

October 2023

Dear Dean/President and applicants,

Thank you for your understanding, cooperation and support of educational research at The United Graduate School of Agricultural Sciences, Ehime University (UGAS-EU).

UGAS-EU accepts applicants for admission to "Special Program for International Students in Tropical and Subtropical Agriculture and Related Sciences (three-year doctoral course, October 2024-September 2027)".

I am very glad to inform you that the "Program of Doctoral Education for the Development of Tropical and Subtropical Agriculture and Related Sciences and Achievement of SDGs" with the MEXT scholarship (Special Selection) is applicable to this Special Program also this year.

In the application, please note the following important points,

1. Generally, a MEXT scholarship can be awarded to a candidate of any nationality approved by the Japanese Government. However, please note that ASEAN countries are designated as the main target countries for this special program.
2. If a student's academic record falls below 2.30 (out of a possible 3.00) at a certain point of time each year, the scholarship will be cancelled.
3. The applicant's university or institute must determine the applicant's eligibility to apply for this scholarship.

Sincerely,

SUGAHARA Takuya

Dean, The United Graduate School of Agricultural Sciences,
Ehime University

【Important】 Implementation of the entrance examination

The current natural disaster caused by torrential rain may affect implementation of the entrance examination.

Any updates regarding changes to the start time of the examination, cancellation or postponement of the examination, changes to the selection method, etc., will be posted on the UGAS·EU website (<http://rendai.agr.ehime-u.ac.jp/english/>).

Please check the website regularly for the latest information.

SPECIAL THREE-YEAR DOCTORAL PROGRAM

**for INTERNATIONAL STUDENTS
in TROPICAL and SUBTROPICAL
AGRICULTURE
and RELATED SCIENCES**

October 2024/September 2027

**Application Guidelines
for Japanese Government Scholarship
(Special Selection)**



**The United Graduate School of Agricultural Sciences
Ehime University**

Admission Policy

<Ideal Applicants>

Agricultural science brings together a broad range of academic disciplines covering biology, chemistry, physics, engineering, economics and biotechnology to improve the efficiency and productivity of biological processes. To achieve these agricultural objectives, it is necessary to adopt an interdisciplinary perspective and build a balanced, sustainable relationship between nature and society. It is equally important to develop and train people to deepen their understanding of biological functions by applying broad knowledge and a flexible mindset unconstrained by conventional academic thinking. They will explore agriculture of the future that goes beyond a simple regional focus and seeks to preserve the global environment. Based on these principles, The United Graduate School of Agricultural Sciences, Ehime University (a consortium of the graduate schools of agriculture at Ehime and Kagawa Universities, and Agriculture and Marine Science, Graduate School of Integrated Arts and Sciences, Kochi University) established a three-year doctoral program offering three majors: Bioresource Production Science, Applied Bioresource Science and Life Environment Conservation Science. These majors accept students with master's degrees from universities in Japan. There are also two courses for outstanding international students to pursue research in specific countries and regions. Agriculture is an academic field rich in future potential and vital for environmental and ecological conservation and improvement for sustaining a healthy life. We welcome applicants who are motivated to lead and explore the many possibilities of agricultural science from diverse perspectives. The Special Program for International Students in Tropical and Subtropical Agriculture and Related Sciences is aimed at research and education in the various sciences related to the production and use of biological resources and the environment that supports such activities in the tropics and subtropics. Centered on such regions, this program accepts outstanding mid-level scientists engaged in research or teaching in all parts of the world and aspires to train scientists and engineers who can positively contribute to their home countries. The Special Doctoral Course Program in Agricultural Sciences for Students from Asia, Africa and the Pacific Rim (AAP) is a unified master's course and doctoral program. The doctoral program accepts students from countries in Asia, Africa and the Pacific Rim who have completed the master's component of this program at the graduate school in Ehime university, Kagawa university or Kochi University and has the goal of training advanced researchers and engineers.

(Knowledge · Discovery · Understanding)

1. Have general expertise in agriculture, the environment, and related sciences; have the ability to collect and analyze information in their respective fields to identify, understand, and solve problems in their area of expertise; and have the technical ability to conduct research independently or in groups.

(Ethics · Practice)

2. Have high ethical standards based on an understanding of research in Bioresource Production Sciences, Applied Bioresource Sciences, Life Environment Conservation Sciences, and related sciences, and be able to conduct research and education in agriculture, the environment, and related sciences based on a solid scientific foundation.

(Information dissemination)

3. Be able to proactively work on global issues on their own and to disseminate the results of their research to the wider world.

(Thought · Judgment · Expression · Communication)

4. Possess the ability for scientific reasoning and objective judgment, be able to see and think broadly, be able to express themselves well, and have advanced presentation and communication skills.

<Admissions Policy>

Applicants are interviewed (includes a presentation and oral examination) to evaluate the knowledge and skills they have acquired through their bachelor's and master's programs, the ability to use that knowledge and skills, and their attitude toward learning independently and collaboratively. In addition, a system is in place for international students to be admitted prior to arriving in Japan, opening the door to motivated applicants with diverse backgrounds. Applicants for Working Student Special Admission are interviewed (includes a presentation and oral examination) to evaluate the knowledge and experience they have gained through employment at companies and organizations. UGAS also offers two special courses for international students. Applicants for the Tropical and Subtropical Agriculture and Related Sciences Course are interviewed by a prospective supervisor and two or more members of faculty to evaluate the following: (1) Master's thesis or equivalent research, (2) research plan after enrollment, (3) professional expertise, (4) aptitude and motivation to learn, and (5) communication skills in English. The Special Doctoral Course Program in Agricultural Sciences for Students from Asia, Africa and the Pacific Rim (AAP) is a five-year course that begins with a master's degree and is evaluated based on the research plan for the doctoral course and a recommendation from the supervisor.

