

平成22年度

帯広畜産大学大学院畜産学研究科

修士課程・博士前期課程

学生募集要項（第2次募集）

（一般選抜・社会人特別選抜・外国人留学生特別選抜）

APPLICATION FOR ADMISSION TO  
THE MASTER'S PROGRAM  
GRADUATE SCHOOL OF AGRICULTURE  
AND VETERINARY MEDICINE  
OBIHIRO UNIVERSITY  
FOR 2010 (The Second Collection)

(General Admission, Special Selection for Mature Applicants,  
Special Selection for International Students)

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1 Number of Students to be Admitted

Program	Laboratory	Number of Students to be Admitted	
		General Admission	Special Selection for Mature Applicants
Life Science and Agriculture	Animal Production Ecology and Environmental Science	Limited	Limited
Food Science	Food Technology and Biotechnology Biomolecular Structure and Function	Limited	Limited
Agro-environmental Science	Plant Production Science Engineering for Agriculture Agricultural Economics	Limited	Limited

Program	Laboratory	Number of Students to be Admitted		
		General Admission	Special Selection for Mature Applicants	Special Selection for International Students
Animal and Food Hygiene	Animal Medical Science Food Hygiene Environmental Hygiene	Limited	Limited	Limited

Note: Not all Programs accept new students every term. Before submitting your application first check with the Admissions Office to see if your desired course will be accepting new students.

## 2 Application Criteria

### (1) General Admission (including international students)

To apply for General Admission, one must meet one of the following criteria:

- ① Those who are graduates of a university or college, or are expected to do so on or before March 31, 2010.
- ② Those who have been awarded a bachelor's degree according to Article 104, Section 4 of the School Education Law or who are expected to do so on or before March 31, 2010.
- ③ Those who have successfully completed 16 years of formal education abroad or are expected to do so on or before March 31, 2010.
- ④ Those who have taken a correspondence course from an overseas educational institution in Japan and completed 16 years of formal education or are expected to do so on or before March 31, 2010.
- ⑤ Those who have completed an undergraduate program of an overseas-based educational institute located in Japan that has been approved by the Minister of Education, Culture, Sports, Science and Technology, whose graduates are regarded as having completed 16 years of formal education, or are expected to do so on or before March 31, 2010.
- ⑥ Those who have completed a four-year or longer professional program approved by the Minister of Education, Culture, Sports, Science and Technology, conducted by a vocational school, after the date set by the Minister of Education, Culture, Sports, Science and Technology, or are expected to do so on or before March 31, 2010.
- ⑦ Those who are deemed eligible by the Minister of Education, Culture, Sports, Science and Technology (Bulletin No. 5, Ministry of Education, 1953).
- ⑧ Those who have been enrolled in a university for three years or longer, or have completed 15 years of formal education attending an overseas educational institution, taking correspondence courses in Japan conducted by an overseas educational institution, or attending an undergraduate program at an overseas-based educational institute located in Japan that has been approved by the Minister of Education, Culture, Sports, Science and Technology, and have been recognized as having earned specified credits with excellent grades by Obihiro University of Agriculture and Veterinary Medicine Graduate School.
- ⑨ Those who are 22 years old or older, and recognized in the preliminary selection by Obihiro University Graduate School as having equal to or higher academic ability than persons who are graduates of a university or college.

Note 1: Applicants who satisfy ⑧ or ⑨ need to refer to “Authorization for Qualified Applicants” on page 8.

Note 2: A preliminary qualification examination is given to international applicants from countries in which it takes less than 16 years to complete formal education to the university level before they apply for the program. Refer to “Authorization for Qualified Applicants” on page 8.

(2) Special Selection for Mature Applicants (including international students):

To apply for the Special Selection for Mature Applicants, one must meet the criteria outlined in ① and at least one of the items i.~viii.:

- ① A person who has been employed in either the public or private sector or an educational institution, self-employed or a homemaker for two years or more, and is at least 24 years of age;
- i . Those who graduated university or college on or before March 31, 2008.
  - ii . Those who have been awarded a bachelor's degree according to Article 104, Section 4 of the School Education Law on or before March 31, 2008.
  - iii . Those who successfully completed 16 years of formal education abroad on or before March 31, 2008.
  - iv . Those who have taken a correspondence course from an overseas educational institution in Japan and completed 16 years of formal education on or before March 31, 2008.
  - v . Those who have completed an undergraduate program at an overseas-based educational institute located in Japan that has been approved by the Minister of Education, Culture, Sports, Science and Technology, whose graduates are regarded as having completed 16 years of formal education, on or before March 31, 2008.
  - vi . Those who have completed a four-year or longer professional program approved by the Minister of Education, Culture, Sports, Science and Technology, conducted by a vocational school, after the date set by the Minister of Education, Culture, Sports, Science and Technology, on or before March 31, 2008.
  - vii . Those who are deemed eligible by the Minister of Education, Culture, Sports, Science and Technology (Bulletin No. 5, Ministry of Education, 1953) .
  - viii . Those who 24 years old or older, and recognized in the preliminary selection by Obihiro University of Agriculture and Veterinary Medicine Graduate School as having equal to or higher academic ability than persons who are graduates of a university or college.

