# 愛媛大学大学院連合農学研究科
## (後期３年のみの博士課程)
## 平成29年10月入学
## 及び
## 平成30年４月入学

# 学　生　募　集　要　項

APPLICATION FOR ADMISSION TO
THE DOCTORAL COURSE OF
THE UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCES
EHIME UNIVERSITY
OCTOBER, 2017
AND
APRIL, 2018

【一般選抜・General Admission】
【社会人特別選抜・Working Student Special Admission】

June, 2017

THE UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCES
EHIME UNIVERSITY
CONSORTIUM ORGANIZATION OF
EHIME, KAGAWA AND KOCHI UNIVERSITIES

# The United Graduate School of Agricultural Sciences, Ehime University

# Admission Policy

Agriculture is one of the fundamental fields of study encompassing biology, chemistry, physics, engineering, economics or biotechnology. Building a harmonious, sustainable relationship between nature and human society by integrating a comprehensive, interdisciplinary fields is necessary. The effective use of life functions and products by utilizing and developing the capacity of living things is essential to maintain and to ensure the rich life that people have built and can be sustained into the future. Accordingly, we require people who are not bound by the existing framework, have gained specialized knowledge and practical skills in their various fields, and possess a broad viewpoint and flexible approach not only from a regional perspective, but also from the view point of conservation of the global environment.

Based on the above principles, The United Graduate School of Agricultural Sciences has established a three-year doctoral program offering three majors: Bioresource Production Science, Applied Bioresource Science and Life Environment Conservation Science. These majors reflect the distinctive strengths of the agriculture faculties of the three participating universities: Ehime University, Kagawa University and Kochi University. The majors accept students who have completed a Master's degree, either from a Japanese university or an accredited overseas university. We also offer agricultural research and study enriched by a global perspective which is enhanced by the excellent international students participating in the Tropical and Subtropical Agriculture and Related Sciences program and the Special Doctoral Course Program in Agricultural Sciences for Students from Asia, Africa and the Pacific Rim who concentrate on research related to their specific regions.

Agriculture is an important area of science not only for maintaining and improving the rich life of humankind, but also for preserving and improving the environment and ecosystem. We are looking for people who are motivated to explore the many possibilities of agricultural sciences.

# 目　　次



# Contents

# 一　般　選　抜

# General Admission

**注）本募集要項の中で，平成29年10月入学又は平成30年４月入学に関して，特記していない事項は双方に共通する事項です。**

※　The information provided in this booklet can be used when applying for entrance in October, 2017 or April, 2018 unless otherwise noted.
The United Graduate School of Agricultural Sciences will hereafter be referred to as UGAS-EU.

| 事　　項 | 平成29年10月入学 | 平成30年４月入学 |
|---|---|---|
| 出願資格認定申請者の出願照会期限[*1]（連合農学研究科へ） | 平成29年６月27日㈫ | |
| 出願資格認定審査書類提出期限[*1]（連合農学研究科へ） | 平成29年７月６日㈭ | |
| 「指導教員予定者届」提出期限（主指導教員予定者へ） | 平成29年７月３日㈪ | |
| 出　願　期　間 | 平成29年７月19日㈬～26日㈬[*2] | |
| 入　学　試　験 | 平成29年８月22日㈫　13時～ | |
| 合 格 者 発 表 | 平成29年９月５日㈫　10時～ | |
| 入学手続期間 | 平成29年９月19日㈫～22日㈮ | 平成30年３月７日㈬～13日㈫ |

＊１　印は該当者のみに関する事項です。
＊２　海外に在住する外国人の志願者の場合で，テレビ会議システム等を用いた面接を実施する場合は，平成29年８月９日㈬から８月24日㈭に実施します。

| Application Schedule | Enter Oct 2017 | Enter Apr 2018 |
|---|---|---|
| Deadline for inquiries from applicants who hold no degree　（To UGAS-EU） | Jun 27（Tue）, 2017 | |
| Deadline for submission of documents from non-degree holders　（To UGAS-EU） | Jul 6（Thu）, 2017 | |
| Deadline for Supervisor Request Form　（Submit to prospective supervisor） | Jul 3（Mon）, 2017 | |
| Application Period | Jul 19（Wed）～26（Wed）, 2017[※1] | |
| Examination | Aug 22（Tue）, 2017　13：00～ | |
| Announcement of Candidates | Sep 5（Tue）, 2017　10：00～ | |
| Registration Period | Sep 19（Tue）～22（Fri）, 2017 | Mar 7（Wed）～13（Tue）, 2018 |

※１　If an applicant living abroad would like to take the Interview Examination using a video conference system or similar, the Interview Examination should be scheduled from August 9（Wed）to August 24（Thu）, 2017.

## 1 Enrollment Capacity

| Major | Enrollment Capacity | |
|---|---|---|
| | Oct 2017 | Apr 2018 |
| Bioresource Production Science | not fixed | 9 |
| Applied Bioresource Science | not fixed | 4 |
| Life Environment Conservation Science | not fixed | 4 |
| Total | | 17 |

＊ The number of international students accepted are not included in the numbers above.

## 2 Application Qualifications

One of the following qualifications is required in order to apply.

(1) Those who hold a master's degree or a valid degree comparable to a master's from an accredited institution in Japan (according to the regulations of Monbukagakusho) or who will receive the degree.

(2) Those who have received a master's degree or equivalent from an institution in a country other than Japan or who will receive such a degree.

(3) Those who have received a master's degree or equivalent through a correspondence course taken in Japan through an institution in a country other than Japan or who will receive such a degree.

(4) Those who have received a master's degree or equivalent from a branch of a foreign graduate school located in Japan and accredited by Monbukagakusho or who will receive such a degree.

(5) Those who have completed a course of study at the United Nations University and have received a master's degree or equivalent or who will receive such a degree.

(6) Those who have completed an education course at a foreign school (at educational institutions that have been designated as qualifying for admission) as stipulated in (4) above or those who have attended the United Nations University and passed an examination equivalent to the Examination of Doctoral Thesis Study Basic Ability, or those who are expected to pass the examination and are recognized as having academic ability considered equal to or greater than that of an applicant who holds a master's degree shall be deemed qualified.

[Examination of Doctoral Thesis Study Basic Ability]

ⅰ) Examination to substantiate an applicant's advanced professional knowledge and ability in their field and basic knowledge in other related fields, which the applicant has learned or intends to develop in the master's course.

ⅱ) Examination to substantiate an applicant's ability to independently conduct research related to their doctoral thesis and to what will be learned in the master's course.

(7) Those who have been designated by the Minister of Monbukagakusho.

※Applicants who have graduated from university, have engaged in research at a university or institute for two or more years, and who are deemed by The United Graduate School of Agricultural Sciences, Ehime University, to have the equivalent academic achievement of a master's degree.(Notification No. 118 of the Ministry of Education, Culture, Sports, Science and Technology, 1989)

(8) Those whom UGAS-EU has determined, by an individual qualifying examination, to have the academic background equivalent to or higher than a master's degree and who are at least 24 years old before entering in October or April.