The Three-year Special Program for International Students in Tropical and Subtropical Agriculture and Related Sciences

The United Graduate School of Agricultural Sciences, Ehime University (UGAS-EU; also known as Ehime Rendai) is a graduate school comprising the Graduate School of Agriculture at Ehime University and Kagawa University, and the Agriculture and Marine Science Program, Graduate School of Integrated Arts and Sciences at Kochi University, located in Shikoku, Japan. UGAS-EU considers it necessary that students of agricultural sciences broaden their perspectives and deepen their expertise. Accordingly, to meet the growing needs in the fields of environmental studies and resource studies in tropical regions, “The Three-Year Special Program for International Students in Tropical and Subtropical Agriculture and Related Sciences” was established in 1990. Applications are now being accepted for the October 2024–September 2027 program in accordance with the UGAS-EU admission policy.

Application Guidelines

1. Field of Study, Number of Applicants Accepted, and Supervisor

(1) Field of Study

Applications are accepted for any field in tropical and subtropical agriculture and related sciences.

(2) Number of Applicants Accepted

Six applicants will be selected from the successful applicants this year. UGAS-EU will recommend six candidates to the Ministry of Education, Culture, Sports, Science and Technology (MEXT) for scholarships. If an applicant is not selected for a MEXT scholarship, they will be accepted as a privately funded student for the Tropical and Subtropical Agriculture and Related Sciences Course if they have achieved a passing score in the interview.

The scholarship recipients will be notified in mid-August 2024.

(3) Supervisor

An application without a nominated prospective supervisor will not be considered. Before applying, you must contact your preferred supervisor about your research topic. Refer to the list of supervisors in “**Field of Instruction and Supervising Professors**”. After admission, two co-supervisors (selected from “**Co-Supervising Professors**”) are assigned to each student. A Doctor of Philosophy degree is conferred on those who satisfactorily complete all the requirements within three years.

2. Qualifications

(1) Eligibility

Those living abroad who wish to pursue graduate study and are employed in research and education at a university or research institution.

(2) Nationality

Applicants must have the nationality of a country recognized by the Japanese government. However, the program prioritizes the ASEAN region. Accordingly, our objective is for five of the six successful candidates to be selected from that region.

(3) Age

Applicants should be under 35 years old as at April 1, 2024 (those born on or after April 2, 1989).

(4) Academic Career

Applicants should possess a master’s degree or an equivalent degree as of September 30, 2024. If the applicant does not have a master’s degree but has conducted research equivalent to a master’s degree, they can submit their research achievements for evaluation. If the applicant’s research work is deemed acceptable, the application will be considered.

(5) Academic Record

An applicant’s academic performance in the past two years must meet a minimum GPA of 2.30 (out of a possible 3.00) based on the criteria set by MEXT. Use **g. GPA Check Sheets** (see **3** below) to calculate and submit your GPA. (For detailed information, please consult your prospective supervisor.) If you cannot calculate your GPA based on the criteria set by MEXT, contact the UGAS-EU office in advance because other documents may be required.

(6) Health

Applicants should be in sufficiently good mental and physical health for university study and research.

(7) Language

Applicants must be able to read and write English, have attained a score of 600 or higher on the TOEIC test

or equivalent in TOEFL, IELTS, or other internationally recognized English language proficiency test. In addition, applicants must satisfy either 1. or 2. below.

1. At the time of admission, applicants are required to have an English qualification or test score equivalent to or higher than B2 in the Common European Framework of Reference for Languages (CEFR). (If you do not know your CEFR level, please contact the UGAS-EU office in advance.)
2. Applicants must have completed or are expected to complete the requirements for academic career outlined in (4) above by September 2024, with English as the primary language of instruction.

Notes

- Active duty military personnel or individuals with military affiliations are not eligible to apply
- Recipients of scholarships or fellowships from other institutions are not eligible to apply
- Duplicate applications submitted to other universities, duplicate applications for scholarships under the MEXT Scholarship Program, and duplicate applications to the Japan Student Services Organization (JASSO) Student Exchange Support Program are not permitted
- Those who have previously received a Japanese government international student scholarship and three years have not elapsed since the end of their scholarship period are not eligible to apply
- Those who are planning to enroll at a university in Japan as a privately financed international student are not eligible to apply
- Those who wish to conduct fieldwork outside of Japan should consult the UGAS-EU office through their prospective supervisor
- Acceptance will be revoked if a successful applicant does not obtain a master's degree or equivalent by the end of September 2024

3. Application

All the documents listed below should be submitted to the Dean of UGAS-EU by the head of the applicant's institution by January 12, 2024. (Applications received after this date will not be accepted.) Applications sent directly by an applicant will not be accepted. Incomplete documents and documents arriving at UGAS-EU after the deadline will not be accepted.

