1. Field Science Center for Northern Biosphere
2. Unit (laboratory) affiliated with an organization outside the Graduate School of Agriculture
3. Hokkaido University Museum
4. Unit (laboratory) endowed by an organization outside the Graduate School of Agriculture

©The academic advisors shaded in the table do not recruit any new students this time.