(Those who wish to apply under category (7) or (8) are advised to contact the dean's office of the UGAS-EU by June 27, 2017.)

## 3 Application Filing Term

The completed application forms must be presented to the dean's office of the UGAS-EU between 10：00 and 17：00, from July 19 to 26, 2017.(except Saturday and Sunday). When mailed, the application forms must reach the office by July 26, 2017. Any applications received after July 26 will not be accepted.

The applicant must submit the enclosed form "Supervisor Request Form" to the prospective supervisor by July 3, 2017.

An applicant living abroad can request to take the Interview Examination using a video conference system or similar. If so, they should consult with their prospective supervisor by July 3 (Mon), 2017.

## 4 Documents for Application

(1) Send the application documents to the address below :

Dean's Office, The United Graduate School of Agricultural Sciences, Ehime University

3-5-7 Tarumi, Matsuyama, 790-8566, Japan

Write "Application Forms" in red on the envelope. For inquiries by phone or fax use the following :

Phone：81-89-946-9910, Fax：81-89-943-5242(81 is the country code for Japan.)

(2) Necessary Documents and Fee Payment

| | |
|---|---|
| ① Application form | Fill out according to the prescribed form. |
| ② Curriculum vitae | Fill out according to the prescribed form. |
| ③ Entrance examination ticket | Fill out according to the prescribed form. |
| ④ Photograph card | Fill out according to the prescribed form. |
| ⑤ Academic record | The applicant should provide his / her<br>1. Academic record issued by an authority of the applicant's university (undergraduate level).<br>2. Academic record issued by an authority of the applicant's university (graduate school).<br>※ Those who have completed (or will be completing) a Master's course must submit both 1 and 2. |
| ⑥ Photographs | Two copies of a photograph, taken within three months before application are required. Paste one on the application form and the other on the photograph card. The photograph should be full frontal bust and hatless, 4 × 3 cm in size. |
| ⑦ Master's degree (copy) or a document of expected completion | Issued by the university authority.<br>Applicants with qualification (6) are required to submit a document showing they have passed the Qualification Examination or equivalent. |
| ⑧ Master's thesis | 1. A copy of the Master's thesis or its substitute, and a one or two-page summary thereof, for those who are Master's degree holders. See Sample Form : Summary of Master's Dissertation<br>2. Those who are expected to complete the Master's course must submit a copy of a report of 20 pages or less, including figures and tables, on their research work in progress and a one or two page summary thereof. See Sample Form : Summary of Research Progress (Applicants Expecting to Complete)<br>3. Copies of academic publications if any. |
| ⑨ Research proposal | Use the prescribed form. |
| ⑩ Certificate of Application Fee | The 30, 000 yen examination fee must be paid by post office transfer. (Payment through a bank or ATM is not possible.) After sending the payment, get a certificate of the transfer from the post office and paste it to the payment form and submit it with the other documents.<br>Payment period : From June 6 to 16 : 00 July 26, 2017.<br>**※The following applicants do not need to pay the examination fee :**<br>(1) International students receiving Japanese government scholarships.<br>※Excluding international students who are applying for or intend to apply for an extension of a Japanese government scholarship to receive payment after entering UGAS-EU.<br>(2) Those who completed the Master's course at Ehime, Kagawa or Kochi Universities in September, 2017 and intend to enter in October, 2017.<br>(3) Those who completed the Master's course at Ehime, Kagawa or Kochi Universities in March, 2018 and intend to enter in April, 2018. |
| ⑪ A transcript of the certificate of residence issued by a city or municipal office | Foreign applicants residing in Japan must submit an original transcript of the certificate of residence issued by a city or municipal office (showing nationality, visa status, period of validity, and the expiry date of the visa).<br>Overseas applicants coming to Japan for the entrance examination must submit a copy of their passport. |
| ⑫ A letter of recommendation written by the President or Dean of the applicant's university or the Director of the applicant's institution, but not a department head (no set form) | An applicant living abroad who requests taking the Interview Examination using a video conference system or similar should submit this letter. |
| ⑬ Letter of recommendation | A letter of recommendation (no set form) will be considered, if provided other than for ⑫. |
| ⑭ Return envelope | If application forms are sent by mail, it should be by express mail, in a 23.5 × 12 cm envelope, with the applicant's address and a ¥362 stamp enclosed. (If an applicant living abroad is taking the Interview Examination using a video conference system or similar, then there is no need to provide a return envelope.) |

(3) Application Fee Reimbursement

The application fee will be reimbursed under the following conditions.

① If the applicant does not submit an application to Ehime University after paying the application fee.
② If the applicant pays the application fee twice or pays too much in error.
③ If the application is not accepted.
④ If the applicant in (2) ⑩ (1)-(3) above mistakenly pays the application fee.
⑤ If the applicant has been granted an extension of a Japanese government scholarship.

※Requesting reimbursement

Please send your request to the following office, if you are eligible for reimbursement.

Income and Expenditures Team, Financial Planning Division
Financial Affairs Department, Ehime University
10-13 Dogo Himata, Matsuyama, 790-8577 Japan
Phone : 81-89-927-9074, 9077
E-mail suitou@stu.ehime-u.ac.jp

## 5 Selection Method

Selection is based on an interview, the applicant's academic record and other submitted documents.
Interview Examination
a. Presentation (20 minutes)
The applicant will introduce the contents of his/her master's thesis or the equivalent work and outline his/her research proposal for the doctoral course. (Usually a PowerPoint presentation using an LCD projector)
b. Oral examination and interview (20 minutes)
The applicant will be questioned on his/her major field of research and on the contents of the oral presentation.

## 6 Time and Date of Examination

The schedule of the interview examination is:
August 22 (Tue), 2017 13：00～
If an applicant living abroad would like to take the Interview Examination using a video conference system or similar, the Interview Examination should be scheduled from August 9 (Wed) to August 24 (Thu), 2017.

## 7 Place of Examination

The entrance examination will be held on campus at the Faculty of Agriculture, Ehime University, 3-5-7 Tarumi, Matsuyama. Public bus service is available from the JR Matsuyama Station, the Matsuyama Shi-eki bus terminal and the Dogo Onsen streetcar station. The No. 8 bus will stop at Aidai Nogakubu Mae (Faculty of Agriculture, Ehime University).
The Interview Examination using a video conference system or similar should be held at a location as specified by the prospective supervisor.

## 8 Announcement of Candidates

September 5 (Tue), 2017 10：00
A list of the accepted candidates'examination numbers will be posted on the UGAS-EU bulletin board and each candidate will be notified by mail.

