For International Applicants

# Graduate School of Agriculture Osaka Metropolitan University

# Master's Program Admission Guidelines for International Students

[For September, October 2022 Admission] [For April 2023 Admission]



<On the Response to COVID-19 >

The latest information on our response to COVID-19 shall be published on our website. Any changes to the information provided in the admission guidelines shall also be published on our website, so please remember to check it regularly.

Osaka Metropolitan University Admission Guidelines Website (In Japanese only)

https://www.upc-osaka.ac.jp/new-univ/admissions/



May 2022

Graduate School of Agriculture Osaka Metropolitan University

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### Admission Policy of Graduate School of Agriculture

Today, we are faced with numerous challenges on both the domestic and international levels. Global challenges include securing sustainable energy, resources and food, and addressing the global environmental deterioration symbolized by abnormal and extreme weather. Within Japan, we face urban environmental issues, food loss, and the extension of healthy life expectancy. The academic field of agriculture can contribute extensively to solve these problems. Educational research in the agricultural sector is also expected to play a key role in achieving the Sustainable Development Goals (SDGs) set by the United Nations. Graduate schools are also expected to play a central role in fostering "intellectual professionals" in current social reform (from the "Fourth Guidelines on Measures to Promote Graduate School Education"). Accordingly, the philosophy of education and research in the Graduate School of Agriculture is to develop human resources with a high level of understanding and deep insights into agriculture-related fields to realize the sustainable society necessary in Japan and overseas.

To realize this philosophy, the Graduate School of Agriculture seeks students with the following qualities, abilities, and motivations.

- 1. Those with a deep interest and understanding of agriculture.
- 2. Those with logical thinking abilities and an independent, inquiring spirit.
- 3. Those with sufficient basic skills in their major academic field of study and proficiency in English.

#### Master's Program

### Admission Policy of Department of Agricultural Biology

The Department of Agricultural Biology aims to educate students to use the varied potential of biology to benefit human life and acquire knowledge to contribute to creating a sustainable society using biological sciences for the production and security of food, resources, and useful materials or in environmental conservation. The Department provides a broad range of education, from gene-level knowledge represented by molecular biology to field science, and also focuses on data science. Our philosophy of research and education is to train human resources with high-level expertise and broad perspectives, high research ethics, and the ability to conduct independent research.

To realize this philosophy, the Department of Agricultural Biology seeks students with the following qualifications, abilities, and motivations.

- 1. Those with the basic ability to understand various biological mechanisms from different perspectives, from the genetic and cellular level to the individual level, and are willing to contribute to the development of agricultural biology.
- 2. Those who can independently form hypotheses and experimentally test them to solve problems in various research areas related to agricultural biology.
- 3. Those who can learn research ethics and the appropriate handling of research results in society.

Based on these, we will select students with the following skills and aptitudes.

- 1. A wide range of basic and professional academic abilities to understand the diverse properties of organisms from different perspectives.
- 2. Creativity and logical thinking to independently formulate hypotheses and experimentally verify them.
- 3. Sufficient communication skills and English-language proficiency.

### Admission Policy of Department of Applied Biological Chemistry

The Department of Applied Biological Chemistry conducts research on bioscience and biotechnology based on chemistry to clarify the various biological phenomena of living organisms and use the diverse life functions of biological organisms. The Department aims to train human resources capable of playing an active role in different social fields with advanced knowledge and skills in biological chemistry and research ethics.

To realize this philosophy, the Department of Applied Biological Chemistry seeks students with the following qualities, abilities, and motivations.

- 1. Those who are motivated to learn bioscience and biotechnology based on chemistry and contribute to the solution of various problems in modern society.
- 2. Those who can form hypotheses about problems in the advanced and diversified research fields of Applied Biological Chemistry and verify them experimentally.
- 3. Those who can learn research ethics and the appropriate handling of research results in society.

Based on the above, we will select students with the following skills and aptitudes.

- 1. A wide range of basic and professional academic abilities to understand the various functions of a wide variety of organisms at the molecular, cellular, and individual levels.
- 2. Independence and logical thinking ability to independently form hypotheses and experimentally verify them.
- 3. Sufficient communication skills and English-language proficiency.

### Admission Policy of Department of Environmental Sciences and Technology

The Department of Environmental Sciences and Technology conducts education and research on science and technology based on regional studies to shed light on the ecosystems formed by various phenomena and interactions within the environment and biomes, including human activities, and address various environmental problems facing the region. The Department's philosophy of education and research is to train human resources who can contribute to the development of environmental science and technology.

To realize this philosophy, the Department of Environmental Sciences and Technology seeks students with the following qualities, abilities, and motivations.

- 1. Those with a deep interest in and understanding of the conservation and creation of an environment that contributes to the sustainable development of cities and urban areas, and are willing to contribute to the development of society.
- 2. Those who can formulate hypotheses about the advanced and diversified fields of environmental science and technology and verify them.
- 3. Those who can learn research ethics and the appropriate handling of research results in society.

Based on the above, students who have acquired the following 1 to 3 skills and aptitudes are selected.

- 1. A wide range of basic and professional abilities to understand the relationships between environmental factors such as air, soil, water, and organisms and ecosystems, and human life.
- 2. Creativity and logical thinking skills to form hypotheses and test them.
- 3. Sufficient communication skills and English-language proficiency.

## Admission Guidelines for International Applicants Master's Program

### [1] Allocation of Admission Spaces

Department	Capacity
Department of Agricultural Biology	low enrollment capacity
Department of Applied Biological Chemistry	low enrollment capacity
Department of Environmental Sciences and Technology	low enrollment capacity

### [2] Qualification for Admission

### <For admission in September or October 2022>

Non-Japanese nationals who have or are expected to obtain by the time of enrollment a valid "Student" visa as defined by the Immigration Control and Refugee Recognition Act and meet one of the following criteria. For those who have graduated or are expected to graduate from a Japanese university, only those who have been admitted or transferred to a university through the Special Selection for Foreign Students are eligible to apply.

