

2021
Kyoto University
Graduate School of Agriculture
Doctoral Program

Guidelines for Applicants
Special Admissions for Privately Financed International Students

1. Eligibility Requirements for Applicants

Applicants must hold a residence status of “college student” (including students who are expected to acquire this status at the time of admission), and must satisfy any of the following requirements (or satisfy any of the following requirements by the end of March 2021):

- (1) Those who have a master's degree, professional degree or Juris Doctor degree (professional degree in law)
- (2) Those who have completed in a foreign country a degree equivalent to a master's program or professional degree program of Kyoto University Graduate School
- (3) Those who, by studying relevant subjects in Japan via a correspondence course provided by a school in a foreign country, have completed a degree equivalent to a master's program or professional degree program of Kyoto University Graduate School
- (4) Those who have completed a graduate course (limited to courses that correspond to a master's degree or professional degree program of Kyoto University Graduate School) of a foreign university that is accredited under the school education system of the relevant foreign country as offering graduate courses and which is designated by the Minister of Education, Culture, Sports, Science and Technology
- (5) Those who have completed a curriculum at the United Nations University and received a degree equivalent to a Master's Degree.
- (6) Those who have passed a Qualifying Examination or equivalent assessment at an institution in another country, and are recognized by Kyoto University as having academic ability on a par with or higher than that of a person with a master's degree.
- (7) Those specifically designated by the Minister of Education, Culture, Sports, Science and Technology (Note 2)
- (8) Those who are qualified, through individual entrance examination of the Graduate School of Agriculture of Kyoto University, and are judged to have academic ability equivalent or superior to those who have a master's degree, and who have reached 24 years of age

Note 1. Applicants are advised to contact the supervisor of the laboratory of their choice beforehand.

Note 2. Those who have conducted research for more than 2 years in a university, laboratory, research institute or company after graduating from a university or completing 16 years of formal education outside of Japan and who on the basis of their research achievements are judged to have academic ability equivalent or superior to those who have completed a master's program at Kyoto University Graduate School.

Note 3. Applicants who qualify under (6), (7) or (8) above must submit to a preliminary eligibility screening. Such applicant must apply to the Student Affairs Office, Graduate School of Agriculture, Kyoto University (hereinafter, the Student Affairs Office).

2. Enrollment Capacity and Subjects of Academic Examination

(1) Enrollment Capacity

Division	Laboratory	Enrollment Capacity
Agronomy and Horticultural Science	Crop Science, Plant Breeding, Vegetable and Ornamental Horticulture, Pomology, Weed Science, Plant Production Systems, Food Quality Design and Development, Quality Analysis and Assessment, Plant Production Control Science	A few for each division (laboratory)
Forest and Biomaterials Science	Forest Resources and Society, Tropical Forest Resources and Environments, Forest Utilization, Forest Biology, Landscape Architecture, Erosion Control, Biomaterials Design, Wood Processing, Fibrous Biomaterials, Tree Cell Biology, Chemistry of Composite Materials, Chemistry of Biomaterials, Forest Information, Silviculture, Wood Structure and Information Science, Active Bio-based Materials, Sustainable Materials, Innovative Humano-habitability, Timber Science & Engineering	

Applied Life Sciences	Cellular Biochemistry, Biomacromolecular Chemistry, Bioregulation Chemistry, Chemical Ecology, Plant Nutrition, Bioenergy Conversion Fermentation Physiology and Applied Microbiology, Microbial Biotechnology, Bio-Analytical and Physical Chemistry, Biofunction Chemistry, Chemistry of Molecular Biocatalysts, Molecular Microbial Science, Plant Gene Expression, Metabolic Science of Forest Plants and Microorganisms, Biomass Conversion	A few for each division (laboratory)
Applied Biosciences	Crop Evolution, Plant Pathology, Insect Ecology, Insect Physiology, Animal Breeding and Genetics, Reproductive Biology, Nutritional Science of Animals, Animal Physiology and Functional Anatomy, Animal Husbandry Resources, Fisheries and Environmental Oceanography, Marine Molecular Microbiology, Marine Bioproducts Technology, Marine Biological Function, Coastal Fisheries Ecology	
Environmental Science and Technology	Comparative Agricultural Science, Forest Ecology, Forest Hydrology, Forest Biochemistry, Tropical Agriculture, Soil Science, Terrestrial Microbial Ecology, Ecological Information, Agricultural Facilities Engineering, Water Resources Engineering, Hydrological Environment Engineering, Rural Planning, Radiation Control, Agricultural Systems Engineering, Field Robotics, Bio-Sensing Engineering	
Natural Resource Economics	Agri-food System Management, Farm Managerial Information and Accounting, Regional Environmental Economics, Agricultural and Environmental Policy, Forest Policy and Economics, International Rural Development, Comparative Agricultural History, Philosophy of Agricultural Science	
Food Science and Biotechnology	Enzyme Chemistry, Nutrition Chemistry, Physiological Function of Food, Bioengineering, Basic and Applied Molecular Biotechnology	