## 9 Registration

(1) Registration period

| Entering in October 2017 | Entering in April 2018 |
|---|---|
| September 19 (Tue) − 22 (Fri), 2017 | March 7 (Wed) − 13 (Tue), 2018 |

(2) Registration Fees
① Registration Fee, 282, 000 yen
Those who are continuing from the master's programs at Ehime, Kagawa and Kochi Universities do not need to pay this fee. Those receiving a Japanese government scholarship are also exempt from paying this fee.
② Tuition for one year: 535, 800 yen (One semester: 267, 900 yen)
Those international students receiving a Japanese government scholarship do not need to pay tuition.
＊ The Registration and Tuition fees for 2017 are as stated above. However, the fees for 2018 may be revised. If there is a change in the tuition fee during your course of study you will be expected to pay the new fee.
③ Candidates are required to pay 3, 620 yen (coverage for three years) for Student Education/Research Accidents and Injury Insurance.
＊ Student Education/Research Accident and Injury Insurance fee is as stated above. However, the fees for 2018 may be revised.
(3) Documents and photographs:
① Written pledge*
② Letter of guarantee*
③ Curriculum vitae*
④ Your Master's degree (copy) or a document indicating you will finish by September, 2017 or March, 2018.
⑤ Copy of Residence Card (both sides)
⑥ Four copies of a 4×3cm photograph.
＊The forms will be sent to you two weeks before the registration period.

## 10 Important Notes

(1) Applicants must file complete, accurate and authentic documents for application. To do otherwise may result in denial of admission.
(2) Applicants must have their entrance examiniation ticket with them on the day of the entrance examination.
(3) Further information is available at the dean's office of the UGAS-EU.

## 11 Personal Information

Any personal information provided in application forms such as names and addresses is used solely for processing applications, contacting applicants if an application document is incomplete, conducting entrance examinations, notifying successful applicants, and sending admission procedure documents. If an application document is incomplete, UGAS may notify the applicant's institution to request the document be promptly amended and resubmitted.
UGAS uses the personal information for academic affairs after enrollment (student registration, educational guidance), student support services (health-care management, scholarship applications), tuition administration, and to conduct surveys and research (improve entrance examinations, study and analyze application trends). The personal information is not used for any other purpose and will not be provided to third parties.

# 主指導教員有資格者の研究分野一覧

# Fields of Instruction and Professors

l Bioresource Production Science Major
Bioresourse Production Science Department

a Plant Resource Production

EH : Ehime University KG : Kagawa University KC : Kochi University

| Professor(Affiliation) | Research Field | Main Subject |
|---|---|---|
| Sakae AGARIE (KG) | Plant Production Physiology | Physiological and molecular biological analysis on plant functions and utilization of plant resources |
| Takuya ARAKI (EH) | Crop Science | Ecophysiological studies on dry matter production and yield of crops |
| Tomoaki ICHIE (KC) | Tree Ecophysiology | Resource allocation strategies for growth, reproduction and herbivore defense of forest trees |
| Hideto UENO (EH) | Soil Science and Plant Nutrition | Dynamics of soil nutrients, agroecological soil managements for sustainable plant production |
| Tsuneo OGATA (KC) | Pomology and Citriculture | Chemical growth regulation in fruit trees |
| Nobuyuki OKUDA (KG) | Vegetable Horticulture | Development regulation of vegetable crops and raising of superior strain |
| Kappei KOBAYASHI (EH) | Plant Molecular Biology and Virology | Molecular biology of plant viruses, plant-virus interactions and plant pathogenesis |
| Kazuhiko SHIMASAKI (KC) | Floricultural Science | Growth control and tissue culture of ornamental plants |
| Masanori TOYOTA (KG) | Crop Ecophysiology | Ecophysiology and morphology on yield determination of crops |
| Yasuyo NISHIMURA (KC) | Vegetable Crop Science | Developmental and nutritional physiology, production technique in vegetable |
| Kenji BEPPU (KG) | Pomology | Reproductive physiology of fruit trees |
| Akira MIYAZAKI (KC) | Crop Physiology | Physiology and function related with yield production in field crops |
| Masayuki MURAI (KC) | Genetics and Breeding in Rice | Studies on effects of genes concerning yield, culm length, heading time and cool tolerance in rice |
| Ryosuke MOCHIOKA (KG) | Pomology | Horticultural utilization of fruit tree resources |
| Tomohiro YANAGI (KG) | Vegetable Crop Science | Flowering physiology and development of production technique in strawberry plants |
| Hisashi YAMADA (EH) | Pomology | Eco-physiological studies on fruit trees |

b Plant and Animal Production under Structure

| | | |
|---|---|---|
| Seiichi ARIMA (EH) | Agricultural Machinery and Mechatoronics | Development of agricultural machinery and robot for intelligent bioproduction system |
| Toshio KAWANO (KC) | Post-harvest Process Engineering | Processing, handling and distribution technology for agricultural products |
| Yasushi SUZUKI (KC) | Forest Engineering | Logging cable system, Forest operation system, Forest road, Effects of forest operation to residual stands, Woody biomass |
| Takejiro TAKAMURA (KG) | Horticultural Plant Breeding | Utilization and genetic improvement of horticultural plant resources. Genetic improvement and environmental control for flower color expression |
| Hiroshige NISHINA (EH) | Environment Control in Biology | Environment control in greenhouse and amenity effect of plants on human being |
| Hiroshi NONAMI (EH) | Plant Biophysics/ Biochemistry | Mass spectrometry, systems biology and biophysics /biochemistry research in plant cells under environmental stress conditions |

| | | |
|---|---|---|
| Kenji HATOU (EH) | Information Systems for Plant Factory | Research of the various models for the speaking plant approach in a plant factory |
| Seiichi FUKAI (KG) | Floriculture | Genetic resources and genetic improvement of Ornamental plants |
| Makito MORI (KC) | Applied Meteorology | Climatrological studies on agricultural ecosystems |
| Yozo YAMADA (EH) | Forest Ergonomics | Working Safety, environmental ethics, working skill, labor productivity, education and training |

c Aquaculture and Livestock Production

| | | |
|---|---|---|
| Kou IKEJIMA (KC) | Coastal and Fisheries Ecology | Ecology and Conservation of coastal ecosystems and fisheries resources |
| Masayuki IMAJOH (KC) | Fish Pathology | Studies on epidemiology and prevention of fish diseases caused by viruses, bacteria and parasites |
| Keisuke EDASHIGE (KC) | Applied Cryobiology | Cryobiological property of gametes and embryos Development of cryopreservation methods for gametes and embryos |
| Shingo SEKI (KC) | Fish Genetics and Breeding Science | Fish genetics and breeding science Conservation genetics in fish |
| Motohiro TAKAGI (EH) | Fish Breeding and Conservation Genetics | Studies on fish breeding and conservation genetics |
| Tetsuya TACHIBANA (EH) | Poultry Nutritional Physiology | Studies on the bioactive molecules related to growth and behavior of chickens |
| Haruhisa FUKADA (KC) | Fish Nutrient Physiology | Studies on hormonal regulation of growth and digestion in fish |
| Toshiro MASUMOTO (KC) | Fish physiology and Biochemistry | Studies on bioavailability and physiological roles of nutrients in Fish |
| Takahiro MATSUBARA (EH) | Fish Reproductive Physiology and Aquaculture | Studies of molecular mechanisms of oocyte development and maturation, and evaluation of gamete quality. The results are applied for seed production in fish aquaculture and stock enhancement |
| Takeshi MIURA (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 |