The documents **a** to **t** listed below must first be submitted to the UGAS-EU office by email, with the letters 'a' through 't' appended to the file name. Send the hardcopy version of the documents to the UGAS-EU office by registered mail.

a. Application form for Japanese Government Scholarship (2024 Application Form for Japanese Government (MEXT) Scholarship (Research Students)*)

- The date of completion should be the same as the dates indicated in **d**, **e**, and **f**
- The period of employment in the work history should include the year and month
(If there is any overlap between the education and work history, provide an explanation.)
- For the email documents, send editable PDF data. (No photo attachments)

This form is revised by MEXT in December every year, but the revision is minor. Applicants may prepare the document using the uploaded form.

b. Application form for UGAS-EU (Application for Admission to the United Graduate School of Agricultural Sciences, Ehime University, Special Program for International Students in Tropical and Subtropical Agriculture and Related Sciences (three-year doctoral course, October 2024–September 2027) for a Japanese Government Scholarship (Special Selection)*)

c. Field of study and research plan (for submission to MEXT) (Field of Study and Study Program*)

d. Applicant's master's degree certificate or an official document issued by the applicant's graduate school indicating that the applicant is expected to receive a master's degree

e. Applicant's undergraduate degree certificate

f. Official transcripts of the applicant's academic record including GPA for both the graduate and undergraduate programs. If the transcript does not include an explanation of the grading system, provide documentation describing the basis for converting evaluation points and calculating the academic performance coefficients.

g. GPA Check Sheets* for both the graduate and undergraduate grades

The GPA issued by the applicant's university must be converted to the MEXT standard (upper limit of 3.0). GPA sheets with a value exceeding 3.0 will be considered invalid.

h. Certificate of citizenship issued by a government authority or a copy of your passport

i. Five passport-sized photographs (4.5 × 3.5 cm: head and shoulders, facing forward, and without any headwear except for religious or medical reasons) taken within the past six months. On the back of each

photograph, write your name and nationality. Attach two photographs to the application form and place the other three in an envelope. For the files to be sent by email, send a single jpg file (maximum size: 3MB) but do not change the aspect ratio.

j. List of publications (master's thesis, books, and academic papers) (*List of publications)**

The list should match the books and academic papers provided in **l** below.

k. One copy of the master's thesis or equivalent. Submit an abstract in English if the thesis is not in English. If the master's thesis is lengthy, a summary (2–3 A4 pages) is acceptable. Applicants who have not yet received a master's degree should submit a report or documentation (in English) of their current research project.

l. Copies of books and academic papers

Submit copies of the books and academic papers listed in **j** above, except the master's thesis.

Note: A summary in English (2–3 A4 pages) is required if the books or papers are not in English.

For the email attachments, use the bookmark function in the PDF and label the file names as l-1, l-2, and so on.

m. One copy of the official results of a TOEFL, TOEIC, IELTS, EF-SET or other internationally recognized English language proficiency test that the applicant has achieved in the past two years

The document must indicate that the applicant has attained a level of English proficiency of 600 or higher in TOEIC (paper-based test) or similar level. If the applicant fulfills the qualifications stated in **2**.

Qualifications (7) Language 1 above, the document must also show that.

n. If the applicant fulfills the qualifications stated in 2. Qualifications (7) Language 2 above, submit a copy of the relevant document

(Submit **n** only if the certificate specified in **m** cannot be prepared or if the score is not equivalent to CEFR B2 or higher. Otherwise, it is not required.)

o. Pledge*

p. A detailed research plan in English or Japanese for this program (more detailed than that required for **c** above). The research plan must be related to the research you have been conducting at your current institution. The plan should be prepared in Microsoft Word format on A4 paper.

q. A letter of recommendation written by the current head (e.g., President, Dean, but not the department head) of the applicant's institution addressed to the President of Ehime University. The letter should include a description of the applicant's responsibilities, achievements, duration of employment, and a statement indicating that the applicant has not applied to other universities (*Letter of Recommendation (1)**).

r. A letter of recommendation addressed to the Dean of UGAS-EU written by a supervisor at the applicant's current institution who is familiar with the applicant's research and academic abilities and is able to provide advice and guidance in collaboration with UGAS-EU during the applicant's period of study (*Letter of Recommendation (2)**).

s. Record of contact with the prospective supervisor (*Record of Contact with the Prospective Supervisor**) detailing any interactions, discussions, or meetings between the applicant and the prospective supervisor, including the content of the interview.

t. Check list for Japanese government scholarship applicants (*Check List For Japanese Government Scholarship Applicants**). Applicants should check the many requirements for application documents using the check list. Carefully review the check list to ensure all the items have been prepared and place a check mark against each completed item before submitting the application.