Note 1: Applicants who satisfy viii need to refer to “Authorization for Qualified Applicants” on page 8.

Note 2: A preliminary qualification examination is given to international applicants from countries in which it takes less than 16 years to complete formal education to the university level before they apply for the program. Refer to “Authorization for Qualified Applicants” on page 8.

(3) Special Selection for International Students.

To apply for the Special Selection for International Students, one must meet all of the criteria ①~④ and at least one of the items i.~v.:

- ① Those who don't hold Japanese nationality and principally reside abroad.
- ② Those who have two years or more of work experience in food or animal hygiene abroad such as working for research, education or government institutes on or before March 31, 2010.
- ③ Those who took the TOEFL test (Paper-Based Testing or Internet-Based Testing) within two years of the time of their application (TOEFL-ITP (Institutional Test Program) is not acceptable).
- ④ As a general rule, those who are no older than 39 years of age when beginning the Master's Program at Obihiro University.
  - i. Those who graduated university or college before March 31, 2008.
  - ii. Those who have successfully completed 16 years of formal education abroad before March 31, 2008.
  - iii. Those who have taken a correspondence course from an overseas educational institution in Japan and completed 16 years of formal education on or before March 31, 2008.
  - iv. Those who have completed an undergraduate program at an overseas-based educational institute located in Japan approved by the Minister of Education, Culture, Sports, Science and Technology, whose graduates are regarded as having completed 16 years of formal education, on or before March 31, 2008.
  - v. Those who are 24 years old or older, and recognized in the preliminary selection by Obihiro University Graduate School as having equal to or higher academic ability than persons who are graduates of a university or college.

Note 1: Applicants who satisfy v need to refer to (4) "Authorization for Qualified Applicants" below.

Note 2: A preliminary qualification examination is given to international applicants from countries in which it takes less than 16 years to complete formal education to the university level before they apply for the program. Refer to (4) "Authorization for Qualified Applicants" below.

Scholarship (Limited to Special Selection for International Students)

A scholarship for a 80,000 yen/month will be provided. However, this scholarship will not be given to those who are recipients of a government or other scholarship. This scholarship will be available for a maximum of 2 years, but could be terminated depending on a general evaluation of grades, etc. after one year.

Entrance and tuition fee exemption (Limited to Special Selection for International Students)

Students admitted by Special Selection for International Students are exempt from the entrance and tuition fees unless a government or other organization is paying their fees. The maximum period of exemption is for 2 years. The exemption may be cancelled depending on the student's overall evaluation including course grades in the first year.

(4) Authorization for Qualified Applicants

Submit the documents in the table below by the deadline if you need to be authorized as a qualified applicant.

- Deadline for the applicants for General Admission and Special Selection for Mature Applicants is Friday, November 13, 2009.

If you send the documents by mail, use registered express mail.

Documents to submit	Application form for qualified applicant authorization (Use the prescribed form) <ul style="list-style-type: none"><li>• Graduation/completion certificate from the last school you attended</li><li>• Academic transcript</li><li>• Research certificate (including period of time and contents of your research)</li><li>• Materials from research results</li></ul>
Submit to:	Admission Office Student Affairs Section Obihiro University of Agriculture and Veterinary Medicine 11, Nishi 2, Inadacho, Obihiro, Hokkaido, 080-8555 Japan