d Bioresource Economics

| | | |
|---|---|---|
| Mamoru ITABASHI (EH) | System of Regional Agriculture | Studies on the agricultural structure and cooperative of rural area |
| Masahiro ICHIKAWA (KC) | Rural resource management | Studies on resource uses, livelihood, society and culture in rural areas in Japan and Asia |
| Naruhito TAKENOUCHI (EH) | Fisheries management and business | Study on economics and management theories of the sustainable development in the fisheries and fishing village |
| Akira NAKAYASU (EH) | Agricultural Marketing | Demand and supply structure of food and marketing |
| HU Bai (EH) | Agricultural Economics and Farm Management | Farm household economy, agricultural and rural development, production and marketing of organic farm products |
| Atsushi MATSUOKA (EH) | Resources and Environmental Management | Economical studies on management and preservation of agricultural land |
| Yoshikazu WAKABAYASHI (EH) | Sociology of Fisheries | Studies on the social structure and culture of fishing Community |

2 Applied Bioresource Science Major
Applied Bioresource Science Department

a Food Science

| | | |
|---|---|---|
| Yasuhiko ASADA (KG) | Applied Microbiology | Biochemistry and molecular biology of basidiomycetes(mushrooms) |
| Kohsuke ADACHI (KC) | Marine biotechnology | Biochemical investigation for more efficient utilization of fisheries products(fisheries waste, deep-sea animals and etc) |
| Hiroyuki UKEDA (KC) | Food Chemistry | Analysis, function and effective utilization of food |
| Masahiro OGAWA (KG) | Food Protein Chemistry | Structure-function analysis of food proteins and their functional development |
| Takehiro KASHIWAGI (KC) | Food Functional Chemistry | Chemicalbiology of food material. Isolation and identification of functional substance in food |
| Osamu KAWAMURA (KG) | Food Hygiene | Development and application of immunological methods for mycotoxins, and toxicicolgy and human exposure of mycotoxins |
| Taro KISHIDA (EH) | Nutrition | Studies on nutritional and physiological effects of food components, especially non-nutrient |
| Shoichi GOHTANI (KG) | Food Physics | Rheological properties and texture of foods, and preparation of nano-emulsions for food system |
| Tomoko SHIMAMURA (KC) | Food Chemistry | Studies on reaction of food components, food functionality, and food analysis |
| Goro TAKATA (KG) | Applied Enzymology | Production of Rare Sugar from bio-resources using microbial and enzymatic reactions |
| Hirotoshi TAMURA (KG) | Food Chemistry | Molecular nutrition and flavor chemistry of Food ingredients |
| Tatsuhiro MATSUO (KG) | Nutrition | Effects of diets and exercises on metabolism and physiological function in mammals |
| Katsuji MORIOKA (KC) | Fisheries Chemistry | Studies on post-harvest science and technology of fish and fisheries products<br>Studies on more efficient utilization of fish |
| Kenji MORIMOTO (KG) | Applied Enzymology | Production of various rare sugars using microbial and enzymatic reactions |
| Hidefumi YOSHII (KG) | Food Engineering | Investigation of formation of functional food powder by spray drying, kneading method, and molecular encapsulation with chemical reaction engineering |
| Akira WATANABE (KG) | Microbial Biochemistry | Studies on biological characteristics of basidiomycetous mushrooms |
| Seiya WATANABE (EH) | Biochemistry | Identification and bioindustrial application of enzymes involved in novel metabolic pathway from microorganisms |

b Bioresource Science for Manufacturing

| | | |
|---|---|---|
| Mitsuru AKITA (EH) | Applied Molecular Cell Biology | Protein transport and metabolite transport in plant organelles |
| Koichi AKIYAMA (EH) | Fungal Genetic Engineering | Functional analysis of the genes from yeast or fungi |
| Makoto ASHIUCHI (KC) | Bioengineering and Nanotechnology | Development of Multi-functional Bionanomaterials and Their Applications |
| Hideaki ICHIURA (KC) | Material Chemistry of Forest Resources | Material Chemistry for utilization of forest resources |
| Kazuya ICHIMURA (KG) | Plant Stress Signaling | Biotic and abiotic stress signal transduction in plants |
| Kazutaka ITOH (EH) | Forest Chemistry | Chemistry for utilization of forest resources |
| Yusuke EDASHIGE (EH) | Biomass Conversion | Utilization of Biomass Energy<br>Chemical Utilization of Plant Polysaccharides |

| | | |
|---|---|---|
| Kouhei OHNISHI (KC) | Microbiology and Molecular Genetics | Molecular analysis of virulence factor secretion systems in plant and animal pathogenic bacteria |
| Takeshi KATAYAMA (KG) | Wood biomass chemistry and tree biochemistry | Organic chemistry, biosynthesis, and bioactivity of wood components, and woody biomass utilization |
| Hisashi KATO (KG) | Plant Biochemistry | Allelopathy and plant biochemistry |
| Yasuhiro KAWANAMI (KG) | Functional Molecular Chemistry | Organic chemistry of biofunctional molecules |
| Chul-Sa KIM (KC) | Chemical Ecology | Isolation and determination of semiochemicals between organisms |
| Yoshio KIMURA (KG) | Physiology of microorganisms | Studies on environmental adaptation in bacteria |
| Masaharu KYO (KG) | Plant Cell Physiology | Physiological and molecular biological studies on adventitious embryogenesis |
| Haruhiko SAKURABA (KG) | Enzyme Engineering | Structure-function analysis of enzymes from extremophiles and development of their application |
| Masashi SATO (KG) | Bioactive Natural Products Chemistry | Bio-organic chemistry of natural bioactive substances |
| Noriyuki SUEYOSHI (KG) | Molecular and Cellular Biology | Signal transduction mediated by protein phosphorylation and dephosphorylation |
| Takuya SUGAHARA (EH) | Animal Cell Technology | Screening and application of biofunctional substances from foodstuffs |
| Masatoshi SUGIMORI (EH) | Wood Science and Technology | Wood Quality |
| Takayuki SEKITO (EH) | Genetic engineering of microorganisms | Molecular mechanism and regulation of intracellular transport |
| Naotaka TANAKA (KG) | Cell biology | Functional analysis of the Golgi apparatus and its application to protein production |
| Mitsuaki TABUCHI (KG) | Applied Molecular Cell Biology | Studies on the regulation of vesicle trafficking and lipid metabolism in yeast and mammalian cells |
| Shinichi TEBAYASHI (KC) | Bioactive Chemistry | Organic chemical studies on bioactive chemicals from natural occurring : eg. isolation and identification of medical agents from folklore medical plants. screening for pesticidal agents from natural occurring |
| Shinji NAGATA (KC) | Microbial Fermentation | Application of microbial function |
| Kosuke NISHI (EH) | Animal Cell Technology | Functional analysis of biomolecules and elucidation of their mode of action |
| Hisashi NISHIWAKI (EH) | Bioorganic chemistry | Structure-activity relationship and mode of action of bioactive substances |
| Mika NOMURA (KG) | Molecular Plant Nutrition | Physiology and molecular biology in plant-microbe interaction |
| Kazuhiro FUKADA (KG) | Biophysical Chemistry | Physical chemistry on biological amphiphile, monosaccharide, and colloidal materials |
| Masayuki FUJITA (KG) | Plant Stress Responses | Biochemistry and molecular biology on stress responses and tolerances of higher plants |
| Satoshi YAMAUCHI (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