For brief information about each division, see attached “Outline of Graduate School of Agriculture.”

(2) Subjects of academic examination

(1) English

Submitted English language qualification (TOEFL-iBT or IELTS score) will be converted into a mark.

(2) Specialized subjects (a specialized field of your choice and related fields)

In the exam, you are allowed to use a dictionary (one dictionary only) between your native language (excluding English) and Japanese (for example, Chinese-Japanese and Korean-Japanese). The use of an electronic dictionary is not permitted.

(3) Oral examination

(3) Selection method

- ① The selection of students is based on the submitted documents and the results of academic examination.
- ② For each subject of the academic examination, the pass criteria have been set. To be admitted, you must meet the pass criteria for all subjects.
- ③ If the number of applicants for the laboratory you are applying for exceeds the quota, even if your score is above the minimum passing score for the relevant laboratory you may not be selected.

3. Documents to Submit

You need to download the forms (1), (2), (4), and (11) below from the website of the Graduate School of Agriculture and print them on A4-size paper.

(1) Application form for admission	<p>Enter all necessary items in designated form yourself.</p> <p>Paste your photo (taken within past 3 months, half-length, full-faced, no background) on specified section of Photograph Card and Examination Voucher.</p> <p>Photo on Photograph Card and Examination Voucher should be identical.</p>
(2) Proof of Payment Seal for Application Fee (to be affixed to the designated form)	<p>Application fee: 30,000 yen</p> <p>Pay your application fee through the Examination Settlement Service of Kyoto University between November 24 (Tue), 2020 and December 4 (Fri), 2020. Payment made before/after the above period is NOT acceptable.</p> <p>(1) Refer to the “Payment Method for Application Fees with Convenience Store or Credit Card”.</p> <p>(2) A transfer fee of 650 yen will be charged in addition to the application fee.</p> <p>(3) The name of the payer must be identical to the applicant’s name. Payment made under a payer’s name other than the applicant’s name may lead to rejection of application.</p> <p>(4) Once payment is made, affix the printed proof of payment seal to the “Form for Affixing Proof of Payment Seal for Application Fee” to submit.</p> <p>(5) Once application documents are submitted and accepted, the application fee paid shall NOT be refunded.</p> <p>Exemption of Application Fee: Applicants whose primary wage earners were affected by the 2011 Great East Japan Earthquake, the 2016 Kumamoto Earthquake, the Heavy Rain Event of July 2018, the 2018 Hokkaido Eastern Iburi Earthquake, and/or the Heavy Rain Event of July 2020 in regions subject to the Disaster Relief Act may be exempted from paying the application fee if evidenced by official documentation (e.g. <i>risai shomeisho</i>). For details, please contact the Student Affairs Office by November 20 (Fri), 2020. [Applicants who are expected to complete Master’s program of Kyoto University Graduate School in March 2021 need not pay entrance examination fee.]</p>
(3) English Score Sheet	<p>The original document is required. We accept only TOEFL-iBT or IELTS as an English language qualification taken within two years from the beginning of the application period. (For the entrance exam in January 2021, the date of taking English exam must be later than November 30, 2018.)</p> <p>See Notes on English score sheet (TOEFL-iBT or IELTS) below for further details.</p> <p>Note: Those who obtained a master's degree at the Kyoto University's Graduate School of Agriculture do not need to submit an English score sheet.</p>
(4) Detailed educational background and employment history	<p>Provide your detailed educational background and employment history in designated form.</p>
(5) Academic transcript issued by university attended(original)	<p>If this document is not written in English, Japanese translation must be attached.</p> <ul style="list-style-type: none"> • Designated form by your university • In case the applicants have earned credits at other university than their home university and those credits have been recognized, they must submit the academic transcript of the university where they earned the credits.
(6) Academic transcript and graduation (expected graduation) certificate for Master’s course (original)	<p>If this document is not written in English, Japanese translation must be attached.</p> <ul style="list-style-type: none"> • Designated form by your graduate school • In case the applicants have earned credits at other graduate school of