- (1) Those who have completed 16 years of school education in foreign countries and those who are expected to complete their studies by September 30, 2022.
- (2) Those who have graduated from a university in Japan or who is expected to graduate by September 30, 2022.
- (3) Those awarded a degree from the National Institute for Academic Degrees and Quality Enhancement of Higher Education and those who is expected to receive a degree by September 30, 2022.
- (4) Those who have completed in Japan a 16-year course offered by a foreign school through correspondence in Japan and those who are expected to complete their studies by September 30, 2022.
- (5) Those who have completed in Japan relevant courses designated separately by the Minister of Education, Culture, Sports, Science and Technology at an educational institution that is positioned within the school education system of the relevant foreign country as one that provides university courses(\*1). This also includes those who are expected to complete their studies by September 30, 2022.
  - \*1 This applies only to those who have completed 16 years of course work as part of school education in the relevant foreign country.
- (6) Those who were awarded a degree equivalent to a Bachelor's degree by completing a course with a study period of at least 3 years at a foreign university or other foreign school (\* 2) and those who are expected to be awarded the degree by September 30, 2022.
  - \*2 The comprehensive situation regarding educational research activities shall be limited to those who have been evaluated by the foreign government or persons recognized by related organizations or those designated by the Minister of Education, Culture, Sports, Science and Technology.
    - This includes completing in Japan, according to the information given above, the correspondence course offered by the relevant foreign school which is part of the education system of that foreign country.
- (7) Those who have completed a course after the date separately designated by the Minister of Education, Culture, Sports, Science and Technology in a specialized course offered by a vocational school (\*3). This also includes those who are expected to complete their studies by September 30, 2022.
  - \*3 Students must meet the standards specified by the Minister of Education, Culture, Sports, Science and Technology such as the duration of the course of study being at least 4 years and other standards.
- (8) A person designated by the Minister of Education, Culture, Sports, Science and Technology (Feb. 7, 1953 Notice No. 5 of the Ministry of Education).
- (9) A person who falls under any of the following and is recognized by the Graduate School as having acquired the designated credits with excellent results (so-called grade skipping).
  - a. Those who have studied at a university in Japan for at least 3 years and those who are expected to have attended the university for at least 3 years by September 30, 2022.
  - b. Those who completed a 15-year course as part of school education in a foreign country and those who are expected to complete their studies by September 30, 2022.

- c. Those who have completed a 15-year course which is part of the relevant foreign country's school education. The course subjects must have been completed in Japan through correspondence. This also includes those who are expected to complete their studies by September 30, 2022.
- d. Those who have completed in Japan the relevant courses designated by the Minister of Education, Culture, Sports, Science and Technology offered by an education institution that is positioned within the school education system and one that delivers university courses(\*4). This also includes those who are expected to complete their studies by September 30, 2022.
  - \*4 Applies only to those who have completed a 15-year course as part of school education in the relevant foreign country.
- (10) Those who are recognized by the Graduate School as having graduated from a university through the qualification examination and those who have an academic ability equal to or beyond that of a university graduate and are also 22 years of age by September 30, 2022.
- (11) Those who are recognized by the Graduate School as having graduated from a university through the qualification examination and those who have an academic ability equal to or beyond that of a university graduate.

### <For admission in April 2023>

The same conditions above, but the date "September 30, 2022" should be replaced with "March 31, 2023".

[Notes]

- Applicants who qualify for admission per criteria (9), (10), and (11) for both admission in September or October 2022 and admission in April 2023 must go through the qualification process described in "[4] Qualification Screening" in advance.
- (2) Applicants who do not have or will not obtain a "Student" visa, please contact the Admissions Office at least two weeks prior to the start of the online application registration period.

### [3] Application Procedure

The application procedure will be conducted via the internet.

### Please consult with your prospective supervisor before you apply.

\*\* Applicants who wish to apply from outside Japan (overseas) will be notified of the application procedure separately. Please send an email to the Admissions Office (<u>gr-nyu-agriculture@omu.ac.jp</u>) by June 17, 2022 if applying for admission in September or October 2022 or by November 11, 2022 if applying for admission in April 2023 including your name and the department to which you wish to apply.

#### 1. Application Period

### <For admission in September or October 2022>

Heading	Period
Online application registration	July 1, 2022, 10:00 to July 12, 2022, 17:00
Submission of documents required for application	July 8 – 12, 2022 (postmarked by July 12) (Note) Please send by simplified-registered mail

#### <For admission in April 2023>

Heading	Period
Online application registration	November 25, 2022, 10:00 to December 1, 2022, 17:00
Submission of documents required for application	November 29 – December 1, 2022 (postmarked by December 1) (Note) Please send by simplified-registered mail

Note: For application documents sent from overseas by EMS, the date of arrival in a post office in Japan will be used as the standard date.

Submissions may be made in person to the Admissions Office, 3rd floor, Block A3, Nakamozu Campus, within the application period indicated above (except Saturdays and Sundays) only between the hours of 10 a.m. to 5 p.m. **Even when dropping off forms in person, please use an envelope and ensure it is sealed.** 

### 2. Method of Application

Please follow Steps 1 – 6 below to submit your application.