| | | |
|---|---|---|
| Hiroki OUE (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 |
| Noriyuki KOBAYASHI (EH) | Geotechnical and geoenvironmental engineering | Application of rehabilitation engineering for Hydraulic Structures |
| Katsuo SASAHARA (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 |
| Shushi SATO (KC) | Water Use and Environmental Engineering | The overall engineering research for achieving the management of water environment and infrastructure in river basin |
| Hao ZHANG (KC) | Hydrautics and Sediment Transport | Research on water/sediment related disasters and environment problems |
| Tadashi HARA (KC) | Geotechnical and earthquake proof engineering | Study on liquefaction characteristics of soft ground |
| Shinsuke HARUTA (EH) | Rural Resources Management for Environmental Preservation | Improvement and Management of Water Quality and Resources in Rural Area |
| Taku FUJIWARA (KC) | Water Environmental Engineering | Analysis of water pollution mechanism and development of wastewater treatment technology |
| Masayuki MATSUOKA (KC) | Geographic Information Science | Geospatial analysis of the environment using remote sensing and geographic information system |
| Shinsuke MATSUMOTO (KC) | Environmental Facility Engineering | Development of construction material and structural analysis of agricultural facility |

b Environmental Science

| | | |
|---|---|---|
| Kazuya AKIMITSU (KG) | Molecular Plant Pathology | Molecular biology of plant microbe interactions |
| Masao ADACHI (KC) | Aquatic Environmental Science | Biology, physiology and ecology of harmful algal blooms |
| Hiroshi ISHIBASHI (EH) | Ecotoxicology/ Molecular toxicology | Studies on ecotoxicological effects of environmental contaminants in animals<br>Studies on disruption mechanism of nuclear receptor signaling pathway by environmental contaminants |
| Kazuhiko ICHIMI (KG) | Coastal Marine Science | Biological and Chemical Processes in Coastal Ecosystems |
| Fuminori ITO (KG) | Insect Ecology | Behavior and ecology of social insects |
| Kōzo IWASAKI (KC) | Plant Nutrition | Plant nutritional physiology and nutrient dynamics in rhizosphere soils |
| Ayato KAWASHIMA (EH) | Environmental Science for Industry | Development of effective utilization technology for biomass and treatment technology for hazardous pollutants |
| Yumei KANG (KC) | Soil Environmental Science | Rehabilitation of contaminated soil, water and grassland ecosystem |
| Akinori KIBA (KC) | Phytopathlogy | Analysis of plant immunity and disease development |
| Kazuhiko KONISHI (EH) | Insect taxonomy | Taxonomy of hymenopterous parasitoids based on morphological characters |
| Kenji GOMI (KG) | Plant Pathology | Signal transduction on plant-microbe interaction |

| | | |
|---|---|---|
| ☆Hikaru SAJI (EH) | Environmental Adaptation of Plants | Responses of plants to ozone and other environmental tactors/Environmental effects of genetically-modified plants |
| Satoru SUZUKI (EH) | Marine Molecular Ecology | Organic matter decomposition and antibiotic resistance in aquatic microbes |
| ☆Noriyuki SUZUKI (EH) | Environmental Sciences | Studies on multimedia fate and transport of chemicals in regional to global scales |
| Shin TAKAHASHI (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 |
| Ichiro TAKEUCHI (EH) | Ecosystem Conservation, Marine Ecology | Studies on structure, mechanism and conservation methods of shallow water ecosystem, with special reference to species diversity of amphipod |
| Kuninao TADA (KG) | Biological and Chemical Oceanography | Biological and chemical studies on biophilic element cycling in coastal food web |
| Yasufumi HIKICHI (KC) | Plant Pathology | Analysis on pathogenicity mechanisms of plant pathogens and responses of host plants |
| Naoto MATSUE (EH) | Soil Science | Chemical structure and surface chemical reactions of soil constituents |
| Haruo YAMAGUCHI (KC) | Aquatic microbial physiology and ecology | Physiology and ecology of microalgae including harmful species |
| Yoshihiro YAMADA (KG) | Limnology Biogeochemistry | Analysis of the material cycling and ecosystem structure in the watershed. Research for the water environment in the region with small precipitation. Development of the environment assessment method by the multiple tracers |
| Hiroyuki YOSHITOMI (EH) | Entomology | Systematics and taxonomy of Insects, conservation of biodiversity |

Those supervisors whose name are marked ☆ are professors of the National Institute for Environmental Studies.

# 愛媛大学大学院連合農学研究科の概要

# The 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 a harmonious balance between people and nature.

# Description

## 1 Bioresource Production Science Major

In the Shikoku region, agricultural and livestock industries have developed utilizing complicated geographical features in Shikoku Island. They cover a wide range of the horticultural production of vegetable and ornamental plants in open fields as well as under structure, the production of citrus fruits, cultural fisheries in the area of inland sea or sea shore, forestry and animal husbandry. This course is intended to enhance the level of fundamental research and develop applied technology with respect to the production and management of plant and animal resources.

● **Bioresource Production Science Department**

In order to achieve the educational goals of this course, study and research is developed for each of the 4 fields of study listed below.

■ **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.

■ **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.

■ **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.

■ **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 role in processing and storage of agricultural products or effective utilization is being far larger not only for national economics but also for diverse social needs towards bioresources including agricultural products. The necessity of basic research and investigation has been strengthening in the development of chemical, biotechnological and up-to-date techniques. This course aims at being investigated, making fruitful use of applied technology which has concurrently been developed by use of basic methods.

● **Applied Bioresource Science Department**

In order to achieve the educational goals of this course, study and research is developed for each of the 2 fields of study listed below.

■ **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 organellae are studied.

■ **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

Increase in population and consumption of natural resources has reached an unprecedented level, so that the limits of global resources, human existence and activities are commonly recognized. Conservation of the life environment, which is a base for bioresource production and human existence, and rational use of environmental factors is the strong demand to the contribution of agriculture. Such a problem has grined greater importance. This course provides investigation and research based on technological and ecological methods.