### 3 Application Procedure

#### (1) Application documents

##### ① Application documents (General Admission • Special Selection for Mature Applicants)

Application documents		General Admission	Special Selection for Mature Applicants	Summary
1	Application form, Exam admission card, Photograph card	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none"> <li>• Fill out the prescribed form except columns marked with *.</li> <li>• The photo (4 cm high x 3 cm wide) must have been taken within 3 months prior to application. The portrait must be a full face, front view, without a hat, and wearing glasses if you expect to do so at the exam. Write your full name and expected major on the back of the photo and glue it to the designated spot.</li> </ul>
2	Statement of purpose	<input type="radio"/>		<ul style="list-style-type: none"> <li>• Fill out the prescribed form. Describe why you chose our Master's Program.</li> </ul>
3	Certificate of graduation, or certificate of expected graduation	<input type="radio"/>	<input type="radio"/>	
4	Academic Transcript	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none"> <li>• Must be sealed.</li> </ul>
5	Certificate of Foreign Registration	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none"> <li>• The applicant who is a registered foreigner must submit this certificate with visa status and period of stay noted on it.</li> </ul>
6	Name and Address Card (the address will be used to contact successful applicants)	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none"> <li>• Fill out your name, address and postal code on the prescribed form.</li> </ul>
7	Seal for confirmation of subject examination	<input type="radio"/>		<ul style="list-style-type: none"> <li>• Fill out the prescribed form.</li> </ul>
8	Self-addressed stamped envelope for sending the exam admission card	<input type="radio"/>	<input type="radio"/>	<ul style="list-style-type: none"> <li>• Fill out your name, address and postal code, and put postage stamps worth 350 yen on the prescribed small envelope. (The stamps are unnecessary if you choose to come to the Entrance Examination Office to pick up the card.)</li> </ul>
9	Letter of recommendation		<input type="radio"/>	<ul style="list-style-type: none"> <li>• Submit a letter of recommendation from the head of the office/company of current or previous employment, or a letter of self-recommendation.</li> </ul>
10	Research proposal		<input type="radio"/>	<ul style="list-style-type: none"> <li>• Describe the research you intend to do in the Master's Program.</li> </ul>
11	Curriculum vitae or Resume		<input type="radio"/>	<ul style="list-style-type: none"> <li>• A list that shows your achievements and duties, which may include published articles, technical reports, patents, utility models, or graduation theses.</li> </ul>

Note 1: Applicants who are not Japanese nationals must contact the Entrance Examination Office to receive special instructions before applying.

Note 2: Government-financed international students do not need to submit items 2-4.

② Application documents (Special Selection for International Students)

Application documents		Summary
1	Application form, Exam admission card, Photograph card	<ul style="list-style-type: none"> <li>• Fill out the prescribed form except columns marked with *.</li> <li>• The photo (4 cm high x 3 cm wide) must have been taken within 3 months prior to application. The portrait must be a full face, front view, without a hat, and wearing glasses if you expect to do so at the exam. Write your full name and expected major on the back of the photo and glue it to the designated spot.</li> </ul>
2	Statement of purpose	<ul style="list-style-type: none"> <li>• Describe your reasons for applying to the Master's Program and how you plan to use the knowledge learned from your graduate studies. Also include a brief personal history. Write on A4-sized paper, three pages maximum.</li> </ul>
3	Certificate of graduation	
4	Academic Transcript	<ul style="list-style-type: none"> <li>• Must be sealed.</li> </ul>
5	Name and address card (the address will be used to contact successful applicants)	<ul style="list-style-type: none"> <li>• Fill out your name, address and postal code on the prescribed form.</li> </ul>
6	Self-addressed stamped envelope for sending the exam admission card	<ul style="list-style-type: none"> <li>• Fill out your name, address and postal code on the prescribed small envelope.</li> </ul>
7	Letter of recommendation	<ul style="list-style-type: none"> <li>• Three letters of recommendation, one each from the following persons:               <ol style="list-style-type: none"> <li>① Head or person of equivalent status of college you attended (which should describe applicant's personality, grades, extracurricular activities, English proficiency, etc.) ;</li> <li>② Head or person of equivalent status from place of employment (which should describe applicant's personality, achievements, working conditions, English proficiency, etc.);</li> <li>③ Other than the above (which should describe applicant's personality, grades/achievements, English proficiency, etc.)</li> </ol> </li> </ul>
8	Curriculum vitae or Resume	<ul style="list-style-type: none"> <li>• Describe your graduation thesis if you have one, the work you are currently engaged in, and any other notable achievements on A4-sized paper, two pages maximum.</li> </ul>
9	Short essay	<ul style="list-style-type: none"> <li>• Write a short essay on the theme provided by the University on A4-sized paper, two pages maximum.</li> </ul>
10	The Examinee's TOEFL Score	<ul style="list-style-type: none"> <li>• The original examinee's TOEFL score (Paper-Based Testing or Internet Based-Testing). The original score will be returned after it is copied by the Admission Office.</li> <li>• TOEFL test which was taken within 2 years of the date of application is acceptable.</li> <li>• TOEFL-ITP (Institutional Test Program) score is not acceptable.</li> </ul>

Note 1: Items 2, 7, 8 and 9 must be typed in English.