	other university than their home university and those credits have been recognized, they must submit the academic transcript of the university where they earned the credits.
(7) Copy of master's course diploma	Applicants who have not completed their master's course at time of application must submit copy of master's course diploma upon completion.
(8) Abstract of master's thesis	Prepare abstract of your master's thesis (write horizontally on A-4 size paper, 1,000 characters or less in Japanese or 200-300 words in English). Do not forget to write your name and names of division and laboratory you wish to enter.
(9) Certificate of Residence or copy of Residence Card (both side)	[For applicants residing inside Japan only] Submit either which shows your residence status and permitted period of residence in Japan.
(10) Copy of passport	
(11) • Address label • Envelope for Examination Voucher • Envelope for Acceptance Letter	<ul style="list-style-type: none"> • Use the prescribed address label. • Prepare two Chou #3 envelopes (size: 120 mm x 235 mm), and affix the address labels “(1) For Examination Voucher” and “(2) For Acceptance Letter” on each envelope respectively. • Affix JPY 384 worth of stamps (for express mail) to the envelope for examination voucher.

Notes on English score sheet (TOEFL-iBT or IELTS):

1. It is the applicant's responsibility to apply for and take the examination at his/her own expense.
2. Submit the original document of TOEFL-iBT Test Taker Score Report or IELTS (Academic Module) Test Report Form when applying. A photo-copy of the sheet is not acceptable.
3. The submitted English score sheet will be returned to the applicant along with his/her Examination Voucher in the middle of December.
4. Submit one score sheet only if an applicant has taken TOEFL-iBT and/or IELTS (Academic Module) multiple times. For TOEFL-iBT scores, we only consider the Test Date Scores on your score sheet, not MyBest Scores.
5. We accept only TOEFL-iBT or IELTS (Academic Module) as an English language qualification taken within two years from the beginning of the application period, i.e. the date of taking the English exam is later than November 30, 2018 for the entrance exam in January 2021. Note that other types of English proficiency examination such as TOEFL ITP (Institutional Testing Program) cannot be accepted.
6. If an applicant cannot submit his/her English score sheet when applying, he/she needs to submit a written notice to that effect and a print-out copy of their online score page. The original English score sheet must reach us no later than January 17 (Fri), 2021 in person or by recorded delivery. A self-addressed stamped envelope to return the original document must be enclosed too (Chou #3 envelope (H235 x W120 mm / portrait format). Enter the applicant's name and postal address with a zip code, and affix a JPY 519 postage stamp to the envelope for domestic recorded delivery in Japan). Contact the Student Affairs Office when the original document is to be returned to an overseas address (Tel: +81-75-753-6014). If we do not receive the original document by the date stated above, his/her English score is considered as zero.
7. If the submitted English score sheet turns out false, we retroactively revoke the admission even after entering the school.
8. Those whose mother tongue is English and/or those who are or have been taught in English at university should contact the Student Affairs Office by November 20 (Fri), 2020.
9. **(Required Scores) Applicants must satisfy at least one of the following requirements:**
TOEFL-iBT: overall score of 55
IELTS (Academic Module): overall score of 4.5

4. Application Procedure

- (1) Applicants must submit the above-listed required documents during the application period.
When mailing the documents, use registered mail and write “Application Form for Doctoral Program for Privately Financed International Students (Special Admissions) enclosed” in red on the front of the envelope.

Application documents should be sent to:

**Student Affairs Office,
Graduate School of Agriculture, Kyoto University
Kitashirakawa Oiwake-cho, Sakyo-ku, Kyoto 606-8502, Japan**

- (2) Applicants filing under Eligibility Requirements for Applicants (6), (7) or (8) must submit the

documents listed below to the Student Affairs Office by November 20 (Fri), 2020, and follow the directions.