*Download the forms from the UGAS-EU website: <http://rendai.agr.ehime-u.ac.jp/english/annai/>

Notes

- Documents **a**, **b**, **c**, **j**, **o**, **q**, **r**, **s**, and **t** should be prepared on A4 paper (29.5 × 21 cm) either typed or neatly handwritten in English or Japanese using the forms provided
- If any document for submission is written in a language other than Japanese or English, an English translation should be submitted. The English translation should be provided by the issuing institution. If the issuing institution is not able to provide a translation, applicants should have the document translated (accurately reflecting the content of the original document) and have the issuing institution certify its accuracy. Submit both the English translation and the original document
- Incomplete documents and documents received after the deadline will not be accepted
- The submitted documents will not be returned to the applicant

4. Interview

Applicants will be individually interviewed by their prospective supervisor and at least two other faculty members (selected by the prospective supervisor). The interview may take place in person or via an on-line

conferencing system. In preparation for the interview, applicants must submit the following to the prospective supervisor before the date of the interview:

- (a) Summary of their master's thesis
- (b) Summary of recent research activities and list of publications
- (c) Research proposal

The prospective supervisor will oversee this process, conduct the interview, and evaluate the applicant based on the results of the interview. The results of the evaluation will be used to assess the applicant's suitability and a student admission report will be prepared. The selection criteria for applicants include the following:

- (1) Master's thesis or equivalent research work
- (2) Proposed research plan including its relevance to the applicant's recent research activities at their current institution
- (3) Specialized knowledge in the applicant's field of study
- (4) Motivation and aptitude for learning
- (5) Proficiency in English

5. Selection Method

Selection is primarily based on the results of the interview outlined in 4 above and evaluating the applicant's academic transcript and other submitted documents.

6. Scholarship Benefits

(1) Scholarship Payments

The monthly payment is 145,000 yen (subject to change). The Japanese government scholarship is provided for the period October 2024 to September 2027.

(2) Transportation to and from Japan

MEXT will provide an economy class air ticket from the international airport closest to the applicant's place of residence to either Tokyo or Osaka. At the completion of studies at UGAS-EU, MEXT will provide an economy class air ticket from Tokyo or Osaka airport to the international airport closest to the applicant's place of residence.

Note: The applicant is responsible for any expenses incurred between the international airport and the UGAS-EU participating university. The student is responsible for all travel-related taxes and fees and for travel expenses from the student's place of residence to the closest international airport. Additionally, the cost of purchasing travel insurance is the student's responsibility.

(3) Fees

Fees for the entrance examination, admission, and tuition are waived. However, students are required to pay for the following insurance policies.

1. Personal Accident Insurance for Students Pursuing Education and Research (Gakkensai) and Liability Insurance (coverage for three years)

2. Comprehensive Insurance for Students Lives Coupled with Gakkensai for International Students:

33,370 yen (coverage for three years) including tenant liability

Note: The insurance fees for 2024 may be revised.

(4) Medical Insurance

Students are required to take out "National Health Insurance" (Japan), which covers most medical costs up to 70%.

7. Admission

(1) Documents

- 1. Pledge
- 2. Letter of guarantee
- 3. Curriculum vitae
- 4. Four 4×3 cm photographs

The forms will be sent to you two weeks before the admission period

(2) Japanese Language

Applicants are encouraged to learn some Japanese because it will be necessary for everyday life. If it is not possible to study Japanese before coming to Japan, classes are offered at all three universities.

8. Notes

- (1) Do not staple any of the application documents
- (2) A scholarship will be revoked in the following cases:
 - Providing false statements on the documents
 - Violating the pledge
 - Violating school regulations and/or no evidence of academic achievement
 - Withdrawing from Ehime University or transferring to another university
 - Changing visa status from student to other status
 - Receiving a scholarship or scholarships from other sources
 - Academic record is lower than 2.30 (out of a possible 3.00) at a certain point of time each year
- (3) An applicant selected for a MEXT scholarship must not cancel their enrollment. If a selected applicant withdraws before coming to Japan, UGAS-EU will not accept applications for a MEXT scholarship for this course from the same institution as the applicant for a period of one year after the withdrawal by the selected applicant.
Also, if an applicant selected for a MEXT scholarship withdraws before coming to Japan and has been admitted to another university (Japan or elsewhere), UGAS-EU will not accept applications for a MEXT scholarship for this course from the same institution as the applicant for a period of three years after the withdrawal by the selected applicant.

9. Personal Information

Personal information such as name and address provided in an application is used solely for the purposes of processing the application, notifying an applicant if the application is incomplete, announcing the results of acceptance, and sending documents related to the admission procedure if an applicant is accepted.

All correspondence relating to the application should be sent by airmail to the address below (enquiries can be made by email):

UGAS-EU Office

The United Graduate School of Agricultural Sciences, Ehime University
3-5-7 Tarumi, Matsuyama, Ehime 790-8566, Japan
Email: rendai@stu.ehime-u.ac.jp
<http://rendai.agr.ehime-u.ac.jp/english/>

10. Reasonable Consideration Requests by Prospective Students

For applicants who require consideration for examinations and during their studies, please inform the UGAS-EU office before submitting the application.

Note

This preliminary consultation is used to familiarize applicants requesting reasonable consideration about the current situation at the three UGAS-EU campuses beforehand to determine how best to accommodate their needs for both examinations and studying. The preliminary consultation is not intended to restrict applicants who wish to receive reasonable consideration from taking examinations or studying at UGAS-EU.

Fields of Instruction and Supervising Professors

EH : Ehime University

KG : Kagawa University

KC : Kochi University

Note: The underlined professors will retire before September, 2027.