Note 2: Contact the instructor of the program you wish to join to before applying.

- ③ Payment method for examination fee  
Entrance examination fee: 30,000 Japanese yen.

1) General Admission and Special Selection for Mature Applicants (Remittance from inside Japan)  
Please pay 30,000 Japanese yen for the examination fee using the prescribed form at a post office or Japan Post Bank within the designated payment period as indicated below. The receipt must be submitted with the application documents.

Government-financed international students do not have to pay the fee but must submit the “certificate of government-financed international studies” issued by your college (a copy is acceptable)

Note that post offices are normally open from 9:00 to 16:00 on weekdays and closed on Saturdays, Sundays and national holidays.

**Payment Period: From Friday, November 13 to Monday, November 30, 2009.**

2) Special Selection for International Students (Remittance from abroad)

The amount of 30,000 Japanese yen for the examination fee must be transferred from a financial institution following the instructions below. A photocopy of the Telegraphic Transfer Application Form must be submitted with the application documents.

- Telegraphic transfer
- Advise and pay
- Applicant pays the transaction charge
- Amount: ¥30,000 (Japanese yen)
- Transfer to:

Receiving bank:

SHINKIN CENTRAL BANK  
INTERNATIONAL OPERATIONS CENTER  
SWIFT CODE: ZENBJPJT

Receiving bank's address:

9-1 HONMURA-CHO, ICHIGAYA, SHINJUKU-KU, TOKYO JAPAN

Beneficiary's Account No:

0340900 with OBIHIRO SHINKIN BANK INADA BRANCH

Beneficiary's name:

OBIHIRO CHIKUSAN DAIGAKU

Beneficiary's Address:

11, NISHI 2, INADACHO, OBIHIRO, HOKKAIDO, 080-8555, JAPAN

**Payment Period: From Friday, November 13 to Monday, November 30, 2009.**

**\*All handling fees including transaction charges are to be paid by the applicant.**

④ Notes for Application

1) The examination fee is not refundable for any reason except the following:

- The applicant has failed to submit his or her application form by the prescribed date, or his or her application form has been rejected by the University.

- The applicant has paid the examination fee twice.

A request for a refund should be made promptly.

\*For further information about the refund, contact:

Admission Office

Obihiro University of Agriculture and Veterinary Medicine

Tel: +81-155-49-5321

2) An application will be rejected if the examination fee is not paid or the payment receipt is not dated by the post office or Japan Post Bank.

(2) Application period

General Admission • Special Selection for Mature Applicants • Special Selection for International Students

Applications will be accepted from Tuesday, November 24 to Monday, November 30, 2009.

If sent by mail, the documents must arrive by Monday, November 30, 2009.

(3) Application method

Enclose all the application documents in the prescribed envelope or an A4-sized envelope and bring it directly to the University or send it by mail.

① Direct Application: Accepted between 8:30 and 17:00, Monday through Friday.

② Mailed Application:

1) General Admission/Special Selection for Mature Applicants

The documents must be sent by registered special delivery mail, and must arrive by 17:00 on Monday, November 30, 2009. Documents arriving later than this will not be accepted. Please be sure to send them early enough to avoid postal delays.

2) Special Selection for International Students (Residents outside of Japan)

Documents must be sent by EMS or registered airmail, and must arrive by 17:00 on Monday, November 30, 2009. Documents arriving later than this will not be accepted. Please be sure to send them early enough to avoid postal delays.

(4) Where to send Application Documents

Admission Office, Student Affairs Section, Obihiro University of Agriculture and Veterinary Medicine.

11, Nishi 2, Inadacho, Obihiro, Hokkaido, 080-8555 Japan

Note: The application documents will not be returned unless stated in the application procedures.

4 Method of Selection

(1) General Admission

Results from the examination of academic ability and interview, the statement of purpose for application, and the academic transcript will be examined.

(2) Special Selection for Mature Applicants

Results from the interview, the letter of recommendation, the academic transcript, the research proposal, and the curriculum vitae/resume will be examined.

(3) Special Selection for International Students

The statement of purpose, the academic transcript, the letters of recommendation, the curriculum vitae/resume, short essay, and the TOEFL score will be examined. No interview is conducted in this Special Selection.