[Applicants filing under (6)]

- ① Application for Eligibility Screening (designated form)
- ② Certificate endorsed by the president of the examining institution certifying that the applicant has passed the examination.
- ③ Documents which detail the examination procedure and qualifying criteria of the Qualifying Examination or equivalent assessment.
- ④ The curriculum details (course list and course outlines) and academic transcript of a program equivalent to a master's program which the applicant has completed.
- ⑤ The curriculum outlines of all courses which the applicant completed during secondary and higher education.

Qualification screening is conducted by oral examination (and by written examination to evaluate applicants expertise and capabilities on their major field and its relevant area, if necessary), the date and time of which will be communicated later.

[Applicants filing under (7)]

- ① Application for Eligibility Screening (designated form)
- ② University Graduation Certificate and Academic Transcript
- ③ Record of Research Achievements (designated form)
- ④ Details of previous studies (designated form)

Qualification screening is conducted by oral examination, the date and time of which will be communicated later.

[Applicants filing under (8)]

- ① Application for Qualification Screening (designated form)
- ② Graduation Certificate and Academic Transcript issued by the institution from which the applicant last graduated
- ③ Record of Research Achievements (designated form)
- ④ Details of previous studies (designated form)

Qualification screening is conducted by oral examination, the date and time of which will be communicated later.

- (3) Applicants with special needs who require any arrangements for examinations or while on campus should contact in advance the Student Affairs Office.

5. Application Period

November 30 (Mon) to December 4 (Fri), 2020 (Due NLT 17:00)

Late applications, including those sent by postal mail, will not be accepted for any reason.

However, the applications which have been sent by registered express mail (“書留速達郵便”) and postmarked on or before December 2 (Wed), 2020 by the originating post office will be accepted even in the case that they arrive after the due date.

6. Date and Place of Examination

Date	Time	Examination Subject	Place
Jan. 23, 2021 (Sat)	13:00~15:00	Specialized subject	Graduate School of Agriculture, Kyoto University Kitashirakawa Oiwake-cho, Sakyo-ku, Kyoto (walk north from Kyoto City Bus “Kyodai Nogakubu-mae” bus stop)
Jan. 24, 2021 (Sun)	13:00 - 17:00	Oral examination	

7. Notification of Screening Result

Announcement of Successful Applicants will be mailed to all admitted applicants on January 29 (Fri), 2021. Telephone inquiries about the screening result will not be accepted.

The information of successful applicants will be announced on Graduate School of Agriculture website on January 28 (Thu), 2021 17:00. Please refer to

http://www.kais.kyoto-u.ac.jp/english/admission/div_adm_info



8. Admission Fee and Tuition

Admission fee: 282,000 yen *The amount indicated at left may be revised at the time of enrollment.
[Students who completed Master's Program at Kyoto University Graduate School in March 2021 are not required to make this payment.]
Yearly tuition fee: 535,800 yen *The amount presented at left may be revised at or after the time of enrollment.

9. Notes

- (1) In selecting a laboratory, **communicate in advance with the supervisor of the laboratory you wish to enter**, after carefully reading the Outline of the Graduate School of Agriculture.
If you have any questions in selecting a laboratory, please contact the **Student Affairs Office**.
(Tel: +81-75-753-6014)
- (2) When making a correction on the document, cross out the relevant part with double lines and write the correct information above it.
- (3) Instructions regarding examination, including examination room, will be announced on Graduate School of Agriculture website on January 22 (Fri), 2021 9:00.
- (4) Applicants who are employed at a company, public agency or research institution: Even if such applicants have passed the entrance examination, unless they resign or take a leave of absence from their work, they will not be admitted to the Graduate School.
- (5) Prior to the application, those who have graduated, or expect to graduate, from an overseas university are required to complete AAO process. Please see following web page for the detail.
https://www.kyoto-u.ac.jp/en/education-campus/education_and_admissions/graduate-degree-programs/for_graduates_of_overseas_universities/for_graduates_of_overseas_universities.html



- (6) Other
 - (a) The Graduate School of Agriculture provides the long-term study program for doctoral students who are (1) engaged in a full-time employment, (2) required to take care of infants or other family members in special need, or (3) handicapped in any ways. This program allows students with such conditions to extend their period of study up to six years and to complete the course in a structured way. If you wish to apply, please contact the **Student Affairs Office**.
 - (b) To receive a copy of the Guidelines for Applicants by mail, write to the address given below, enclosing a 250-yen stamped and self-addressed (name, address and postal code) envelope (kakugata No. 2,330mm x 240mm).
Be sure to write "Request for Guidelines for Special Admissions of Privately Financed International Students (Doctoral Program)" in red on the front of the envelope.