1 Bioresource Production Science Major

Bioresource Production Science Department

a. Plant Resource Production

Professor (Affiliation)	Research Field	Main Subject
ARAKI Takuya (EH)	Crop Science	Ecophysiological studies on dry matter production and yield of crops
BEPPU Kenji (KG)	Pomology	Reproductive physiology of fruit trees
ICHIE Tomoaki (KC)	Tree Ecophysiology	Resource allocation strategies for growth, reproduction and herbivore defense of forest trees
KAMIYA Koichi (EH)	Forest Genetics	Molecular population genetics and conservation genetics of forest organisms
KAYA Hidetaka (EH)	Plant Molecular Biology	Plant Molecular genetics and physiology
KOBAYASHI Kappei (EH)	Plant Molecular Biology and Virology	Molecular biology of plant viruses, plant-virus interactions and plant pathogenesis
MIYAZAKI Akira (KC)	Crop Physiology	Physiology and function related with yield production in field crops
TOYOTA Masanori (KG)	Crop Ecophysiology	Ecophysiology and morphology on yield determination of crops
UENO Hideto (EH)	Soil Science and Plant Nutrition	Dynamics of soil nutrients and agroecological soil management for sustainable agriculture

b. Plant and Animal Production under Structure

HATOU Kenji (EH)	Information Systems for Plant Factory	Research of the various models for the speaking plant approach in a plant factory
KAWANO Toshio (KC)	Post-harvest Process Engineering	Processing, handling and distribution technology for agricultural products
SUZUKI Yasushi (KC)	Forest Engineering	Logging cable system, Forest operation system, Forest road, Effects of forest operation to residual stands, Woody biomass

c. Aquaculture and Livestock Production

FUKADA Haruhisa (KC)	Fish Nutrient Physiology	Studies on hormonal regulation of growth and digestion in fish
GOTO Rie (EH)	Fish Reproductive Physiology and Aquaculture	Studies of developmental biotechnology and reproductive physiology in aquaculture species
IKEJIMA Kou (KC)	Coastal and Fisheries Ecology	Ecology and Conservation of coastal ecosystems and fisheries resources
IMAJOH Masayuki (KC)	Fish Pathology	Studies of epidemiology and prevention of fish diseases caused by viruses, bacteria and parasites
MIURA Takeshi (EH)	Fish Reproductive Physiology	Studies of the molecular control mechanisms of gametogenesis in animals, and establishment of the applied techniques in aquaculture based on the basic studies
SAITO Taiju (EH)	Aquaculture, developmental engineering	Development of an efficient aquaculture technology by using developmental engineering methods
TACHIBANA Tetsuya (EH)	Poultry Nutritional Physiology	Studies on the bioactive molecules related to growth and behavior of chickens
TAKAGI Motohiro (EH)	Fish Breeding and Conservation Genetics	Studies on fish breeding and conservation genetics

d. Bioresource Economics

MATSUOKA Atsushi (EH)	Resources and Environmental Management	Economical studies on management and preservation of agricultural land
TAKENOUCHI Naruhito (EH)	Fisheries management and business	Study on economics and management theories of the sustainable development in the fisheries and fishing village

**2 Applied Bioresource Science Major
Applied Bioresource Science Department****a. Food Science**

KASHIWAGI Takehiro (KC)	Food Functional Chemistry	Chemicalbiology of food material / Isolation and identification of functional substance in food
KISHIDA Taro (EH)	Nutrition	Studies on nutritional and physiological effects of food components, especially non-nutrient

MARUYAMA Koutatsu (EH)	Community Health and Nutrition	The approaches of nutritional epidemiology to do research on the association between dietary habits (i.e. food and nutrient intakes, eating behaviors, and eating foods with function claims) and human health
MORIMOTO Kenji (KG)	Applied Enzymology	Production of various rare sugars using microbial and enzymatic reactions
MORIOKA Katsuji (KC)	Fisheries Chemistry	Studies on post-harvest science and technology of fish and fisheries products / Studies on more efficient utilization of fish
OGAWA Masahiro (KG)	Food Protein Chemistry	Structure-function analysis of food proteins and their functional development
SHIMAMURA Tomoko (KC)	Food Chemistry	Studies on reaction of food components, food functionality, and food analysis
TAKATA Goro (KG)	Applied Enzymology	Production of Rare Sugar from bio-resources using microbial and enzymatic reactions
YONEKURA Lina (KG)	Food Chemistry	Bioavailability, bioaccessibility and assessment of biological activity of functional compounds in foods

b. Bioresource Science for Manufacturing

AKITA Mitsuru (EH)	Applied Molecular Cell Biology	Protein transport and metabolite transport in plant organelles
AKIYAMA Koichi (EH)	Genetic engineering in fungi	Molecular biology and recombinant protein production in <i>Fusarium oxysporum</i>
ASHIUCHI Makoto (KC)	Bioengineering and Nanotechnology	Development of Multi-functional bionanomaterials and Their Applications
ICHIMURA Kazuya (KG)	Plant Stress Signaling	Biotic and abiotic stress signal transduction in plants
ICHIURA Hideaki (KC)	Material Chemistry of Forest Resources	Material Chemistry for utilization of forest resources
<u>ITO Kazutaka (EH)</u>	Forest Chemistry	Chemistry for utilization of forest resources
KAWADA Miyuki (EH)	Molecular Microbiology	Biochemistry and molecular biology of membrane transporters
NISHI Kosuke (EH)	Animal Cell Technology	Functional analysis of biomolecules and elucidation of their mode of action
NISHIWAKI Hisashi (EH)	Bioorganic Chemistry	Structure-activity relationship and mode of action of bioactive substances
NOMURA Mika (KG)	Molecular Plant Nutrition	Physiology and molecular biology in plant-microbe interaction