5 Program of Academic Skill (for General Admission only)

(1) MASTER'S PROGRAM OF LIFE SCIENCE AND AGRICULTURE

Laboratory	Examination Subjects	Specialized Subjects
Animal Production	English and Short Essay	Animal Production Science
Ecology and Environmental Science		Ecology and Environmental Science

Examination Subjects

I . Specialized Subjects

Note: Choose 1 subject from your desired laboratory.

II . English

Note: International students will have an oral examination in Japanese.

(2) MASTER'S PROGRAM OF FOOD SCIENCE

Laboratory	Examination Subjects	Specialized Subjects
Food Technology and Biotechnology	English and Short Essay	Food Technology and Biotechnology
Biomolecular Structure and Function		Biomolecular Structure and Function

Examination Subjects

I . Specialized Subjects

Note: Choose 1 subject from your desired laboratory.

II . English

Note: International students will have an oral examination in Japanese.

(3) MASTER'S PROGRAM OF AGRO-ENVIRONMENTAL SCIENCE

Laboratory	Examination Subjects	Specialized Subjects
Plant Production Science	English and Short Essay	Plant Production Science
Engineering for Agriculture		Engineering for Agriculture
Agricultural Economics		Agricultural Economics

Examination Subjects

I . Specialized Subjects

Note: Choose 1 subject from your desired laboratory.

II . English

Note: International students will have an oral examination in Japanese.

(4) MASTER'S PROGRAM OF ANIMAL AND FOOD HYGIENE

Laboratory	Examination Subjects
Animal Medical Science	English and Short Essay
Food Hygiene	
Environmental Hygiene	

## 6 Time, Date and Examination Location

### (1) General selection

Date	Subject	Time	Location
Wednesday, January 6, 2010	Foreign language (English or Oral examination in Japanese )	9:30 — 11:30	Obihiro University
	Special Subject and Short Essay	13:00 — 15:00	
Thursday, January 7, 2010	Interview	9:00 —	

### (2) Special Selection for Mature Applicants

Date	Subject	Time	Location
Thursday, January 7, 2010	Interview	9:00 —	Obihiro University

### (3) Special Selection for International Students

Selection based on submitted documents: Friday, December 4, 2009

Note: By 10:00am on Tuesday, January 5, 2010, the location of the examination room will be posted at the entrance of the General Research Building I. However, entry into the examination room is not allowed.

## 7 Advance Consultation for Applicants with Physical Disabilities

Applicants with physical disabilities are advised to consult with the Entrance Examination Office beforehand, as special consideration may be necessary for taking the examination or studying. Those who use a hearing aid, crutches, or a wheel chair are also advised to consult the Entrance Examination Office as special arrangements at the examination sites and other locations may be necessary.

(1) Deadline for the consultation: Friday, November 13, 2009

(2) For inquiries, contact: Admission Office, Student Affairs Section,

Obihiro University of Agriculture and Veterinary Medicine

11, Nishi 2, Inadacho, Obihiro, Hokkaido, 080-8555 Japan

Phone: +81-155-49-5321 (Direct line) (Mon.-Fri. 8:30-17:15)

Fax: +81-155-49-5324

## 8 Notification of Admission

(1) General Admission / Special Selection for Mature Applicants:

10:00 am, Thursday, February 4, 2010

Special Selection for International Students: 10:00 am, Thursday, December 17, 2009

The code numbers of the accepted students are displayed at the entrance of the General Research Building I and on the website (<http://www.obihoro.ac.jp>).

(2) Notification of admission and the documents necessary for enrollment procedures are sent to the accepted students.

(3) No telephone enquiries regarding admission.

## 9 Enrollment Procedures

### (1) Enrollment Period:

#### ① General Admission/Special Selection for Mature Applicants

From Monday, February 8 to Friday, February 12, 2010

#### ② Special Selection for International Students

From Monday, March 8 to Friday, March 26, 2010

### (2) Enrollment Fee: 282,000 yen

### (3) Tuition Fee: 267,900 yen for the first term (535,800 yen for one year)

Note: If there is an increase in tuition after enrollment, the student will be required to pay the difference.

### (4) Other Expenses

Fee for disaster/accident insurance for students in education/research: 2,780 yen

(Insurance for accidental injury in University activities)

## 10 Privacy Statement

(1) Any personal information we acquire is strictly protected under the “Law on Protection of Personal Information Held by Independent Administrative Agencies” and the “Obihiro National University of Agriculture and Veterinary Medicine Management Regulations of Personal Information.”

(2) Personal information such as your name and address that is sent during the application process is used for selection, notification of admission, enrollment procedures, survey and research on selection methods and additional procedures.