Address request for a copy of the Guidelines for Special Admissions to:
Student Affairs Office,
Graduate School of Agriculture, Kyoto University
Kitashirakawa Oiwake-cho, Sakyo-ku
Kyoto 606-8502, Japan

- (c) Submitted application document content cannot be changed for any reason.
Please also note that paid application fee will not be returned under any conditions.
 - (d) The University does not provide accommodation services (arrangements for hotels etc.) for applicants.
- (7) Handling of personal information
Personal information (name, gender, date of birth, address etc.) provided in application documents is used only for ① entrance examinations, ② admission procedures, scholarship etc., ③ preparation for accepting students.
 - (8) Ensuring implementation of entrance examination at the time of natural disasters
Announcement, including whether to carrying on the entrance examination, is posted on the website of Graduate School of Agriculture, Kyoto University at the time of natural disasters, such as heavy snow, earthquake and others.

November 2020

Graduate School of Agriculture, Kyoto University

Payment Methods for Application Fees with Convenience Store or Credit Card

Payment is possible 24 hours a day using a convenience store (Seven-Eleven, Lawson, Ministop, FamilyMart, Seicomart, Daily Yamazaki), credit card, financial institution ATM or Internet banking.

1 Apply From The Web

Access the URL below and enter the required items following the instructions on the screen after selecting the school from the list.







<https://www3.univ-jp.com/kyoto-u/en/agr/>

2 Checking Application Content

The **reception number** (not the examination number) and **number required for payment** will be displayed so please make a memo or print the screen. The e-mail address and password entered in the personal information input screen will be used when displaying the proof of payment.

3 Payment

Please make the payment using one of the methods below. **If you are in outside of Japan, you can only pay by credit card.**

Credit Card	Convenience Store (Payments of 300,000 yen or less)				
	Seven-Eleven 	Lawson Ministop (Loppi) 	FamilyMart (Famiport) 	Seicomart (Club Station) 	Daily Yamazaki 
Personal identification During the application procedure, you will be required to enter credit card details for personal identification purposes. Please have your card ready before applying. Number of payments Payments are only accepted in full. Other precautions Please ensure that you have sufficient funds available on your credit card before applying.	Let a staff member at a 7-Eleven store know the [払込票番号] (payment number) that was displayed after you completed your initial application and pay the application fee and processing fee in cash. Be aware that no refunds will be given after you have paid at the cash register.	Select [各種サービスメニュー] (Service Menu). Select [各種代金・インターネット受付・スマートビットのお支払] (Pay a bill/Pay for an online purchase/Pay for a Smart Pit purchase). Select [各種代金お支払] (Pay a bill). Select [マルチペイメントサービス] (Multi-Payment Service). Enter the customer number. Enter the confirmation number	Select [代金支払い] (Pay a bill). Select [各種番号をお持ちの方はこちら] (I have a number). Select [番号入力画面に進む] (Go to number entry screen). Enter the customer number. Enter the confirmation number. Agree and proceed.	Tell a staff member that you want to make an internet payment (インターネット決済).	Tell a staff member that you want to make an online payment (オンライン決済).
		If the application information is correct then press the "Confirm" and "Print" buttons. An application ticket will come out of the terminal so pay the admission examination payment fee with cash at the counter within 30 minutes.	On the LCD touch panel screen of the cash register, enter the online payment number (オンライン決済番号).	Pay the admission examination payment fee with cash at the counter within 30 minutes.	

