SPECIAL THREE-YEAR DOCTORAL PROGRAM

for INTERNATIONAL STUDENTS in TROPICAL and SUBTROPICAL AGRICULTURE and RELATED SCIENCES

October 2025/September 2028

Application Guidelines for Japanese Government Scholarship (Special Selection)

The United Graduate School of Agricultural Sciences
Ehime University

The United Graduate School of Agricultural Sciences, Ehime University

Admission Policy

Agricultural science encompasses a broad range of academic disciplines, including biology, chemistry, physics, engineering, economics, and biotechnology. Consequently, an interdisciplinary approach is required to build balanced and sustainable relationships between nature and society. Therefore, it is essential to develop and train people with broad knowledge and a flexible mindset unconstrained by conventional academic thinking, who can deepen our understanding of biological functions, improve agricultural productivity, enhance the efficient use of agricultural products, and explore the agriculture of the future with a focus on both regional and global environmental conservation.

Based on this philosophy, The United Graduate School of Agricultural Sciences, Ehime University (UGAS-EU) (three-year doctoral program only) established three majors: Bioresource Production Science, Applied Bioresource Science, and Life Environment Conservation Science. UGAS-EU accepts students with master's degrees from universities in Japan but also offers special courses for outstanding international students to pursue research relevant to their respective countries and regions.

Agricultural science is a promising field of study with enormous potential and is vital for ensuring the conservation and enhancement of the environment and ecosystems, as well as improving the quality of people's lives. Therefore, 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-career scientists engaged in research or education in all parts of the world and trains them to become advanced researchers and engineers who can contribute to the future of their home countries.

The Special Doctoral Course Program in Agricultural Sciences for Students from Asia, Africa, and the Pacific Rim (AAP) is an integrated master's course and doctoral program. The program aims to foster students who have graduated or are scheduled to graduate from universities in various countries through a comprehensive education program starting from the master's level, with the goal of training them to become advanced researchers and engineers.

1. Knowledge, Discovery, and Understanding

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

2. Ethics and Practice

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 fields based on a solid scientific foundation.

3. Information Dissemination

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

4. Thought, Judgment, Expression, and Communication

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.

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. Applicants for the Tropical and Subtropical Agriculture and Related Sciences Course are interviewed by a prospective supervisor and two or more members of faculty from the graduate school to evaluate the following: (1) master's thesis or equivalent research, (2) research plan after enrollment, (3) specialized knowledge, (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 integrated master's and PhD program. Applicants for this course are assessed based on their research plan for the doctoral program 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 2025–September 2028 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 2025.

(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, 2025 (those born on or after April 2, 1990).

(4) Academic Career

Applicants should possess a master's degree or an equivalent degree as of September 30, 2025. 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 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, DET(Duolingo English test) or other internationally recognized English language proficiency test. In addition, applicants must satisfy 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 2025, 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 2025

1. Application

All the documents listed below should be submitted to the Dean of UGAS-EU by the head of the applicant's institution by December 25, 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 (*2025 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 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 2025–September 2028) 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) were 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, DET(Duolingo English test) 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

2. 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

3. 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.

4. 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 2025 to September 2028.

(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 2025 may be revised.

(4) Medical Insurance

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

5. 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.

6. 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.

7. 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/

8. 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 Professors

Note : The underlined professors will retire before September 2028.
EH : Ehime University KG : Kagawa University KC : Kochi University