(3) Personal information such as the examination results acquired in the process of selection is used for survey and research on selection and selection methods.

(4) Of items (2) and (3) regarding the use of personal information mentioned above, only applies to successful applicants, school affairs (ex: study guidance etc.), student support (ex: scholarship application, tuition exemption application etc.) after entering Obihiro University, the information is used for these purposes only.

Description of the Master's Program of the Graduate School of  
Obihiro University of Agriculture and Veterinary Medicine

**Admission Policy**

This Graduate School strives to train researchers, college educators and advanced specialists to an international level so that they can conduct research on and teach about livestock production, food hygiene and environmental conservation from the standpoint of "food safety" and the symbiotic relationship between humans and nature. With these ideas and goals in mind, we are looking for prospective students who are:

1. basically interested in food safety issues
2. internationally-minded and wish to play an active role in international exchanges
3. experienced in the field, but wish to improve their basic and practical skills
4. in search of a way to enhance their ability to understand and solve the problems in the field

## **1 Purpose**

The Graduate School strives to broaden scientific knowledge through instruction and research in order to contribute to both theoretical and applied science.

## **2 History**

- June 1, 1967 Graduate School established with three Master's Programs (Veterinary Medicine, Dairy Science, Agricultural Chemistry)
- April 1, 1969 Master's Programs in Grassland Science and Agricultural Engineering implemented.
- April 1, 1976 Master's Program Agricultural Economics implemented.
- April 1, 1978 Master's Program Agro-Environmental Science implemented.
- April 1, 1982 Master's Program Science renamed to Course of Animal Science.
- April 1, 1990 Master's Program in Veterinary Medicine abolished.  
Department of Veterinary Medicine joined in the Doctor's Program at Gifu University United Graduate School of Veterinary Sciences.
- April 1, 1994 The Master's Programs in Animal Science, Agricultural Chemistry, Grassland Science, Agricultural Engineering, Agricultural Economics and Agro-Environmental Science reorganized to Master's Program in Animal Production & Agricultural Economics, Agro-Environmental Science and Bioresource Chemistry.  
Department of Agricultural Sciences joined in the Doctor's Program at Iwate University United Graduate School of Agricultural Sciences.
- April 1, 2001 Master's Program in Bioresource Chemistry renamed Bioresource Science.
- April 1, 2004 Independent Master's Program in Animal and Food Hygiene implemented.

### **3 Program Description**

#### **◎ Life Science and Agriculture**

Progress in life sciences and related technologies has transformed agriculture into an advanced bio-industry that requires not only special knowledge but also wide range of knowledge, spanning cellular biology to the global environment. The aim of this program is to provide students cutting-edge knowledge in animal and ecology/environment sciences. The curriculum covers various areas of life sciences from molecular biology to physiology, from animal behavior to conservation ecology. The program also provides research opportunities to deepen understanding in these subjects. The program consists of two majors, one specializing in animal production, and the other ecology and environmental science. Inter-disciplinary seminars are also provided to broaden the students' outlook on life, agriculture and the environment.

#### **Laboratory of Animal Production**

The curriculum of the major provides the latest knowledge in animal science and state-of-the-art production technologies. The major also addresses economic, social and environmental issues that the livestock industry and our societies face. Through a series of lectures, practicums and research activities, the course aims to nurture students who are capable of contributing to the life sciences as well as the livestock industry.

#### **Laboratory of Ecology and Environmental Science**

This major provides education in life science, mainly on various ecological research fields (synecology, landscape ecology, behavioral ecology, molecular ecology, conservation ecology) and environmental adaptation, dealing with the rich natural environment and extensive agricultural and livestock production systems of Hokkaido. This program intends to train people who can contribute to society by understanding the relationship between life and the environment from a broad perspective, comprehend their complicated and diverse mechanisms, think scientifically and make suggestions on environmental conservation and management.

## © Food Science

With the advances in the human diet, the role and importance of food science has become increasingly evident. Taking this into account, the goal of this program is to assist students in the acquisition of advanced knowledge and skills in the field of food processing and utilization with a focus on the secondary functions of food, and in the field of food function science that focuses on the tertiary functions of food. They will also gain knowledge and skills of the primary functions of food as the foundation of their studies. The program develops people who can, through their basic knowledge of organic chemistry, biochemistry, microbiology and molecular biology, comprehend advanced knowledge and skills in food science, apply bioprocesses to agricultural and livestock products, and elucidate the functions of food constituents that affect living bodies.