Financial Institution ATM (Pay-easy)

Payments can be made with ATMs with the Pay-easy mark at the financial institutions below.
 A cash payment of 100,000 yen or less or a credit card payment of 1,000,000 yen or less is possible with a single application.
 (List of compatible financial institutions)
 -Japan Post Bank
 -Mizuho Bank
 -Resona Bank/Saitama Resona Bank
 ■Check financial institutions compatible for payment with the "List of compatible ATMs" below.
http://www.well-net.jp/multi/financial_list/index.html



From the ATM menu screen, select [税金・料金払込み] (Pay tax/bill) or [Pay-easy].

Enter the receiving institution number, customer number and confirmation number

Select either 現金 (Cash) or キャッシュカード (Cash card) as a payment method.

Internet Banking

Internet banking with major banks, regional banks, credit unions and cooperatives, worker's credit unions, agricultural cooperatives and fisheries cooperatives can be used. Prior application with the financial institution is required.
 Payments can also be made with Rakuten Bank, Japan Net Bank, au Jibun Bank or SBI Sumishin Net Bank. Prior opening of an account with the financial institution is required.



Open the payment and application content confirmation screen

Press the "Payment with Internet Banking"

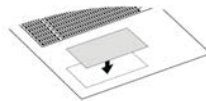
Select financial institution with Internet banking contract and login

4 Proof of Payment Seal for Application Documents

Print the proof of payment from the payment or application content confirmation screen, then cut out the required section and attach it to the designated position on the applicant ticket. Post it in the same way as the required documents.



(1) Cut out the required section,



(2) Attach it to the designated position on the applicant ticket.

A service fee is charged separately. Check with the website for details.

Policy for Admission to the Graduate School of Agriculture

(Admission Policy)

Agricultural science is a field of study that concerns the most important and fundamental issue on how humankind can conduct productive and sustainable activities to live on the earth, and builds a "foundation of knowledge" for the next generation by leading-edge basic research. With “Life, Food, and Environment” as keywords, the Graduate School of Agriculture is engaged in efforts to address a variety of issues relating to resources, energy, local communities, information, lifestyle, health, and culture, which are important global-level matters in the 21st century. The Graduate School of Agriculture is made up of seven Divisions, with each Division taking a different approach to tackling these issues, which are related to the survival of humankind, and carries out agricultural research and human resources development with the aim of contributing to improving the welfare and sustainable prosperity of humankind. Accordingly, the Graduate School of Agriculture seeks students who possess the abilities and qualifications described below to study in highly specialized fields.

1. Individuals with a broad perspective and adequate basic academic skills, in addition to a high sense of ethics and a strong sense of responsibility
2. Individuals highly committed to developing society through research in agricultural sciences
3. Individuals who can set out research themes on their own and have a strong desire to pursue such topics, as well as the ability to conduct their research
4. Individuals with great communication skills as well as an international perspective

Doctoral Course, Graduate School of Agriculture

In addition to the student profile of individuals for the Master’s program, the Doctoral program seeks individuals who aim to engage in research or specialized work in agriculture-related fields, and who are also able to play leading roles in research. In order to implement this admission policy, an entrance examination is administered to regular students who are not coming up from within the Graduate School of Agriculture and working adults. The entrance examination is a combination of a written test to evaluate English proficiency and field-specific knowledge for each Division, an evaluation of the applicant’s Master’s thesis, and an oral examination related to the thesis. For privately financed international students, an entrance examination comprising a written test in field-specific subjects and an oral examination is administered. In either case, details regarding the evaluation method, including the weighting, are clearly described in the Guidelines for Applicants.

With regard to the written test of field-specific knowledge and the oral examination for each Division, they are conducted based on the student profile for each Division described below.

[Division of Agronomy and Horticultural Science]

The Division of Agronomy and Horticultural Science carries out education and research in a wide range of agricultural sciences, ranging from the molecular and cellular level with regard to the production and use of crops to the individual, community, and regional ecosystem level. It aims to develop human resources possessing highly specialized knowledge and the ability to integrate interdisciplinary studies, as well as create new technologies, with the goal of resolving food and environmental problems facing humankind and region-specific agricultural problems.

The Division of Agronomy and Horticultural Science, through highly pioneering research, aims to create new knowledge, develop new technology, and develop researchers, engineers, and educators with a high level of expertise who are capable of opening up new paths for agriculture for future generations. The profile of individuals sought by the Division to become such specialists is described below.