Advance Preparations					
	PC or other Operating Environment	• Applications can be registered from a PC, smartphone, or other device connected to the internet			
	Printing Requirements	• Print the documents that need to	be mailed on A4 paper.		
• A notification email will be s			be sent when you register your application. Ensure that you et to your safelist as an authorized sender so that you can domain.		
	Documents Necessary for Application	• Please refer to [3] Application them, so they may be submitted		n Documents and prepare	
	<ul> <li>Please prepare two types of envelopes:</li> <li>① A commercially available rectangle-type No. 2 (24.0cm×33.2cm) for application documents.</li> <li>② A commercially available long-form No. 3 (12.0cm×23.5cm) with stamp 404 yen attached for sending the Entrance Examination Card</li> </ul>				
▼	:		0		
	• Accessing the Or	nline Application Site			
	• You can find the	e Online Application Site on the u	niversity website during t	he application registration	
Step2	period. University Webs				
▼					
	Application Regi	istration			
Step3	<ul> <li>tep3</li> <li>Please read the "User's Guide," "Application Procedures," and "Q&amp;A" on the Internet Application Site before you register your application.</li> <li>Please verify all your entered information on the final confirmation screen, as you cannot change the input information after the application registration is completed.</li> </ul>				
<b>V</b>	-				
	• Payment of Example 1	mination Fee			
Step4	<ul> <li>Please pay the examination fee (30,000 yen) by any of methods (1)–(4), as per the instructions on the online application site. (See [3] Application Procedure 3. Examination Fee Payment Method)</li> <li>In addition to the examination fee, a handling fee (990 yen) is required.</li> </ul>				
	(1)	(2)	(3)	(4)	
	Credit card	Convenience stores	ATM (Pay-Easy)	Net banking	
	• Printing the App	lication Confirmation Slip and Add	ress Label		
Step5	• Please complete printing within the registration period for the online application. You will not be able to print the application confirmation slip and address label after the registration period.				

	• Sending the Required Documents
Step6	<ul> <li>Please send the application documents by simplified-registered mail (postmark valid). (See p.6 [3] Application Procedure 4. Application Documents)</li> <li>If you wish to submit the documents in person, please note the dates and times for submitting the documents.</li> <li>Application documents not submitted within the deadline will not be accepted. (See p.4 [3] Application Procedure 1. Application Period)</li> </ul>

- 3. Examination Fee Payment Method
  - The fees required for application registration are as follows.
    - Admission certification fee ¥30,000
    - Handling fee ¥990

Payment may be made through any of the following payment methods available. For detailed information on payment methods, please check the screen for the payment method selected on the "Select Payment Method" page of the online application site.

Payment Method	Handling Agency
(1) Credit card	VISA, MasterCard, JCB, AMERICAN EXPRESS, Diners Club Note: Only lump-sum payments are accepted.
(2) Convenience stores	7-Eleven, Lawson, Ministop, FamilyMart, Daily Yamazaki, Yamazaki Daily Store, Seicomart Note: Only cash payments are accepted.
(3) ATM (Pay-Easy)	You can pay at ATMs in financial institutions that have the Pay-easy mark.
(4) Net banking	You can use the banking services of more than 1,000 banks across Japan, including major megabanks that support Pay-easy.

4. Application Documents

After registering your application and paying the examination fee, <u>please submit all the following documents</u> within the submission period. Please download the designated form from the university website.

Ensure that you use a commercially available rectangle-type No.2 envelope (24cm x 33.2cm) with the following address label attached.

\*\* Applicants who have undergone [4] Qualification Screening may omit documents that are duplicated in the Qualification Screening.

	Application Documents	Preparation	
1	Application Confirmation Form (for submission to the university)	• After registering your online application and paying the examination fee, please print the application form on A4-sized paper from the online application site.	
2	Application for Admission	<ul> <li>Please use either the Japanese or English form specified by the Graduate School.</li> <li>Please paste 4cm x 3cm photos taken within the last three months.</li> </ul>	
3	Entrance Examination Card	• Please use the form specified by the Graduate School.	
4	Photo Card	<ul><li>Please use the form specified by the Graduate School.</li><li>Please paste 4cm x 3cm photos taken within the last three months.</li></ul>	
5	Certificate of Graduation (Completion) or Prospective Certificate (Documents Certifying Qualification for Admission)	• Certificate issued by the president of the applicant's previous university stating that the applicant has received (or expects to receive) the degree.	

6	Academic Transcript	<ul> <li>A transcript issued by the president of the applicant's previous university stating the number of credits and the grades of courses taken.</li> <li>Transfer students must also submit transcripts of grades from the educational institution they attended before transferring.</li> </ul>
7	Score certificate of either TOEIC L&R or TOEFL- iBT	<ul> <li>Accepted tests and validity period</li> <li><for 2022="" admission="" in="" october="" or="" september=""> <ul> <li>TOEIC Listening &amp; Reading public test results (IP test not permitted) or</li> <li>TOEFL-iBT grade taken after August 2020 shall be valid.</li> </ul> </for></li> <li><for 2023="" admission="" april="" in=""> <ul> <li>TOEIC Listening &amp; Reading public test results (IP test not permitted) or</li> <li>TOEFL-iBT grade taken after January 2021 shall be valid.</li> </ul> </for></li> <li>Accepted score certificates <ul> <li>Please submit the original "TOEIC Listening &amp; Reading OFFICIAL SCORE</li> <li>CERTIFICATE" of the TOEIC Listening &amp; Reading public test or the "Test Taker Score Report" of the TOEFL-iBT. The original copy of the submitted score certificate will not be returned.</li> <li>* Only the Test Date score of the TOEFL-iBT "Test Taker Score Report" may be used in the application. (We do not use My Best ™ scoring.)</li> <li>* We do not accept the TOEFL-iBT Special Home Edition and TOEFL-iBT Home Edition score certificates.</li> <li>If you have not received the score certificate in time for submission by mail, you may temporarily submit a paper printout of the score certificate by the morning of the day before the exam. If no score certificate is submitted, we will consider the applicant's English score to be 0.</li> </ul> </li> </ul>
8	Letter of Recommendation	• From a supervising professor, superior authority from applicant's institute, from the applicant's university.
9	Applicant's Background and Curriculum Vitae	• Please use either the Japanese or English form specified by the Graduate School.
10	Copy of the residence card	<ul> <li>Please submit photocopies of both sides of the residence card.</li> <li>Overseas residents must submit a copy of their passport (the page with the photo).</li> </ul>
11	Envelopes for sending Entrance Examination Card	<ul> <li>Please write your name, address, and postal code on a commercial long-form No.3 envelope (12cm×23.5cm) and attach a stamp worth 404 yen.</li> <li>※ Please add "sama (様)" after your name.</li> <li>Note: Even if the application documents have been submitted directly to the Admissions Office, including the envelope for sending the Entrance Examination Card.</li> </ul>
12	Address Label	• After registering your online application and paying the examination fee, please print it on a piece of A4 paper from the online application site and paste it on the commercial rectangular No.2 envelope (24cm×33.2cm).