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
ICHIE Tomoaki (KC)	Tree Ecophysiology	Ecophysiological responses to environmental stresses in tropical and temperate trees
UENO Hideto (EH)	Soil Science and Plant Nutrition	Dynamics of soil nutrients and agroecological soil management for sustainable agriculture
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
TOYOTA Masanori (KG)	Crop Ecophysiology	Ecophysiology and morphology on yield determination of crops
NAKANO Michiharu(KC)	Horticultural Breeding	Genetics and breeding science in fruit trees and ornamentals
BEPPU Kenji (KG)	Pomology	Reproductive physiology of fruit trees
MIYAZAKI Akira (KC)	Crop Science	Yield production and physiology in field crops

b. Plant and Animal Production under Structure

ISLAM MD PARVEZ (EH)	Information Systems for Plant Factory	Research on development of technology and artificial intelligence for next-generation smart agriculture
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
HATOU Kenji (EH)	Information Systems for Plant Factory	Research on measurement and artificial intelligence for smart agriculture
MORI Makito (KC)	Applied Meteorology	Climatological studies on agricultural ecosystems

c. Aquaculture and Livestock Production

IKEJIMA Kou (KC)	Coastal and Fisheries Ecology	Ecology and Conservation of coastal ecosystems and fisheries resources
IMAJOH Masayuki (KC)	Fish Pathology	Studies on epidemiology and prevention of fish diseases caused by viruses, bacteria and parasites
KAWASAKI Kiyonori (KG)	Animal Nutrition	Study of the effects of using underutilized resources and insect into feed on the nutritional and physiological responses of animals (i.e. rabbits, pigs, and poultry)
GOTO Rie (EH)	Fish Reproductive Physiology and Aquaculture	Studies of developmental biotechnology and reproductive physiology in aquaculture species
SAITO Taiju (EH)	Aquaculture, Developmental Engineering	Development of an efficient aquaculture technology by using developmental engineering methods
TAKAGI Motohiro (EH)	Fish Breeding and Conservation Genetics	Studies on fish breeding and conservation genetics
TACHIBANA Tetsuya (EH)	Poultry Nutritional Physiology	Studies on the bioactive molecules related to growth and behavior of chickens
FUKADA Haruhisa (KC)	Fish Nutritional Physiology	Studies on hormonal regulation of growth and digestion in fish

d. Bioresource Economics

TAKENOUCHI Naruhito (EH)	Fisheries management and Business	Study on economics and management theories of the sustainable development in the fisheries and fishing village
MATSUOKA Atsushi (EH)	Resources and Environmental Management	Economical studies on management and preservation of agricultural land
MAMADA Michihiko (EH)	Resource & Environmental Economics	Economic and Policy Studies on the Effective Utilization of Local Resources

2 Applied Bioresource Science Major

Applied Bioresource Science Department

a. Food Science

OGAWA Masahiro (KG)	Food Protein Chemistry	Structure-function analysis of food proteins and their functional development
KASHIWAGI Takehiro (KC)	Food Functional Chemistry	Isolation and identification of functional compounds in foods, agricultural products, and medical plants
KISHIDA Taro (EH)	Nutrition	Studies on nutritional and physiological effects of food components, especially non-nutrient
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
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
YONEKURA Lina (KG)	Food Chemistry	Bioavailability, metabolism and function of bioactive compounds

b. Bioresource Science for Manufacturing

AKIYAMA Koichi (EH)	Genetic Engineering in Fungi	Molecular biology and recombinant protein production in *Fusarium oxysporum*
ASHIUCHI Makoto (KC)	Bioengineering and Nanotechnology	Development of Multi-functional Bionanomaterials and Their Applications
ICHIURA Hideaki (KC)	Material Chemistry of Forest Resources	Material Chemistry for utilization of forest resources
ICHIMURA Kazuya (KG)	Plant Stress Signaling	Biotic and abiotic stress signal transduction in plants
KAWADA Miyuki (EH)	Molecular Microbiology	Biochemistry and molecular biology of membrane transporters