1. Individuals who have solid basic knowledge in various fields of science that are related to agricultural sciences and have a strong desire to contribute to the welfare of human society by consolidating such knowledge to create knowledge and develop new technology related to the production and use of crops.
2. Individuals who have a strong desire to boldly take on challenges in research in new interdisciplinary fields that arise in various areas of science related to agriculture, which are advancing day by day.
3. Individuals who have a global perspective as well as a strong interest in food and environmental problems in developing countries and aspire to make international contributions through research and education.

[Division of Forest and Biomaterials Science]

The Division of Forest and Biomaterials Science aims to maintain and advance a healthy and comfortable living environment for humankind by living in a symbiotic relationship with many living organisms, mainly forests. The scope of subject matters of such research is extremely broad, ranging from a relatively narrow residential environment used by humans on a daily basis (including energy, clothing, furniture, dwellings, and streets), to a regional environment with the fresh air, water, and scenery which is formed by adequate coordination between cities, farmland, and outlying undeveloped areas, and the prevention of global warming through the preservation of the environment on a global scale and the use of biomass resources. Therefore, as academic areas that form the background of education and research, it is important to have perspectives of not only advanced natural sciences, but also humanities and social sciences. There is also great diversity in research techniques, including overseas field research, exhaustive laboratory research, and information processing.

It is hoped that individuals who wish to progress to or transfer to the Doctoral program will engage in the creative and interdisciplinary development of research. They are also expected to acquire the broad perspectives and academic skills needed to objectively evaluate their own research, the academic knowledge and leadership qualities needed to guide future generations, and the communication skills needed for actively participating at the

international level.

[Division of Applied Life Sciences]

The Division of Applied Life Sciences carries out education and research pertaining to a wide range of living organisms, ranging from microorganisms to plants and humans, from the perspectives described below.

1. Understand and develop life phenomena based on physical chemistry, organic chemistry, biochemistry, and molecular biology.
2. Understand and develop the commonality and diversity of biofunctions of microorganisms, plants, and animals.
3. By doing research, learn how to approach the research and acquire logical thinking skills, in addition to nurturing originality.
4. Put new discoveries and inventions to use in applied research, and give back research results to society.

The Division of Applied Life Sciences places value on proactive self-study and self-instruction, and nurtures researchers and engineers who understand the principles of life phenomena, work to resolve various problems based on the principles that arise in areas such as fermentation, foodstuffs, the chemical industry, food production, preservation of the environment, and healthcare, and are capable of using such results to make advances in new biotechnologies and biosciences.

In addition to the individuals described in the student profile for the Master's program, the Doctoral program aims to develop researchers capable of taking on leadership internationally through research that has originality, as well as highly skilled engineers capable of demonstrating leadership for starting up new projects at the frontlines of production. The Doctoral program seeks individuals who have academic skills equivalent to those of a graduate who has completed a master's program, and also have clear and strong motivation and willingness to engage in research.

[Division of Applied Biosciences]

The Division of Applied Biosciences consists of a diverse range of research areas, integrating forest biology, fisheries science, livestock science, and tropical agriculture. The mission of the Division of Applied Biosciences is to become an education and research hub to provide interdisciplinary and global responses to a variety of new problems related to biosources, food, health, and the environment that are expected to arise in the 21st century. The Division treats a variety of living organisms ranging from microorganisms to plants and animals that inhabit the land and sea, and the environment that surrounds them. The aim of the Division is to engage in education and research on the use, creation, conservation, and preservation of those living organisms and the environment from a broad perspective covering from molecules to individuals and up to the ecosystem level, and to develop human resources that are capable of engaging in interdisciplinary initiatives that are not constrained by the conventional

boundaries.

Individuals who wish to progress to or transfer to the doctoral program need to make every effort in order to achieve the objectives described below.

1. Acquire the skills needed to resolve problems, as well as the skills required to establish tasks from a broad perspective and carry out such tasks.
2. Achieve creative research results, and at the same time, acquire a high level of communication skills and have the confidence to actively take part in international settings.
3. Make efforts to broadly give back research results to society and significantly contribute to the development of the agriculture, livestock, and fishery industries as well as academic researches that are the foundation of such industries.