[Notes]

1. Original copies of the above certificates are required for application. Copies will not be accepted.

2. No changes in the information will be accepted after the application procedure.

3. If your name is different from the name on the graduation certificate from your university, please submit a document certifying that fact (official family register, etc.).

### 5. Notes for Applications

(1) You must complete all the procedures for application registration, payment of the examination fee and others, and submission of the application documents (by mail or in person) within the "Application Period" as indicated on page 4, Section [3] Application Procedures, item 1. <u>Please note that the application procedure is not completed if you only completed the steps of application registration and payment of examination fee.</u>

(2) Input of Applicant Information

Please enter an address where you can receive mail when sending the Entrance Examination Card. If your address has changed since the announcement of successful applicants, please contact the Admissions Office (E-mail:<u>gr-nyu-agriculture@omu.ac.jp</u>) or submit a change of residence notification to the post office.

- (3) You cannot change the details in the application once registration has been completed. If you notice a mistake before paying the examination fee, please do not pay the fee, and begin registration again from the beginning. Additionally, you are not permitted to cancel an application once it has been accepted.
- (4) The "Application Receipt Number" listed on the application confirmation slip is not the examination number.
- (5) We cannot accept incomplete Applications for Admission. When registering the application, please ensure you include a contact number and email address where you can be reached, as we may contact you if the application is incomplete.
- (6) Once paid, the examination fee shall not be refunded except for the following reasons.
  - Grounds for refund:
  - If you paid the examination fee but did not apply,
  - If the application documents are incomplete or otherwise unacceptable,
  - In case of duplicate payment of examination fee.
  - Note: Please contact the Admissions Office within one month of the application deadline for information on obtaining a refund.
- 6. Sending the Entrance Examination Card

The "Entrance Examination Card" and "Instructions for the Examination" will be sent by simplifiedregistered mail to those who have completed the application procedures. The cards are expected to be mailed by July 21 for September, October 2022 Admissions and by December 12 for April 2023 Admissions. If you do not receive these after one week from the scheduled mailing date, please contact the Admissions Office. (E-mail : <u>gr-nyu-agriculture@omu.ac.jp</u>)

#### 7. Considerations for Examination

Persons with disabilities or in another situation that requires consideration for the examination, please contact the Admissions Office as soon as possible before submitting your application. (E-mail : gr-nyu-ask3@omu.ac.jp)

### [4] Qualification Screening

Applicants who are eligible to apply for admission in September or October 2022 or admission in April 2023 per qualification criteria (9), (10), or (11) must undergo the Qualification Screening as follows before applying. You are required to inform your prospective supervisor of your application before submitting your documents.

- 1. Documents to be submitted
  - (a) Applicants who come under the application qualifications (9) a
    - Applicant's Background and Curriculum Vitae (Form 1)
    - Student Status Certificate
    - Academic Transcript
    - Material to gain an understanding of the course content taught at the university the student is currently enrolled in
  - (b) Applicants who come under the application qualifications (9) b, (9) c or (9) d
    - Applicant's Background and Curriculum Vitae (Form 1)
    - Certificate of completion or a document certifying expected completion
    - Academic Transcripts
    - · Documents on the details of classes at your previous university

- Research Background (Form 2)
- (c) Applicants who come under the application qualifications (10) or (11)
  - Applicant's Background and Curriculum Vitae (Form 1)
  - Certificate of Graduation (Completion)
  - Academic Transcripts
  - Research Background (Form 2)

%Form1 and Form2 may be downloaded from our website. You may use either the Japanese or English form.

### 2. Submission Period

Acceptance period	Shipping address (Inquiries)
<pre><for 2022="" admission="" in="" october="" or="" september=""> June 7 - 9, 2022 [Deadline: June 9, 2022] </for></pre> <for 2023="" admission="" april="" in=""> October 4 - 6, 2022 [Deadline: October 6, 2022]</for>	Admissions Office (Nakamozu Campus), 1-1, Gakuen-cho, Naka-ku, Sakai, Osaka, 599-8531, Japan TEL 072-254-8319 % Please send by registered mail before the deadline. % Please write "Qualification Screening Documents for Application to the Graduate School of Agriculture" on the envelope.

Submissions may be made in person to the Admissions Office, 3rd floor, Block A3, Nakamozu Campus, within the application period indicated above and only between the hours of 10 a.m. to 5 p.m. **Even when dropping off forms in person, please use an envelope and ensure it is sealed.** 

### 3. Announcement of Result Qualification Screening

Applicants will be notified in writing of the results of the screening.