SATO Masashi (KG)	Bioactive Natural Products Chemistry	Bio-organic chemistry of natural bioactive substances
SUGAHARA Takuya (EH)	Animal Cell Technology	Screening and application of biofunctional substances from foodstuffs
SUGIMOTO Hiroyuki (EH)	Physics of Wood and Engineered Wood	Development of the novel wood and wood based materials
SUZUKI Toshisada (KG)	Biomass Chemistry	Organic chemistry, biosynthesis, biodegradation and utilization of wood components
SEKITO Takayuki (EH)	Genetic Engineering of Microorganism	Molecular mechanism and regulation of intracellular transport
TANAKA Naotaka (KG)	Cell Biology	Functional analysis of the Golgi apparatus and its application to protein production
TABUCHI Mitsuaki (KG)	Applied Molecular Cell Biology	Analysis of the regulatory mechanism of sphingolipid metabolism using yeast and functional analysis of plant pathogen effectors using yeast expression system
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 from natural occurring
NISHI Kosuke (EH)	Molecular Pharmacology of Bioactive Compounds	Functional molecular analysis of naturally occurring and synthetic bioactive compounds
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
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

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
KUME Takashi (EH)	Soil Hydrology	Study on water and solute transport in soil of irrigated land
KOBAYASHI Noriyuki (EH)	Geotechnical and Geoenvironmental Engineering	Application of rehabilitation engineering for Hydraulic Structures
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	Early warning system against Landslide, Landslide disaster due to climate change
SATO Shushi (KC)	Water Use and Environmental Engineering	The overall engineering research for achieving the management of water environment and infrastructure in river basin
HARA Tadashi (KC)	Geotechnical Engineering	Research on soil dynamics and liquefaction Development of environmentally and low cost civil structures using natural materials such as wood and stone
HARUTA Shinsuke (EH)	Rural Resources Management for Environmental Preservation	Improvement and Management of Water Quality and Resources in Rural Area
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
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
ICHIMI Kazuhiko (KG)	Biological and Chemical Processes in Coastal Ecosystems	Biological and chemical processes in estuarine and coastal ecosystems
ITO Katsura (KC)	Insect Ecology	Ecology of herbivorous insects and mites
ITO Fuminori (KG)	Insect Ecology	Behavior and ecology of social insects
OBAYASHI Yumiko (EH)	Marine Molecular Ecology/ Biogeochemistry	Biogeochemical cycles and related microbial ecology in marine environment

KAWASHIMA Ayato (EH)	Environmental Science for Industry	Development of analysis and treatment technologies for chemical substances in the environment and effective utilization technologies of biomass
KANG Yumei (KC)	Soil Environmental Science	Mechanism of soil pollution and rehabilitation of contaminated soil
KIBA Akinori (KC)	Phytopathology	Analysis of plant immunity and disease development
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
TATARAZAKO Norihisa (EH)	Ecotoxicology/Environmental Risk	Ecotoxicity/evaluation of environmental risk/microplastics/endocrine disruptors
MORITSUKA Naoki (KC)	Soil Science and Plant Nutrition	Dynamics of fertilizer elements in agroecosystems for sustainable agriculture
YAENO Takashi (EH)	Plant Pathology	Molecular biology of plant-microbe interactions
YAMAGUCHI Haruo (KC)	Aquatic Microbial Physiology and Ecology	Ecology and physiology of aquatic microorganisms including harmful algae
YAMAGUCHI Hitomi (KG)	Coastal Oceanography and Biogeochemistry	Analysis of material cycle and energy flow in coastal ecosystems
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 (UGAS-EU) is a collaboration between 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, each of which has its own unique characteristics.UGAS-EU aims to cultivate outstanding individuals, equipped with reasoned judgement based on profound insights into people, society, and nature, and advanced expertise and skills in highly specialized fields. Through forward-thinking and innovative research to produce significant research outcomes, we aim to nurture individuals who contribute to their local communities, assume leadership roles in regional development in their fields, and serve as a driving force for progress. In addition, by actively welcoming outstanding students from around the world and training them to be core researchers who will shape the future in their respective countries, we all contribute to the sustainable development of society, a balanced relationship between humanity and the natural environment, and a more peaceful, considerate world.

Course Description

1 Bioresource Production Science Major

In the Shikoku region, the agricultural, forestry, fisheries, and livestock industries have developed by taking advantage of the complex geographical features on the island. The industries cover a wide range such as horticulture in open fields and greenhouses; citrus fruit and flower cultivation; and aquaculture in the inland and coastal areas. This major focusses on education and research aimed at developing fundamental studies and applied technologies for the production and management of plant and animal resources.