● **Life Environment Conservation Science Department**

In order to achieve the educational goals of this course, study and research is developed for each of the 2 fields of study listed below.

■ **Land Conservation and Irrigation Engineering**

Using physical and technological methods, students study the consolidation, maintenance and improvement of varrious 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.

■ **Environmental Science**

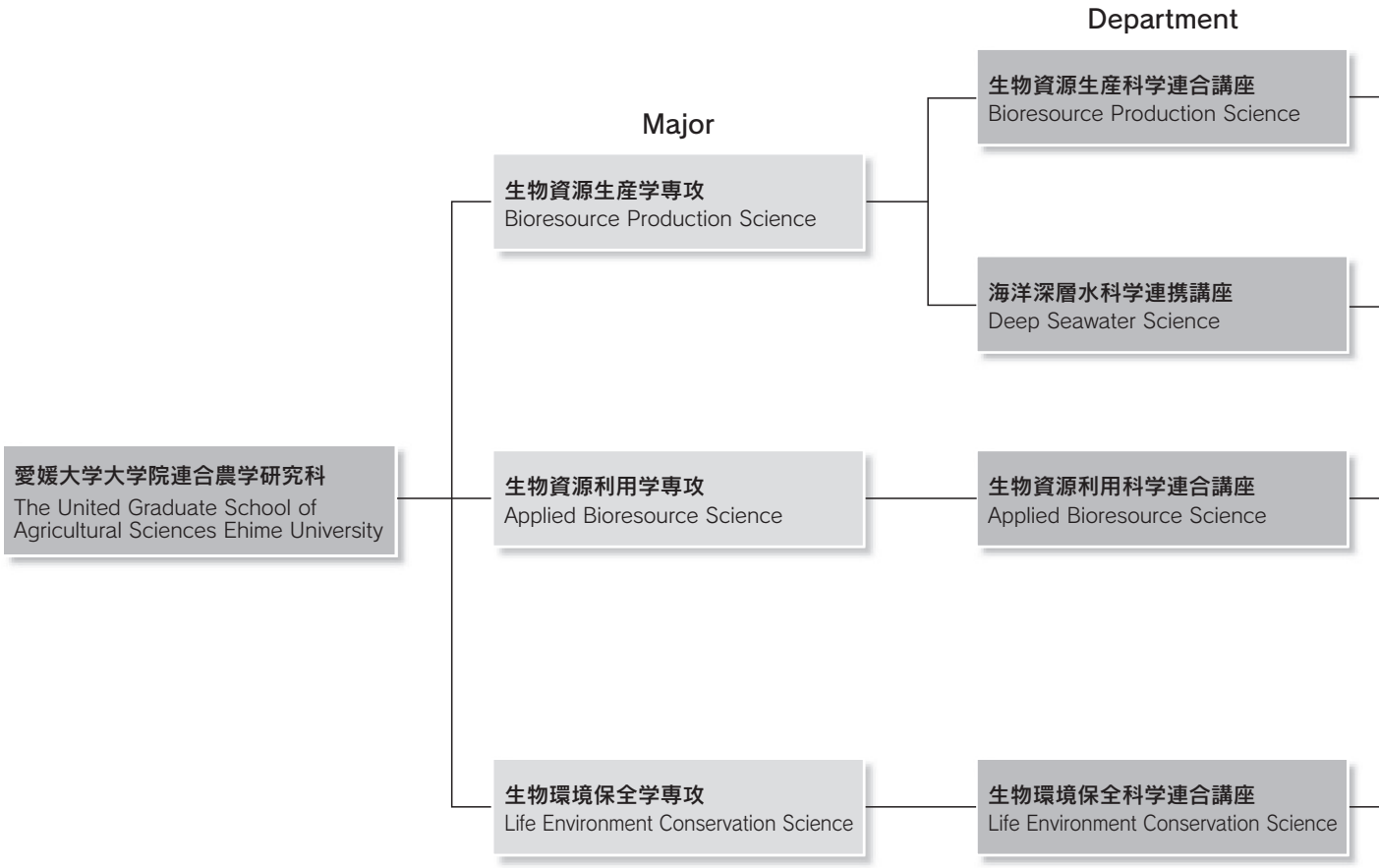
This chair provides instruction and research programs concerning the basic study and applied technology of the structure and function of various ecosystems ranging from the terrestrial land to the seas, along with environmental changes caused by human activities, and conservation and management of life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

# 研究科の構成

## Organization

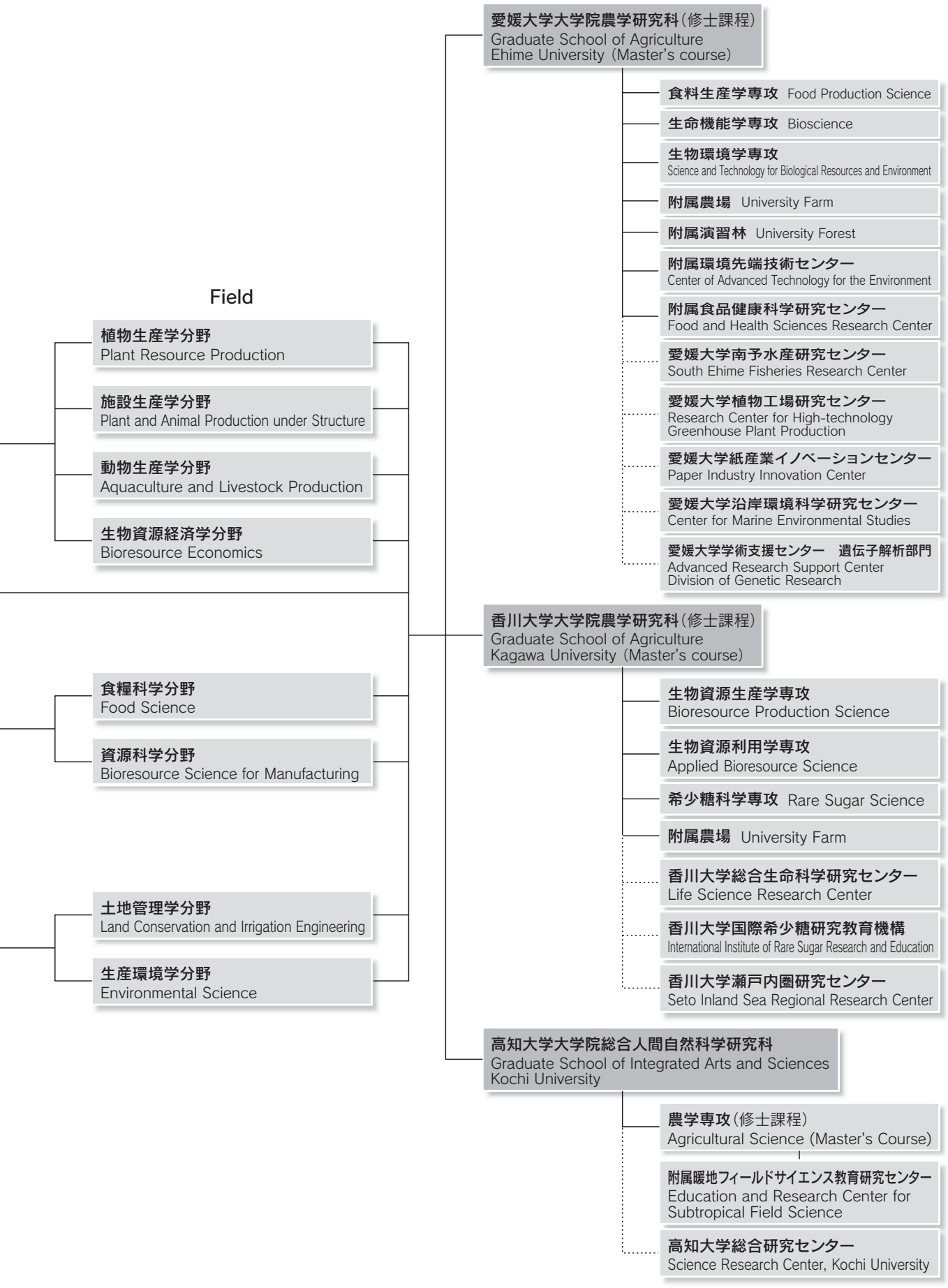
本連合農学研究科は，愛媛大学，香川大学及び高知大学の平等の精神に基づき，その密接な協力のもとに構成されている。各構成大学の修士課程である，大学院農学研究科（愛媛大学，香川大学）及び大学院総合人間自然科学研究科農学専攻（高知大学）と附属施設を母体として編成されている博士課程後期３年のみの独立研究科である。