Note: If you are requested to submit additional documents by the Graduate School, please follow the instructions immediately.

### [5] Examination Date and Location

Examination date				
For admission in September or October 2022	For admission in April 2023	Examination subjects	Examination time	Examination locations
August 23, 2022	January 5, 2023	Special subject (Written examination)	13:00-15:00	Nakamozu campus building B11
August 24, 2022	January 6, 2023	Special subject (Oral examination)	10:00-	Nakamozu campus building B11, C17

Refer to the details of the examination will post at the entrance of building B11 at 9 am on the day of the examination.

Spare day

For admission in September or October 2022	August 25, 2022	Due to unexpected circumstances such as
For admission in April 2023	January 7, 2023	natural disasters, the above examination is postponed on the day that is designated.

### [6] Admission Selection Method

Comprehensive judgment will be made based on the tests of academic ability (written and oral examinations), English language (TOEIC or TOEFL results), and application documents.

1. Written examination

Specialized Subject Examination —— As per the table below for each major.

### [Department of Agricultural Biology]

Specialized Subject Examination			
Compulsory Subject	Elective Subjects (Please elect ONE subject from the following ten elective subjects.)		
<ul> <li>Basics of Agricultural Biology <ul> <li>(Questions on the basic knowledge for Plant physiology</li> <li>[Photosynthesis, Use of Nutrition and Water etc.],</li> <li>Genetics [Genes and Genetic map etc.] and</li> <li>Biochemistry [Enzyme, Metabolism of Biomolecules etc.] etc.).)</li> </ul> </li> <li>References <ul> <li>Plant Physiology and Development Sixth edition, by Lincoln Taiz, Eduardo Zeiger, Ian M. Møller, and Angus Murphy</li> <li>The Cell: A Molecular Approach by Geoffrey M. Cooper and Robert E. Hausman</li> <li>Essential Genetics and Genomics Seventh Edition by Daniel L. Hartl</li> </ul> </li> <li>Principles of Biochemistry 5th Edition by Laurence A. Moran, Robert A Horton, Gray Scrimgeour, and Marc Perry</li> </ul>	Plant Molecular Breeding Functional Genomics Cell Molecular Biology Metabolism and Biochemistry Plant Nutrition Plant Pathology Breeding and Genetics Food Safety Science Horticultural Science Crop Production Science		

### [Department of Applied Biological Chemistry]

Specialized Subject Examination		
Compulsory Subject	Elective Subjects (Please elect ONE subject from the following nine elective subjects.)	
Applied Biological Chemistry (Questions on the basic knowledge for Biochemistry, Molecular Biology, Microbiology, Organic Chemistry, Enzyme Chemistry, Analytical Chemistry, etc.)	Nutrition Chemistry Applied Microbiology Bioresource Chemistry Food Chemistry Chemistry of Biological Macromolecule Natural Products Chemistry Fermentation Physiology Synthetic Organic Chemistry Biophysical Chemistry	

### [Department of Environmental Sciences and Technology]

Specialized Subject Examination		
Compulsory Subject	Elective Subjects (Please elect ONE subject from the following nine elective subjects.) ( ); keywords for each subject	
General question on environmental sciences and technology (e.g. environmental problems, which concerns to mankind and various organisms)	<ul> <li>Ecological Meteorology <ul> <li>(Heat and gas transfers, Meteorology, Climate modification and climate change)</li> <li>Environmental Control in Biology</li> <li>(Plant responses to environment, Interactions between plants and environment, Biomass utilization)</li> <li>Geo-environmental Engineering</li> <li>(Geotechnical Engineering, Greening base, Design and maintenance of facilities)</li> <li>Science and Engineering of Hydrological Environment</li> <li>(Hydrological cycle, Water quality, Watershed and irrigation management, Water and soil)</li> <li>Environmental Engineering in Biological Production</li> <li>(Instrumentation technology, Bioproduction engineering, Management of bioproduction environment, System engineering in bioproduction environment)</li> <li>Landscape Planning and Design</li> <li>(Urban and rural landscape design, Open space planning, Urban park planning and design)</li> <li>Landscape Architecture and Conservation</li> <li>(Conservation ecology, Vegetation management, Nature restoration)</li> <li>Regional Landscape Management</li> <li>(Regional environment management, Symbiosis with regional ecology)</li> <li>Environmental Entomology and Zoology</li> <li>(Insect systematics, Insect physio-ecology, Animal ecology, Conservation of biodiversity)</li> </ul> </li> </ul>	

### 2. English Grade Evaluation.

Based on the results of TOEIC Listening & Reading public testing or TOEFL-iBT

### 3. Oral Examination

Details will be posted at the examination site.

### [7] Announcement of Successful Applicants

1. Announcement of successful applicants

Date and time of announcement	Place of publication
<b>For admission in September or October 2022</b> > September 5, 2022, 10:00 <b>For admission in April 2023</b> > January 23, 2023, 10:00	https://www.upc-osaka.ac.jp/new- univ/admissions/g/exam_info/pass.html

Successful applicants will be notified directly. The examination numbers of successful applicants will also be posted on the university website, from 10:00 on the day of the announcement to 17:00 on the seventh day from the announcement. Please note that the university will not respond to any inquiries regarding the results by telephone or other means.

2. Letter of Acceptance and Enrollment Procedure Documents

Successful applicants will receive the letter of acceptance along with the enrollment procedure documents via registered mail.

#### Note:

Applicants other than 'those who have completed 15 years of course work in a foreign country' who wish to enroll in the Graduate School in accordance with application qualification (9) will be treated as a provisionally accepted applicant. The provisionally accepted applicant must provide a transcript which shows the results achieved up to the third year of study. This can either be sent by post (registered post) or submitted in person to the Admissions Office by March 2, 2023. (If sent by post it must arrive by this day. It is not necessary for students enrolled in the Life Environment Science Area to provide the transcript.)