### **Laboratory of Food Technology and Biotechnology**

The goal in this major is for the students to acquire advanced knowledge and skills in the field of food processing and utilization by focusing on the secondary functions of food as well as knowledge and skills of the primary functions of food as the foundation of their studies. Advanced instruction and research is conducted on physicochemical properties of livestock products such as milk, dairy products, meat and meat products, the production techniques and safety of processed foods, physiology and quality of agricultural products in storage, processing methods of various agricultural products, quality evaluation, the latest processing techniques, and chemistry, nutrition, biological regulatory functions and health-promoting functions of nutrients contained in agricultural and livestock foods.

### **Laboratory of Biomolecular Structure and Function**

The students in this major are expected to acquire advanced knowledge and skills in the field of food function science focusing on the tertiary functions of food as well as knowledge and skills of the primary functions of food as the foundation of their studies. Advanced instruction and research is conducted on the application of the characteristics and microbe functions of food constituents, such as brewing and fermentation, in the production of food and useful materials, functions of food constituents in regulating a living organism and the mechanism for health maintenance and promotion, the development of functional evaluation methods, the present situation and prospective of biotech food, and disease prevention to support an aging society.

## ◎ Agro-environmental Science

Even though food issues are gaining more and more attention, still the degree of food self-sufficiency in Japan is remarkably low compared to other developed countries. Taking this into account, the goal of this program is to utilize the resources of Tokachi, Hokkaido, a major food production area for Japan, to acquire advanced knowledge and skills that will improve food productivity. Taking into consideration sustainable material circulation and use of local resources, based on advanced knowledge of the physiology, habits and heredity of plants and knowledge of soil, the program trains people who can make quantitative and qualitative enhancements in plant production, by improving the food production environment using their knowledge of mechanical, biological and civil engineering techniques, or by carrying out administrative and the efficient maintenance and development in food production using their knowledge of economics and administration related to food production.

### **Laboratory of Plant Production Science**

The goal of this major is to produce expert professionals with a comprehensive understanding of the factors that support sound ecological agriculture and livestock industry practices, including soil making, breeding and cultivation of upland and forage crops, disease and pest control, and grassland utilization, taking full advantage of being at an education and research institute located in Tokachi, Hokkaido, which is one of the largest upland and livestock zones in Japan. Through extensive practical instruction and research ranging from basic laboratory work to practical fieldwork, the course produces professionals who can take an active part in the making of the foundations of the world's agriculture and livestock industries.

### **Laboratory of Engineering for Agriculture**

In this major, advanced instruction and research is conducted on theories and applications of agricultural machinery system engineering, agricultural and rural engineering, and atmospheric and ground information science, which serve as the bases of agroenvironmental engineering. In the field of agricultural machinery system engineering, instruction and research is conducted on the advancement of agricultural and livestock techniques, quality improvement and cost reduction of agricultural products, and utilization techniques of biomass resources, based on agricultural energy engineering, farming system engineering and resource recycle engineering. In the field of agricultural and rural engineering, instruction and research is conducted on the improvement of agricultural production bases and rural living environments, and environmentally-friendly agriculture, based on agricultural land engineering, rural planning studies, and studies on farm land conservation. In the field of atmospheric and ground information science, instruction and research is conducted on the evaluation of meteorological, ground, and environmental information in farmlands and forests.

### **Laboratory of Agricultural Economics**

This major teaches:

- 1) Administrative theories for the sustainable development of farm management and supporting organizations
- 2) Theories for agricultural and food policies that provide citizens with a stable supply of food, and techniques to evaluate the effects of those policies
- 3) Advanced statistical theories necessary to carry out practical research about agriculture and food

Special emphasis is given to social survey and analysis by various techniques in order to go beyond merely acquiring theories but to understand the efficacy and limitations of them when applied to actual problems. This major cultivates the students' sense of administration and economics that will enable them to make practical suggestions to solve problems.

### ◎ **Animal and Food Hygiene**

In Japan as well as in many other countries in the world, the safety of food of animal origin (animals, milks, meats, etc.) has become an increasingly important issue in order to compete and survive in international free trade. In this program the practical education and research focuses on training students to be advanced specialists so they can work at the international level to enhance the safety of foods. This program will become one of the best in the world in the food hygiene field because it is supported and conducted by the research staff of the 21<sup>st</sup> Century COE program in Japan. The aim of this program is to address all the health management aspects of the production, processing and transportation of foods of animal origin. Therefore, this program has been designed to train students graduates from the departments of agriculture and animal husbandry, as future specialists in the field of “food safety,” so they have excellent research capabilities and enlightened opinions. To do accomplish this they are provided complementary knowledge from the viewpoint of the public health aspects of conventional veterinary medicine and the latest information on the production of foods and agricultural and animal husbandry products.