本研究科には，生物資源生産学，生物資源利用学，生物環境保全学の３専攻の下に３連合講座及び１連携講座が置かれている。




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.


Field
植物生産学分野
Plant Resource Production
施設生産学分野
Plant and Animal Production under Structure
動物生産学分野
Aquaculture and Livestock Production
生物資源経済学分野
Bioresource Economics
食糧科学分野
Food Science
資源科学分野
Bioresource Science for Manufacturing
土地管理学分野
Land Conservation and Irrigation Engineering
生産環境学分野
Environmental Science
愛媛大学大学院農学研究科（修士課程）
Graduate School of Agriculture
Ehime University (Master's course)
食料生産学専攻 Food Production Science
生命機能学専攻 Bioscience
生物環境学専攻
Science and Technology for Biological Resources and Environment
附属農場 University Farm
附属演習林 University Forest
附属環境先端技術センター
Center of Advanced Technology for the Environment
附属食品健康科学研究センター
Food and Health Sciences Research Center
愛媛大学南予水産研究センター
South Ehime Fisheries Research Center
愛媛大学植物工場研究センター
Research Center for High-technology Greenhouse Plant Production
愛媛大学紙産業イノベーションセンター
Paper Industry Innovation Center
愛媛大学沿岸環境科学研究センター
Center for Marine Environmental Studies
愛媛大学学術支援センター 遺伝子解析部門
Advanced Research Support Center
Division of Genetic Research
香川大学大学院農学研究科（修士課程）
Graduate School of Agriculture
Kagawa University (Master's course)
生物資源生産学専攻
Bioresource Production Science
生物資源利用学専攻
Applied Bioresource Science
希少糖科学専攻 Rare Sugar Science
附属農場 University Farm
香川大学総合生命科学研究センター
Life Science Research Center
香川大学国際希少糖研究教育機構
International Institute of Rare Sugar Research and Education
香川大学瀬戸内圏研究センター
Seto Inland Sea Regional Research Center
高知大学大学院総合人間自然科学研究科
Graduate School of Integrated Arts and Sciences
Kochi University
農学専攻（修士課程）
Agricultural Science (Master's Course)
附属暖地フィールドサイエンス教育研究センター
Education and Research Center for Subtropical Field Science
高知大学総合研究センター
Science Research Center, Kochi University

# 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 the 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.

Since April 2001, in accordance with article 14 of the special edict on education for working students, instruction and classes have been provided in the evening and other designated times.

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.

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 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 and independent research projects.

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.

## Curriculum (Bioresource Production Science)

| Subject | Recommended Year | Credits | Category | Instruction | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | Lecture | Seminar | Practical | |
| Joint Seminar | 1 | 1 | ★ | ○ | ○ | | Residential |
| Bioresource Production Science Seminar | 1 − 2 | 1 | ★ | ○ | | | |
| Dissertation Research | 1 − 3 | 6 | ★ | | ○ | | Supervisor and Co-supervisor |
| Dissertation Tutorial | 1 − 3 | 1 | ★ | | ○ | | Second Co-supervisor |
| Comprehensive Agricultural Science I (Japanese) | 1 | 1 | ☆ | ○ | | | Jointly with 6 united graduate schools |
| Comprehensive Agricultural Science II (English) | 1 | 1 | ☆ | ○ | | | Jointly with 6 united graduate schools |
| English for Scientific Writing and Presentations I | 1 | 1 | | ○ | | | |
| English for Scientific Writing and Presentations II | 1 − 2 | 1 | | ○ | | | |
| Research Project | 1 − 2 | 1 | | | ○ | | |
| Internationalization Program | 1 − 2 | 1 | | | ○ | | |
| Internship | 1 − 2 | 1 | | | | ○ | |
| Bioresource Production Science Presentations | 1 − 2 | 1 | | | ○ | | |
| Applied Bioresource Science Seminar | 1 − 2 | 1 | | ○ | | | |
| Life Environment Conservation Science Seminar | 1 − 2 | 1 | | ○ | | | |

Completion Prerequisites

Successful candidates must take the prescribed subjects, acquire a minimum 12 credits (9 credits of required subjects, 1 or more credits of required elective subjects, and 2 or more credits of elective subjects), complete the dissertation interim presentation and have their doctoral dissertation accepted for review.

Notes :
1. ★ indicates a required subject, ☆ indicates a required elective subject, and no symbol indicates an elective subject.
2. Grades : Excellent (A) for 90 or more, Very Good (B) for 80-89, Good (C) for 70-79, Satisfactory (D) for 60-69 and Fail (E) for less than 60. A minimum grade of Satisfactory (D) is required to pass. A Pass (P) or Fail (E) is awarded for the Joint Seminar, Dissertation Tutorial, Research Project, Internationalization Program, Internship and the Bioresource Production Science Presentations.