SATO Masashi (KG)	Bioactive Natural Products Chemistry	Bio-organic chemistry of natural bioactive substances
SEKITO Takayuki (EH)	Genetic engineering of microorganisms	Molecular mechanism and regulation of intracellular transport
SUGAHARA Takuya (EH)	Animal Cell Technology	Screening and application of biofunctional substances from foodstuffs
<u>SUGIMORI Masatoshi (EH)</u>	Wood Science and Technology	Wood Quality
SUZUKI Toshisada(KG)	Biomass Chemistry	Organic chemistry, biosynthesis, and bioactivity of wood components, and woody biomass utilization
TABUCHI Mitsuaki (KG)	Applied Molecular Cell Biology	Studies on the regulation of vesicle trafficking and lipid metabolism in yeast and mammalian cells
TANAKA Naotaka (KG)	Cell Biology	Functional analysis of the Golgi apparatus and its application to protein production
TEBAYASHI Shinichi (KC)	Bioactive Chemistry	Organic chemical studies on bioactive chemicals from natural occurring: e.g. isolation and identification of medical agents from folklore medical plants screening for pesticidal agents form natural occurring
YAMAUCHI Satoshi (EH)	Chemistry and Utilization of Bioresources	Synthetic Organic Chemistry for research about function and effective utilization of bioresources

3 Life Environment Conservation Science Major

Life Environment Conservation Science Department

a. Land Conservation and Irrigation Engineering

HARA Tadashi (KC)	Geotechnical and earthquake proof engineering	Study on liquefaction characteristics of soft ground
HARUTA Shinsuke (EH)	Rural Resources Management for Environmental Preservation	Improvement and Management of Water Quality and Resources in Rural Area
KOBAYASHI Noriyuki (EH)	Geotechnical and Geoenvironmental Engineering	Application of rehabilitation engineering for Hydraulic Structures
KUME Takashi(EH)	Soil hydrology	Study on water and solute transport in soil of irrigated land

OUE Hiroki (EH)	Hydrometeorology for Environmental Science	Micrometeorology of the plant canopy under changing environment, hydrological processes in forest and farmland watersheds, irrigation and drainage and integrated agricultural water use management
SAKAMOTO Jun (KC)	Urban Planning and Disaster Management	Urban planning in an era of Declining population
SASAHARA Katsuo (KC)	Erosion and Sediment Control, Landslide Engineering	Sediment and Water discharge from mountainous slope, Early warning system against landslide Mechanism of deformation of unsaturated soil
SATO Shushi (KC)	Water Use and Environmental Engineering	The overall engineering research for achieving the management of water environment and infrastructure in river basin
TAKEYAMA Emi (EH)	Rural Landscape Planning	Design and planning of agricultural landscape for sustainable rural development
YAMASHITA Naoyuki (EH)	Water Environmental Engineering	Study on securing of sanitary safety water environment

b. Environmental Science

ADACHI Masao (KC)	Aquatic Environmental Science	Biology, physiology and ecology of harmful algal blooms
ICHIMI Kazuhiko (KG)	Coastal Marine Science	Biological and Chemical Processes in Coastal Ecosystems
ISHIBASHI Hiroshi (EH)	Ecotoxicology/Molecular toxicology	Studies on ecotoxicological effects of environmental contaminants in animals Studies on disruption mechanism of nuclear receptor signaling pathway by environmental contaminants
ITO Fuminori (KG)	Insect Ecology	Behavior and ecology of social insects
KANG Yumei (KC)	Soil Environmental Science	Rehabilitation of contaminated soil, water and grassland ecosystem
KAWASHIMA Ayato (EH)	Environmental Science for Industry	Development of effective utilization technology for biomass and treatment technology for hazardous pollutants
KIBA Akinori (KC)	Phytopathology	Analysis of plant immunity and disease development
MORITSUKA Naoki(KC)	Soil science and plant nutrition	Dynamics of fertilizer elements in agroecosystems for sustainable agriculture

OBAYASHI Yumiko (EH)	Marine molecular ecology / Biogeochemistry	Biogeochemical cycles and related microbial ecology in marine environment
TAKAHASHI Shin (EH)	Environmental Analytical Chemistry, Environmental Chemistry, Ecotoxicology, Resources Recycling Engineering	Studies on development of analytical methods, elucidation of emission sources and environmental behaviors, and assessment of ecological effects for persistent bioaccumulative and toxic substances
YAENO Takashi (EH)	Plant Pathology	Molecular biology of plant-microbe interactions
YAMAGUCHI Haruo (KC)	Aquatic microbial physiology and ecology	Physiology and ecology of microalgae including harmful species
YOSHITOMI Hiroyuki (EH)	Entomology	Systematics and taxonomy of Insects conservation of biodiversity

**Outline of The United Graduate School
of Agricultural Sciences, Ehime University**

Educational Principles

The United Graduate School of Agricultural Sciences, Ehime University is a consortium linking the strengths of the graduate schools of agriculture at Ehime and Kagawa Universities, and Agricultural Science, Graduate School of Integrated Arts and Sciences, Kochi University with the aim of producing exceptional people who will be leaders in the 21st century. Our educational goal is to instill a high standard of scholarship, skills and judgement based on a deep understanding of people, society and nature.