### **Laboratory of Animal Medical Science**

We teach technical development and theories for raising and breeding healthy livestock and controlling diseases as well as naturally maximizing the potential of healthy animals in order to improve economic efficiency. Furthermore, we examine the interactions between host animals and parasites, such as worms and protozoa that cause infectious diseases. Based on this research, we provide a comprehensive program of animal medical science that includes the diagnoses and treatment of zoonotic protozoan diseases, and the relationship between animal health/disease prevention and the basic functions of nutrition.

### **Laboratory of Food Hygiene**

We provide a comprehensive examination of the potential dangers that exist in the path that food takes from farm to dining table in order to achieve a stable and efficient supply of safe, high quality livestock food products. The instruction and research on food hygiene done by this Laboratory includes:

1. the treatment and prevention of pathogenic microbe contamination, (mainly bacteria and viruses),
2. the management and evaluation of sanitary control systems on farms and at food processing sites,
3. the economic evaluation and design of quarantine systems used in international trade,
4. the development of risk evaluation methods for livestock food products by examining food functions and
5. the pathogenic mechanism of microbes, and the analysis of health dangers related to food.

### **Laboratory of Environmental Hygiene**

We provide comprehensive instruction in environmental hygiene including prevention of diseases by infected vector animals, an international epidemiological study of infectious diseases and the utilization of biomass. Our studies cover the prevention of emerging and re-emerging diseases transmitted by vector animals such as rats, and external parasites like insects and ticks, and epidemiological study of infectious diseases associated with livestock food product hygiene as well as consideration of these diseases from the international point of view including the economic impact and prediction of potential outbreaks. We are also studying the establishment of a recycling system in the agricultural and livestock production system based on energy recycling (carbon) and material recycling (nitrogen) in order to alter the highly energy intensive livestock production system that greatly impacts the environment by disturbing material circulation, polluting water systems and emitting global-warming gases.

#### **4 Duration and Qualification**

(1) Animal Production and Agricultural Economics • Agro-environmental Science • Bioresource Science

In the Master's Program, regular attendance of two years at the University with completion of the curriculum and units decided by the Division of Research, and after completing the required research, by passing thesis inspection and final examination, a Master's Degree in Agriculture is awarded.

(2) Animal and Food Hygiene

In the Master's Program, after a regular attendance at the university for two years and completion of the required research, instructions, and after passing the thesis (including results of the research about a special problem/issue) inspection and the final examination, a Master's Degree in Animal and Food Hygiene will be awarded.

Laboratory	Degree
Life Science and Agriculture	Master (Agriculture)
Food Science	Master (Agriculture)
Agro-environmental Science	Master (Agriculture)
Animal and Food Hygiene	Master (Animal and Food Hygiene)

#### **5 Teaching Certificate**

In the Master's Program, if students who have a high school teaching certificate (Agriculture or Sciences) and attend more than one year at the University and complete the curriculum, required research, pass thesis inspection and final examination, a Special Teaching Certificate for High School (Agriculture, Sciences) is awarded.

The graduates of the Master's Program of Animal and Food Hygiene (Provisional) are ineligible for a Teaching Certificate / College Teaching Certificate.

#### **6 Application from workers in the private / public sectors**

The Graduate School welcomes applications from those who are working in private / public sectors.

#### **7 Special long term limit**

This system allows students who have a job or other special considerations to complete their degree within an agreed-upon time (maximum of four years) beyond the standard term limit and still pay the same fee as those students who complete their degrees in the standard amount of time.

In principle, those who want to use this system must apply for it at the time they enroll after consulting with their prospective advisor.

#### **◎ Application and enquiries**

1. Contact method:

Please contact us by telephone or postal mail. If you contact us by postal mail, please enclose a self-addressed stamped envelope (if you send mail from outside Japan, please enclose international reply coupons for 250-gram airmail instead of postage stamps).

2. Contact:

Admission Office,  
Student Affairs Section,  
Obihiro University of Agriculture and Veterinary Medicine.  
11, Nishi 2, Inadacho, Obihiro, Hokkaido, 080-8555 Japan  
Phone: +81-155-49-5321 (Monday-Friday, 8:30-17:15)  
Fax: +81-155-49-5324

#### **Obihiro University Website**

Visit our website for further information on admission, faculties and outline of Obihiro University of Agriculture and Veterinary Medicine.

<<http://www.obihoro.ac.jp>>