## Curriculum (Applied Bioresource Science)

| Subject | Recommended Year | Credits | Category | Instruction | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | Lecture | Seminar | Practical | |
| Joint Seminar | 1 | 1 | ★ | ○ | ○ | | Residential |
| Applied Bioresource Science Seminar | 1 − 2 | 1 | ★ | ○ | | | |
| Dissertation Research | 1 − 3 | 6 | ★ | | ○ | | Supervisor and Co-supervisor |
| Dissertation Tutorial | 1 − 3 | 1 | ★ | | ○ | | Second Co-supervisor |
| Comprehensive Agricultural Science I (Japanese) | 1 | 1 | ☆ | ○ | | | Jointly with 6 united graduate schools |
| Comprehensive Agricultural Science II (English) | 1 | 1 | ☆ | ○ | | | Jointly with 6 united graduate schools |
| English for Scientific Writing and Presentations I | 1 | 1 | | ○ | | | |
| English for Scientific Writing and Presentations II | 1 − 2 | 1 | | ○ | | | |
| Research Project | 1 − 2 | 1 | | | ○ | | |
| Internationalization Program | 1 − 2 | 1 | | | ○ | | |
| Internship | 1 − 2 | 1 | | | | ○ | |
| Applied Bioresource Science Presentations | 1 − 2 | 1 | | | ○ | | |
| Bioresource Production Science Seminar | 1 − 2 | 1 | | ○ | | | |
| Life Environment Conservation Science Seminar | 1 − 2 | 1 | | ○ | | | |

Completion Prerequisites

Successful candidates must take the prescribed subjects, acquire a minimum 12 credits (9 credits of required subjects, 1 or more credits of required elective subjects, and 2 or more credits of elective subjects), complete the dissertation interim presentation and have their doctoral dissertation accepted for review.

Notes :
1. ★ indicates a required subject, ☆ indicates a required elective subject, and no symbol indicates an elective subject.
2. Grades : Excellent (A) for 90 or more, Very Good (B) for 80-89, Good (C) for 70-79, Satisfactory (D) for 60-69 and Fail (E) for less than 60. A minimum grade of Satisfactory (D) is required to pass. A Pass (P) or Fail (E) is awarded for the Joint Seminar, Dissertation Tutorial, Research Project, Internationalization Program, Internship and the Applied Bioresource Science Presentations.

## Curriculum (Life Environment Conservation Science)

| Subject | Recommended Year | Credits | Category | Instruction | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | Lecture | Seminar | Practical | |
| Joint Seminar | 1 | 1 | ★ | ○ | ○ | | Residential |
| Life Environment Conservation Science Seminar | 1 − 2 | 1 | ★ | ○ | | | |
| Dissertation Research | 1 − 3 | 6 | ★ | | ○ | | Supervisor and Co-supervisor |
| Dissertation Tutorial | 1 − 3 | 1 | ★ | | ○ | | Second Co-supervisor |
| Comprehensive Agricultural Science I (Japanese) | 1 | 1 | ☆ | ○ | | | Jointly with 6 united graduate schools |
| Comprehensive Agricultural Science II (English) | 1 | 1 | ☆ | ○ | | | Jointly with 6 united graduate schools |
| English for Scientific Writing and Presentations I | 1 | 1 | | ○ | | | |
| English for Scientific Writing and Presentations II | 1 − 2 | 1 | | ○ | | | |
| Research Project | 1 − 2 | 1 | | | ○ | | |
| Internationalization Program | 1 − 2 | 1 | | | ○ | | |
| Internship | 1 − 2 | 1 | | | | ○ | |
| Life Environment Conservation Science Presentations | 1 − 2 | 1 | | | ○ | | |
| Bioresource Production Science Seminar | 1 − 2 | 1 | | ○ | | | |
| Applied Bioresource Science Seminar | 1 − 2 | 1 | | ○ | | | |

| Completion Prerequisites |
|---|
| Successful candidates must take the prescribed subjects, acquire a minimum 12 credits (9 credits of required subjects, 1 or more credits of required elective subjects, and 2 or more credits of elective subjects), complete the dissertation interim presentation and have their doctoral dissertation accepted for review. |

Notes :
1. ★ indicates a required subject, ☆ indicates a required elective subject, and no symbol indicates an elective subject.
2. Grades : Excellent (A) for 90 or more, Very Good (B) for 80−89, Good (C) for 70−79, Satisfactory (D) for 60-69 and Fail (E) for less than 60. A minimum grade of Satisfactory (D) is required to pass. A Pass (P) or Fail (E) is awarded for the Joint Seminar, Dissertation Tutorial, Research Project, Internationalization Program, Internship and the Life Environment Conservation Science Presentations.

## 平成28年度　入学者状況　2016 Admissions

| 専攻名 Major | 入学定員 Admission Quota | 志願者 Candidates | | 受験者 Examinees | | 合格者 Successful Candidates | | 入学者 Enrolled | |
|---|---|---|---|---|---|---|---|---|---|
| | | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult |
| 生物資源生産学 Bioresource Production Science | 9 | 4(4) | 5 | 4(4) | 5 | 4(4) | 5 | 4(4) | 5 |
| 生物資源利用学 Applied Bioresource Science | 4 | 11(2) | 2 | 11(2) | 2 | 11(2) | 2 | 10(2) | 2 |
| 生物環境保全学 Life Environment Conservation Science | 4 | 4(1) | 2 | 4(1) | 2 | 4(1) | 2 | 4(1) | 2 |
| 計 Total | 17 | 19(7) | 9 | 19(7) | 9 | 19(7) | 9 | 19(7) | 9 |

## 平成27年度　入学者状況　2015 Admissions

| 専攻名 Major | 入学定員 Admission Quota | 志願者 Candidates | | 受験者 Examinees | | 合格者 Successful Candidates | | 入学者 Enrolled | |
|---|---|---|---|---|---|---|---|---|---|
| | | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult |
| 生物資源生産学 Bioresource Production Science | 9 | 7(3) | 3 | 7(3) | 3 | 7(3) | 3 | 7(3) | 3 |
| 生物資源利用学 Applied Bioresource Science | 4 | 6(2) | 0 | 6(2) | 0 | 6(2) | 0 | 4(2) | 0 |
| 生物環境保全学 Life Environment Conservation Science | 4 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| 計 Total | 17 | 15(5) | 4 | 15(5) | 4 | 15(5) | 4 | 13(5) | 4 |

## 平成26年度　入学者状況　2014 Admissions

| 専攻名 Major | 入学定員 Admission Quota | 志願者 Candidates | | 受験者 Examinees | | 合格者 Successful Candidates | | 入学者 Enrolled | |
|---|---|---|---|---|---|---|---|---|---|
| | | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult | 一般 General | 社会人 Working Adult |
| 生物資源生産学 Bioresource Production Science | 9 | 4(4) | 4 | 4(4) | 4 | 4(4) | 4 | 4(4) | 4 |
| 生物資源利用学 Applied Bioresource Science | 4 | 8(3) | 0 | 8(3) | 0 | 8(3) | 0 | 8(3) | 0 |
| 生物環境保全学 Life Environment Conservation Science | 4 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 |
| 計 Total | 17 | 15(7) | 4 | 15(7) | 4 | 15(7) | 4 | 15(7) | 4 |

注）（ ）内の数字は外国人留学生で内数を示す。
（ ）indicates the number of international students.