Through farsighted, original research, we hope to train talented, world-class researchers who will play a central role in the regional development of their countries, and we are actively recruiting talented students from all over the world. In this way, we hope to develop a sustainable society and contribute to world peace and harmonious balance between people and nature.

Description

1. Bioresource Production Science Major

In the Shikoku region, agricultural and livestock industries have developed by taking advantage of the complicated geographical features on Shikoku Island. The industries cover a wide range such as the horticultural production of vegetables and ornamental plants in open fields as well as under structure; the production of citrus fruits; aquaculture fisheries in the inland sea and coastal areas; forestry; and animal husbandry. This course is intended to enhance the level of fundamental research and develop applied technology for the production and management of plant and animal resources.

Bioresource Production Science Department

To achieve the educational goals of this course, study and research is developed for each of the four fields of study listed below.

(1) Plant Resource Production

This chair is intended to train specialists who would have full knowledge about rationalizing qualitative and quantitative improvement of the production of field crops, fruits and vegetables, ornamental plants and forestry and forestry products as well as plant idioplasm.

(2) Plant and Animal Production under Structure

This chair is concerned with the fields of study for understanding basic problems about the improvement of productivity by creating artificial environments such as greenhouses, and the technological examination of agricultural facilities, along with environmental and behavioral characteristics of plants and animals.

(3) Aquaculture and Livestock Production

This chair provides instruction and research programs concerning the culture, propagation (reproduction), feeding, pathology and environment of aquatic life and domestic animals from the integrated viewpoint of biology, chemistry and physics.

(4) Bioresource Economics

The research and instruction field of this chair is the following: farm, forest, and fishing ground management, including business analysis and planning of farm, forest, and fishing ground operation, and marketing of fruits, vegetables, livestock, timber, and fishery products; resource economics, including effective use of biotic resources as production factors, energies and green resources; and social economic field, including policies and strategies closely related to farm, forest, and fishing ground management, and domestic and international marketing of agricultural, forest and fishery products.

Deep Seawater Science (Joint-Department)

Basic education and research in elucidating the chemical, physical, biological and microbiological characteristics of deep seawater for the efficient use and applied technology in fisheries and marine food production.

2. Applied Bioresource Science Major

The processing and storage of agricultural produce, or more specifically its effective use, is a growing sector important for the national economy and is also a means of meeting diverse social needs for agricultural products. There is an increasing need for basic research and education in the development of new biochemical technology. This course aims to apply that basic research and education.

Applied Bioresource Science Department

To achieve the educational goals of this course, study and research is developed for each of the two fields of study listed below.

(1) Food Science

This chair is concerned with the field of study for understanding the utilization process of food from its production to ingestion. Chemistry, physics, nutrition, hygienics, manufacturing of agricultural products and aquatic products, and applied microbiology of food as well as applied biochemistry including morphology, structure, and functions of tissue contents and cell organelles are studied.

(2) Bioresource Science for Manufacturing

This chair gives the student various types of instruction and research programs concerning the fields of chemistry, biochemistry and biotechnology as a base of production of plant and animal resources as well as application of knowledge about the use of economic resources from the viewpoint of chemistry, physics, physiology and biochemistry.

3. Life Environment Conservation Science Major

The increasing world population and consumption of natural resources has reached an unprecedented level, to the extent that the limits of global resources, and human existence and activities are now recognized. Conservation and efficient use of the environment, the base for bioresource production and human existence, are major issues for agriculture. This course provides education and research based on engineering and ecological methods.

Life Environment Conservation Science Department

To order to achieve the educational goals of this course, study and research is developed for each of the two fields of study listed below.

(1) Land Conservation and Irrigation Engineering

Using physical and technological methods, students study the consolidation, maintenance and improvement of various geographical features such as forests, cultivated land, shores and coastal waters, along with the rationalization of water use, and maintenance and development of facilities related to water use.

(2) Environmental Science

This chair provides instruction and research programs concerning the basic study and applied technology of the structure and function of various ecosystems ranging from the terrestrial land to the seas, along with environmental changes caused by human activities, and conservation and management of life environments.

Education and Research

Advisory System

UGAS-EU consists of three majors and four departments, with academic staff expertise that extends beyond that of any one of the constituent universities. Three supervisors are assigned to each student: a supervisor and two co-supervisors. Students are located at the same university as their supervisor and one of the co-supervisors, which provides an efficient and effective educational system.

Instruction

Applicants can choose a supervisor by referring to the 'Fields of Instruction and Supervising Professors' pages. Once accepted by a supervisor, applicants take an examination. After acceptance, students are assigned two co-supervisors. UGAS-EU students receive direct professional guidance and instruction for their doctoral thesis from the supervisor. Students also receive further instruction from their co-supervisors. Upon entering UGAS-EU, the supervisor will review the student's research in close cooperation with the two co-supervisors and the student.

Education

The primary goal of UGAS-EU is to train top-level researchers with a broad knowledge of agricultural science who can continue their research activities on their own after graduating.

The Student Education Program was established in April 2006. This program entails research supervision by several faculty members, seminars and a mid-term review of both the dissertation and research progress. A new curriculum and a course credit system were introduced in April 2009 to enhance graduate school education.

We also offer competitive programs that provide funding for presenting at international conferences.