Bioresource Production Science Department

The Bioresource and Production Science Department aims to achieve the educational goals of this major through the four fields of study listed below, serving as the foundation for educational research.

◆**Plant Resource Production:** In this field, educational research is conducted to address issues such as qualitative and quantitative improvement in the production of field crops, fruit trees, vegetables, flowers, and forestry and forestry products, as well as the improvement of genetic quality and the rationalization of production and management techniques, from an advanced perspective.

◆**Plant and Animal Production under Structure:** In this field, educational research is conducted on fundamental issues such as improving productivity through facilities like greenhouses, engineering considerations for the agricultural facilities themselves, along with biological behavior and environmental characteristics under facility conditions.

◆**Aquaculture and Livestock Production**: In this field, educational research is conducted to investigate the breeding, reproduction, feed, pathology, and environment of livestock and aquatic animals from biological, chemical, and physical perspectives to enhance production.

◆**Bioresource Economics**: In this field, the focus is on training specialists with advanced development and applied skills in farm, forest, and fishing ground management, including measurement and planning methods; management and operation of production resources; distribution of products; socioeconomic fields including those related to the policies of farm, forest, and fishing ground management; and domestic and international market relations.

Deep Seawater Science (Joint Department)

The Deep Seawater Science Department conducts research and education on the basic research and applied technologies required for effectively using deep seawater in the fields of fisheries and marine food production by elucidating the chemical, physical, biological, and microbiological characteristics of deep seawater.

2 Applied Bioresource Science Major

The processing and storage of agricultural produce, or more specifically its effective use, is a significant sector in the national economy and also serves as a means of meeting diverse social demands for agricultural products. There is an increasing need for basic research and education in the development of new biochemical engineering technologies. This major focusses on the study of foundational techniques and applied research using these methods.

Applied Bioresource Science Department

The Applied Bioresource Science Department conducts education and research based on the two fields of study listed below to achieve the educational goals of this major.

◆**Food Science**：In this field, educational research is conducted in applied biochemistry, encompassing chemistry, physics, nutrition, hygiene, use of agricultural products and aquatic products, microbiology, and other fields. The focus is on comprehensively understanding food products from production to consumption, including the structure and function of biological tissue constituents and other related aspects.

◆**Bioresource Science for Manufacturing**：This field provides students with diverse research and education on biological resources, examining their chemistry, physics, physiology, and biochemistry. This study includes both theoretical and applied aspects aimed at the advanced use of biological resources. In addition, we cover fields such as chemistry and biochemistry that support the production of biological resources. Furthermore, we provide research and education in areas that contribute to what is commonly known as biotechnology.

3 Life Environment Conservation Science Majo

The processing and storage of agricultural produce, or more specifically its effective use, is a significant sector in the national economy and also serves as a means of meeting diverse social demands for agricultural products. There is an increasing need for basic research and education in the development of new biochemical engineering technologies. This major focusses on the study of foundational techniques and applied research using these methods.