Those who have passed the final grades examination after presenting the above certificate will be regarded as successful candidates. The others will be regarded as unsuccessful applicants. Successful applicants will be notified directly. The examination numbers of successful applicants will also be posted on the university website at 10:00 on March 10, 2023.

### [8] Enrollment Procedures

1. Date of Enrollment

#### <For admission in September or October 2022>

September 24, 2022

- \* Date of enrollment of those who meet application qualification during September 24 to 30, 2022 will be October 1, 2022.
- <For admission in April 2023>

April 1, 2023

2. Enrollment Procedures

#### <For admission in September or October 2022>

September 5–16, 2022 Must arrive no later than this date.

If the documents arrive after September 16, they must be postmarked by September 14 (\*)

#### <For admission in April 2023>

March 1–15, 2023 Must arrive no later than this date

If the documents arrive after March 15, they must be postmarked by March 13 (\*)

The application must arrive by mail within this period.

(\*) Only in the case of simplified-registration express mail postmarked at a post office in Japan. For application documents sent from overseas by EMS or other methods, the date of arrival in a post office in Japan will be used as the date for consideration.

Submissions may be made in person to the Admissions Office, 3rd floor, Block A3, Nakamozu Campus, within the application period indicated above (except Saturdays and Sundays) only between the hours of 10 a.m. to 5 p.m.

Successful applicants will be notified of the details of the procedure.

Applicants who do not complete the Enrollment Procedures will be treated as having declined admission.

### [9] School fees (Enrollment Fee and Tuition Fee)

The current schedule is as follows, all of which are subject to revision.

1. Enrollment Fee: Osaka residents and their children: 282,000 yen; Others: 382,000 yen

"Osaka residents and their children" shall apply to the following persons who have completed the prescribed procedures and have been approved.

- Eligibility: Either the applicant or his/her parents who appear on the same family registry as the applicant must present a certificate of residence in Osaka Prefecture for at least one year prior to the date of admission (on or before September 24, 2021 for admission in September or October 2022, or on or before April 1, 2022 for admission in April 2023). The same requirement applies to applicants who do not have Japanese citizenship.
  - \*Those who qualify for admission between September 24 and September 30, 2022, must have a certificate of residence in Osaka Prefecture continuously starting from a date that is before October 1, 2021. The same requirement applies to those who do not have Japanese citizenship.
- The enrollment fee must be paid by the time of the Enrollment Procedures using the designated bank transfer form.
- Payment of the enrollment fee is not sufficient to complete the Enrollment Procedures, and the enrollment fee must be paid before the Enrollment Procedures can be completed.
- After completing the enrollment procedures, the enrollment fee is not refundable even if the applicant declines admission.
- The university does not allow for deferrals of the entrance fee payment.
- 2. Tuition fee [Annual amount] 535,800 yen
  - Tuition is to be paid semi-annually in the amount equivalent to half of the annual tuition fee by direct debit from the bank account you register.
  - The tuition fee will be debited from your bank account on May 27 for the first semester and October 27 for the second semester. If the debit date falls on a holiday of a financial institution, the debit date will be the next business day.
  - For students who have applied for tuition reduction and exemption or are long-term study students, the amount of tuition fee and the date of withdrawal for the relevant year may differ from the above.

### [10] Long-Term Study System

(1) Purpose

This system is intended for students for whom it will be difficult to complete a curriculum within a standard term of study (2 years for master's program) owing to various circumstances such as holding down a job, and makes it possible for them to obtain a degree by taking longer than the standard term to study intentionally and complete the course.

(2) Applicant qualification

Individuals who meet any of the following conditions may submit the "Application for Long-term Course of Study" to apply for long-term study.

- (a) Applicants who have a job and work.
- (b) Applicants who have circumstances of child care, caregiving, or other responsibilities.
- (c) Applicants who have any other matters deemed necessary by our dean.
- (3) Term of study

The period of long-term study system for master's program students is 3-, or 4-years, which shall be approved individually.

Students who wish to shorten their period of long-term study because of the dissolution of the conditions above must submit "Reduction in the Period of Long-term Study Request" by the deadline.

(4) Tuition fees under the long-term study system (annual amount)

The fee shall be the figure obtained by multiplying the regular annual tuition fee by the number of years corresponding to the standard term of study, and dividing that by the number of years approved for long-term study. (Should tuition fees be revised while the student is enrolled at the university, the new tuition fees shall apply to enrolled students as well.)

If a reduction in the period of long-term study has been approved, the student must make up the difference from the original tuition fee.

(5) Period for submitting the request form

At the time of filling the application form for the entrance examination, please submit "Application for Long-term Course of Study".

- (6) Permission for long-term study Permission for long-term study and abbreviation of the period of long-term study are determined after discussions among the faculty of the Graduate School.
- (7) Please contact us if you want further details on the long-term study system.

Submission Documents and Contact Information

Academic Affairs Section, Graduate School of Agriculture, Osaka Metropolitan University Education Affairs Division (Nakamozu Campus) (Tel: 072-254-9401)

Note: Applicants who wish to apply for long-term study should consult beforehand with their prospective supervising professor.

### [11] Other

1. Handling for the Protection of Personal Information

- (1) The names, addresses, and other personal information submitted at the time of application will be used solely to conduct the admission process, prepare for admission, prepare statistical materials, and provide information on individual results. However, we may use applicants' examination results in connection with the educational purposes and student life at this university.
- (2) In the event that the university outsources the computerized processing of personal information to a third party in order to carry out the operations of the university, a contract will be made with the third party stating that information will be protected and handled in accordance with the Act on the Protection of Personal Information and the Osaka Prefecture Personal Information Protection Ordinance.