UGAS-EU eagerly welcomes students from foreign countries. We feel Japan and UGAS-EU should play a role in the internationalization of education and in protecting environmental resources. To further this goal, we have a Special Three-year Doctoral Program for International Students in Tropical and Subtropical Agriculture and Related Sciences.

In October 2002, Ehime, Kagawa and Kochi universities started a special master's program in agriculture for international students from Asia, Africa and the Pacific Rim that leads into our special doctoral course for Asian, African and Pacific Rim students.

Research

The three constituent universities each have a history of providing a base for bioresource production through academic research, thus promoting the growth of the Shikoku Island region. Therefore, the combined resources of these universities should have a greater impact in the fields of agriculture, forestry and fisheries. This structure supports a wider range of research from production technology, environment, and facilities; product processing, use, and distribution; and human living environments.

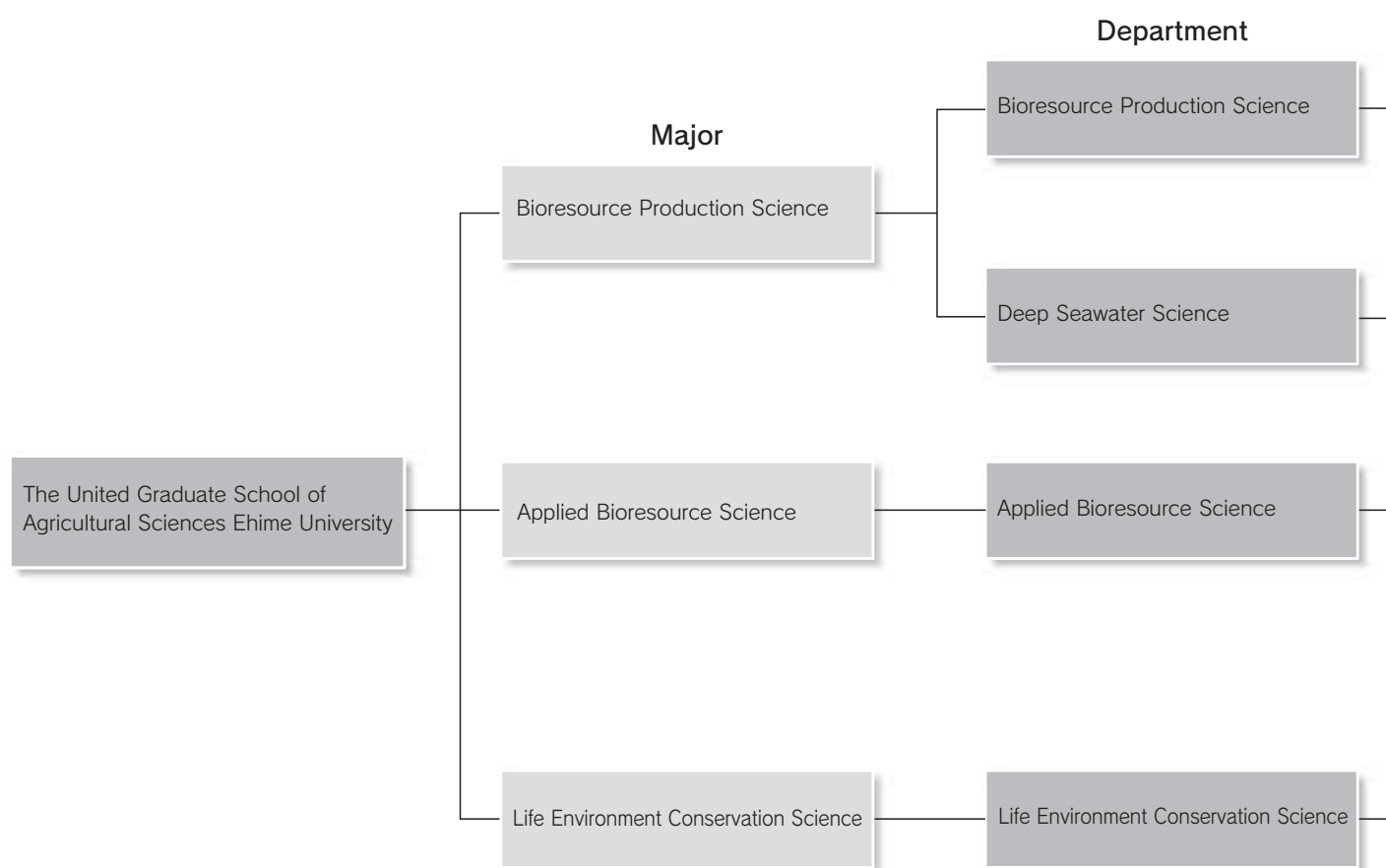
Completion of the Doctoral Course

The doctoral course requires enrollment for three or more years and acquiring at least 12 academic credits. In addition, students must pass the doctoral dissertation review along with the final examination.

Students deemed to have completed outstanding work for their master's degree may go on to complete the doctoral course in one year.

Those who successfully complete the course will receive a Doctor of Philosophy degree.

Organization



UGAS-EU is based on the equal status of Kagawa, Kochi and Ehime universities and operates with their close cooperation. Although UGAS-EU draws from the facilities and staff of the master's course of each university, it is an independent institution that operates separately under its own management and regulations.

Three majors are offered by UGAS-EU : Bioresource Production Science, Applied Bioresource Science and Life Environment Conservation Science. There are four departments.