Life Environment Conservation Science Department

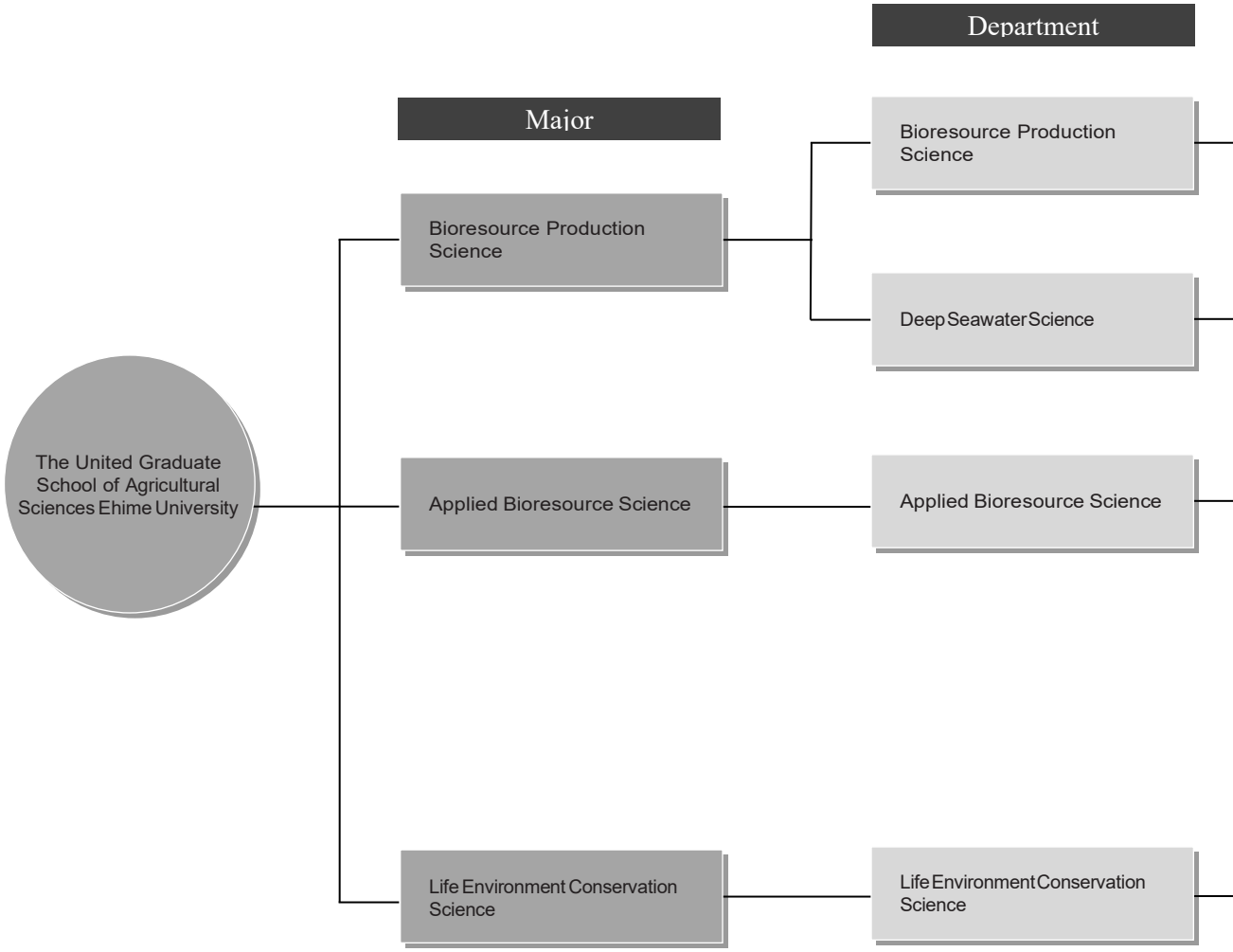
The Life Environment Conservation Science Department focusses on the two fields of study listed below to achieve the educational goals of this major.