[Division of Environmental Science and Technology]

Humans have always lived their lives while dealing with the natural environment that is particular to the respective regions on the earth in which they live. The Division of Environmental Science and Technology aspires to conduct research that will enable people to continue to develop both production and daily life activities in their most desirable forms while coexisting with the components that shape the natural environment. To achieve this, the groups doing research on living organisms and ecosystems and the groups doing research on regional environmental engineering cooperate with each other and carry out interdisciplinary and international research that takes into consideration both the production of food and the preservation of the environment in the Division. The Division of Environmental Science and Technology is made up of numerous research fields (including newly established four fields) following a reorganization in 1995 of the eleven laboratories, one research division, and one office that had made up the Division.

The Division hopes that students become independent as researchers, engaging in research activities with creativity and passion, and furthermore, have broad knowledge and flexibility to deal with various complex problems. The Division of Environmental Science and Technology is the division with the greatest diversity in the Graduate School of Agriculture. Therefore, the Division very much looks forward to welcoming individuals who will have willingness not only to acquire comprehensive knowledge and techniques, but also to gain an international perspective and communication skills with which they can use such knowledge and techniques in every part of the world as well as in Japan in the future.

[Division of Natural Resource Economics]

The desired development of humans greatly relies upon mutual cooperation between nations of the world and among people, as well as mechanisms of social and economic coordination. In today's society, amidst truly

remarkable advances in science and technology, the affluence and surplus of food in developed countries coexist with the poverty of developing countries. And there are countries like Japan, which, in spite of being a developed country, have a food self-sufficiency rate that is declining to near-crisis levels. It is under these circumstances that environmental problems, regional social problems, and food safety problems have been arising. The circumstances we are facing now are the results of 20th century developments in the economic ideology that determine how science, technology, and resources should be deployed, international rules related to trade and other similar interactions, and the social, economic, and management structures and systems inside and outside Japan that are based on that ideology and those rules. At present, there are demands for a fundamental reexamination of the factors behind these circumstances. A major goal of the Division of Natural Resource Economics is to resolve the problems faced by these structures and systems and to develop new systems and policies. This can be achieved based on economics and by making use of management, social science, historical science, and political science theories.

[Division of Food Science and Biotechnology]

The field of research related to food is becoming increasingly broader and more interdisciplinary. In addition to the immense expansion of the scale of industries involved in food, problems inherent in food are also becoming greatly varied. While there are societies that face starvation, there are also societies in which diseases caused by gluttony are widespread. In Japan, traditional eating habits are on the brink of collapse, and the food self-sufficiency rate and food safety are urgent issues. Together with medical and pharmaceutical sciences, food science should make important contributions with the aim of improving the public wellbeing.

It is necessary to build a new foundation for food research in order to resolve the issues mentioned above. In other words, it is not only food that is the object of research. The Division seeks to have a deep understanding of the interaction between humans, the environment, and food. The Division of Food Science and Biotechnology was established in April 2001 with the aims of developing individuals capable of grasping the roots of the broad range of problems related to food and dealing with such problems, and engaging in research and development to be the foundation of such activity. The Division established a specialized educational system and an advanced research system for food science and biotechnology, and has been carrying out education and research in such systems. The Division also systematized the research areas of life science, biology, organic chemistry, biochemistry, genetic biology, food chemistry, chemical engineering, enzyme chemistry, physical properties science, nutrition science, health science, kinesiology, immunology, physiology, microbiology, zymology, taste sensory science, experimental psychology, and ethology, and has been trying to create new studies that involve food, and putting priority on becoming the leader in such research in the future. In order to achieve these objectives, the Division has three basic chairs, “Food Life Sciences”, “Food and Health Science”, and “Food Production Technology”, each of which has its own distinctive characteristics.

The Division seeks students who will take on challenges with high ideals and a burning passion for the food

science and biotechnology as described below.

1. Individuals who aim not only to acquire the ability to resolve each separate issue, but also to establish tasks from a very broad perspective and acquire the ability to resolve problems.
2. Individuals who aim to achieve creative research results, as well as to acquire a high level of communication skills to actively take part in activities in international settings.
3. Individuals who aspire to give research results back to society, and hope to take on central roles in the development of the food industry from a technical and educational standpoint.