### 2. Providing Information on Individual Results

Information on individual results will be provided as follows.

- (1) Period
  - <For admission in September or October 2022>

From 10:00 on November 1, 2022 to 15:00 on November 30, 2022

#### <For admission in April 2023>

From 10:00 on May 9, 2023 to 15:00 on June 9, 2023

(2) Eligible Persons

Only the examinees themselves.

(3) Method of Request

Access the following URL and follow the on-screen instructions to enter the required information. https://www.upc-osaka.ac.jp/new-univ/admissions/g/exam\_info/score.html

- A. If you wish to receive information on your individual result, please make sure to register your fourdigit score disclosure PIN at the time of application. This can only be created during application registration. The PIN will be printed on the application confirmation slip (your copy), but please handle it with care.
- B. For the password for result disclosure, please enter your score disclosure PIN registered at the time of application, followed by your examination number.
   For example, if your score disclosure PIN registered during application is "1230," and your
- examination number is "987654," the password will be "1230987654."C. You will need to enter your date of birth for identification.
- 3. In the event that the entrance examination cannot be conducted as planned due to a natural disaster, etc., an "Emergency Notice" will be published on the university's website, so be sure to check it. <u>https://www.upc-osaka.ac.jp/new-univ/admissions/g/news/</u>

- 4. If an applicant is found to have made a false statement in the Application for Admission or has committed unfair practices during the examination, the university may revoke their acceptance even after the applicant has been admitted.
- 5. The second semester starts from September 24, and the classes are open for those admitted in October 1.
- 6. OMU (Osaka Metropolitan University) stipulates the regulations for security export control in accordance with the Foreign Exchange and Foreign Trade Act, and strictly reviews all items and technologies to be exported from the university. If you have conflict of interest with any regulations set by OMU, you may not be eligible for education and research of OMU.

### [12] Inquiries

For additional information and clarifications, please contact the Admissions Office at the following address: Admissions Office,

Osaka Metropolitan University

1-1, Gakuen-cho, Naka-ku, Sakai, Osaka, 599-8531, Japan (E-mail: gr-nyu-agriculture@omu.ac.jp)

# Graduate School of Agriculture Faculty member lists

# 【Department of Agricultural Biology】

(As of April 1, 2022)

Status	Name	Research and Education Fields
Professor	AOKI Koh	Functional genomics of vegetable crops. Cell-to-cell communication in the co- construction of junction tissues between the parasitic plants and their hosts.
Professor	INADA Noriko	Cell biology-based research for production of plants with useful traits, Intracellular temperature imaging
Professor	KOIZUMI Nozomu	Plant molecular breeding, Metabolic engineering, Regulation of gene expression in plants, Risk communication of GMO
Professor	OHTA* Daisaku	Cytochromes P450, Metabolomics Molecular Biology, Molecular Genetics, Biochemistry
Professor	Sasaki Nobuhiro	Biosynthesis of plant pigments, Plant molecular biology, Plant biochemistry, Food safety
Professor	TAKANO Junpei	Plant Nutrition, Regulation of nutrient transporters and its application
Professor	TOJO Motoaki	Plant pathology, Crop protection, Taxonomy and epidemiology of oomycetes plant pathogens
Professor	YOKOI Shuji	Plant Breeding, Characterization of phase change in plants
Associate Professor	IWATA Yuji	RNA-mediated regulation of gene expression and its application in plants
Associate Professor	MOCHIZUKI Tomofumi	Molecular mechanisms of viral pathogenicity and adaptation
Associate Professor	OGATA Yoshiyuki	Function and evolution of genes based on homology analysis
Associate Professor	OHE Masamichi	Stable, high yielding and safe cultivation methods of paddy rice, Food crop science, crop physiology and crop ecology
Associate Professor	OKAZAWA Atsushi	Chemical, biological, and biotechnological control of parasitic weeds, Metabolic engineering of useful plant specialized metabolites
Associate Professor	SHIOZAKI Shuji	Pomology, Chemical regulation of fruits development and quality, Development of bioactive compounds in fruits, Propagation of wild Grapes
Associate Professor	YAMAGUCHI Yube	Defense response against biotic and abiotic stress in crops, and its impact on food production
Lecturer	FUKADA Takashi	Molecular cell biology of mammalian cells, mainly on their response to mechanical stimuli and role of cytoskeletal structures
Lecturer	FURUKAWA* Hajime	Development of technology for using toy drones in the field of horticulture
Lecturer	MATSUMURA Atsushi	The role of soil microbial nutrient cycle in crop production
Lecturer	OGAWA Takumi	Molecular plant-microbe interactions, Metabolomics
Lecturer	TEZUKA Takahiro	Plant breeding, Analysis of reproductive isolation (especially hybrid lethality) observed in wide hybridization, Development of DNA markers
Lecturer	WADA Teruo	Vegetable crop sciences, Hydroponics, Soilless culture, Plant factory
Assistant Professor	TSUSHIMA Ayako	Plant disease diagnosis using genomic data, Evolutionary genomics of plant pathogenic fungi
Assistant Professor	YANASE Masanori	Plant breeding and propagation

\*This person will retire at the end of March 2024.