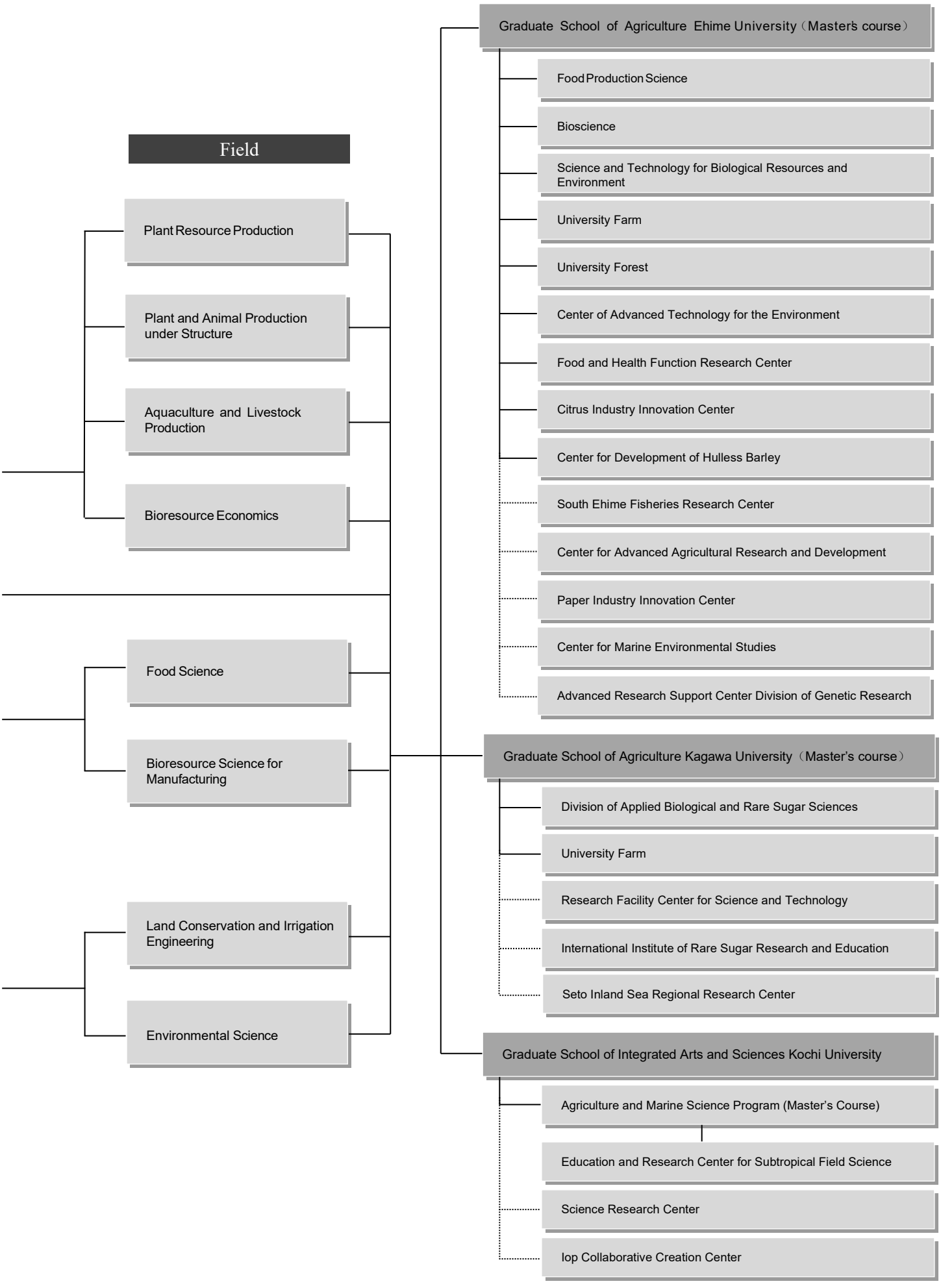
◆**Land Conservation and Irrigation Engineering**：This field provides education and research using physical and engineering methods to develop, improve, and rationalize infrastructure, including land development, improvement, water resource use, and the development of related facilities, across various terrains ranging from forests to agricultural lands and coastlines.

◆**Environmental Science**：This field provides fundamental and applied education and research on the structure and function of large ecosystems ranging from terrestrial soils to the ocean, the environmental changes caused by human activities, and the conservation and management of the environments.

Organization

UGAS-EU is based on the equal status of Ehime University, Kagawa University, and Kochi University, operating under close cooperation. UGAS-EU is an independent graduate school offering a three-year doctoral program, which is organized as an extension of the master's programs at each constituent university. Within the graduate school there are four departments under three majors: Bioresource Production Science, Applied Bioresource Science, and Life Environment Conservation Science.