# [Department of Applied Biological Chemistry]

Status	Name	Research and Education Fields
Professor	AKIYAMA	Chemical identification and functional analysis of signalling molecules
FIOLESSOI	Kohki	involved in the development of mycorrhizal symbiosis
Professor	FUJIEDA Nobutaka	Creation of enzymes, pepzymes, and nanozymes
Professor	INUI Takashi	Drug delivery system by transporter protein, Enzymes for the biosynthesis of nucleic acids in parasite, Identification of allergen proteins
Professor	KATAOKA Michihiko	Screening and application of microbial enzymes to the production of useful compounds
Professor	KAWAGUCHI** Takashi	Screening and utilization of microbial functions, Molecular genetics of microorganisms
Professor	SAKAMOTO Tatsuji	Functional analysis of microbial polysaccharidases, Biotechnological utilization of plant biomass
Professor	TANIMORI Shinji	Organic and Bioorganic Chemistry, Chemical Biology, Organometallic Chemistry, Heterocyclic Chemistry
Professor	WATANABE Yoshiyuki	Process engineering for effective use of food materials
Professor	YAMAJI Ryoichi	Signaling mechanisms of nutrients or non-nutrients, Nutraceuticals (functional food factors, etc.) for skeletal muscle health
Associate Professor	HARADA Naoki	Hormonal regulation of macronutrient metabolism, Functional foods and metabolic homeostasis
Associate Professor	ISHIBASHI Osamu	Non-coding (nc) RNAs and ncRNA-associated proteins, Bone metabolism, Reproductive endocrinology
Associate Professor	KAI Kenji	Bioactive natural products chemistry, Chemical communication among microbes
Associate Professor	KISHIDA Masao	Analysis of available yeast strains which bred by gene-activation mutagenesis and cell fusion
Associate Professor	SONODA Motohiro	Designing and synthesis of bioactive compounds, Synthesis of fused heteropolycyclic compounds
Associate Professor	SUMITANI Jun-ichi	Functional improvements of carbohydrate hydrolases and diagnostic Enzymes from microorganisms, Regulatory mechanisms of their genes
Associate Professor	TANI Shuji	Molecular genetics in Fungi and Oomycetes, Gene regulation
Associate Professor	UEDA Mitsuhiro	Biomass, Biological waste treatment, Bioenergy, Biotransformation, Bioremediation
Lecturer	NAKAZAWA Masami	Biochemistry and gene manipulation of Euglena gracilis
Assistant Professor	HIBINO* Takeshi	Kinetics & Protein Engineering (especially of Adenylate kinase), Enzyme Chemistry, Biophysics
Assistant Professor	KITAKAZE Tomoya	Carotenoid and retinoid signaling, Molecular nutrition, Myokine
Assistant Professor	MIURA Natsuko	Enzyme evolution, Molecular basis of microbial metabolic regulation under stress
Assistant Professor	NISHIMURA Shigenori	Kinetic study and structure biology of amylase and related enzymes

\*This person will retire at the end of March 2023.

\*\*This person will retire at the end of March 2024.

# [Department of Environmental Sciences and Technology]

(As of April 1, 2022)

Status	Name	Research and Education Fields
Professor	FUJIWARA Nobuo	Revegetation technology, Mitigation, Waterfront restoration, Cultural landscape, Global warming
Professor	HIRAI Norio	Animal ecology, Biological interaction, Biodiversity, Life history of insects
Professor	HORINO Haruhiko	Hydrological cycle, Multi-functional roles of agricultural production system, Sustainable management of water environment
Professor	IMANISHI Junichi	Landscape management, Development of regions based on nature, history and culture
Professor	KAGA Hiroyuki	Landscape planning and design, Environmental planning, Open space management by citizen
Professor	SHIBUYA Toshio	Plant–environment interactions, Responses of plants to environmental stresses, Controlled-environment horticulture
Professor	YAMADA Hiroyuki	Urban climate, Micrometeorology, Thermal environment, Urban greenery
Associate Professor	AONO Yasuyuki	Urban climatology, Heat budget analysis, Satellite remote sensing, Climatic analysis of plant phenology
Associate Professor	HIRAI* Hiroaki	Development of plant production and management technique
Associate Professor	KIMATA Takashi	Geotechnical engineering, Construction and materials, Soil test, Numerical analysis
Associate Professor	NAKAGIRI Takao	Conservation of water resources and the environment, Hydrological cycle, Hydrology, Basin water management
Associate Professor	NAKAMURA Akihiro	Revegetation, Biodiversity, Environmental effects, Forest management
Associate Professor	NISHIURA Yoshifumi	Systematization and robotization for environment-conscious bioproduction, Bioinstrumentation and control engineering, Phytotechnology
Associate Professor	TAKEDA Shigeaki	Landscape planning and design, Residential environmental planning, New town revitalization
Associate Professor	TANIGAWA Torahiko	Conservation of global water resource and the environment, Subsurface irrigation, Soil
Associate Professor	UEDA Moeko	Vegetation landscape, Cultural landscape, Historic greenery, Satoyama conservation activities
Associate Professor	UEDA Shouhei	Environmental entomology and zoology, Evolutionary ecology, Conservation biology, Biological interaction, Alien species control
Associate Professor	UEYAMA Masahito	Micrometeorology, Terrestrial Ecosystem, Urban Climate, Remote Sensing, Trace Gas exchange, Greenhouse gases
Lecturer	ENDO Ryosuke	Biomass utilization in plant production for sustainable agriculture, Non-destructive imaging analysis for evaluation of plant responses
Lecturer	SAKURAI Shinji	Substance behavior in the water-soil-plant systems, Hydrological cycle, Management of water quality, Environmental conservation in basin water
Assistant Professor	KUDO Yosuke	Landscape of structures, Multifunctionality, Performance-based design, Maintenance for infrastructures
Assistant Professor	MATSUO Kaoru	Landscape planning and design, Ecological Planning, Urban Environment, GIS
Assistant Professor	OTSUKA Yoshitaka	Environmental and human health science, Urban green space and public health, Horticultural therapy, Behavior modification

\*This person will retire at the end of March 2023.