Field
Plant Resource Production
Plant and Animal Production under Structure
Aquaculture and Livestock Production
Bioresource Economics
Food Science
Bioresource Science for Manufacturing
Land Conservation and Irrigation Engineering
Environmental Science
Graduate School of Agriculture Ehime University（Master's course）
Food Production Science
Bioscience
Science and Technology for Biological Resources and Environment
University Farm
University Forest
Center of Advanced Technology for the Environment
Food and Health Function Research Center
Citrus Industry Innovation Center
Center for Development of Hulless Barley
South Ehime Fisheries Research Center
Center for Advanced Agricultural Research and Development
Paper Industry Innovation Center
Center for Marine Environmental Studies
Advanced Research Support Center Division of Genetic Research
Graduate School of Agriculture Kagawa University（Master's course）
Division of Applied Biological and Rare Sugar Sciences
University Farm
Research Facility Center for Science and Technology
International Institute of Rare Sugar Research and Education
Seto Inland Sea Regional Research Center
Graduate School of Integrated Arts and Sciences Kochi University
Agriculture and Marine Science Program (Master's Course)
Education and Research Center for Subtropical Field Science
Science Research Center
Iop Collaborative Creation Center

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. For each student, three faculty members (one supervisor and two cosupervisors) provide educational and research guidance, ensuring intensive and efficient education.

◆Instruction

Students choose their supervisor from the list of published educational and research fields of faculty members that align with their own research interests. Upon admission, students are assigned two co-supervisors who are suitable for their research topic. The supervisor and two co-supervisors provide educational and research guidance to the student. Students are registered at Ehime University, the core university of UGAS-EU. They are then assigned to the university where their supervisor is affiliated and receive research guidance under their supervision. They also receive guidance as needed from the two co-supervisors affiliated with the other constituent universities. The supervisor conducts research guidance based on the education and research guidance plan developed by the student at the time of admission and collaborates closely with the two co-supervisors to provide research guidance. Since April 2001, instruction and classes have been conducted in the evening or other specified times for working students. Starting in April 2004, working students have also been eligible to apply for the 'Long Term Study Plan', making it possible to extend the time for instruction past that for the normal course of study. Furthermore, the 'Short Term Study Program for Working Students' started in October 2016, in which working students deemed to have completed outstanding research can complete the program in two years.

◆Education

The primary goal of UGAS-EU is to provide students with advanced knowledge in agricultural science from a broad perspective and cultivate their ability to continue their research activities independently after graduating. To achieve this, we implemented the Student Education Program in April 2006. This program entails research guidance by several faculty members, seminars, and an interim presentation to assess the progress of the dissertation. Additionally, a new curriculum and a course credit system were introduced in April 2009 to enhance graduate school education. The school also offers, as part of its competitive programs, funding assistance to students through open recruitment for presenting at international conferences. Recognizing the role in the internationalization of academic disciplines and Japan's role in resource management and environmental conservation, UGAS-EU actively accepts international students. The Special Three-year Doctoral Program for International Students in Tropical and Subtropical Agriculture and Related Sciences was stablished in October 1990. In October 2002, the Special Doctoral Course in Agricultural Sciences for International Students from Asia, Africa, and the Pacific Rim was introduced, which allows students from 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 to transition into UGAS-EU upon completion of their master's degree. The recruitment quota for the Ministry Education, Culture, Sports, Science and Technology International Priority Graduate Program (until October 2027) is six students under the Japanese government-funded special quota and six students under other quotas (such as privately funded). Additionally, recruitment for April enrollment outside the government-funded places has been conducted since the 2019 academic year.

◆Research

The three constituent universities each have a history of supporting the academic aspects of the Shikoku region, which has served as a base for bioresource production. Therefore, the combined resources of these universities through the graduate school covers a wide range of research fields from production technology, environment, and facilities supporting the agriculture, forestry, and fisheries industries to processing, use, and distribution of products, and even extends to issues related to human living environments.

Completion of the Doctoral Course

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