# Policy

The goal of the Graduate School of Environmental and Life Science, Okayama University, is to guarantee the sustainable development of all life, including humankind, through the formation of a recycling-based society and solution of issues to secure food security. And consequently, it is to realize a safe, secure and prosperous society. In cooperation and collaboration with other graduate schools, our school is enthusiastically working on the development of human resource development that can lead the achievement of goals and the construction of a new academic system that ensures the sustainable development of all life. In this school, in order to steadily achieve the above goals, the following important policies in the graduate course have been established.

## **Diploma** Policy

The Graduate school of Environmental and Life Science aims to achieve a safe, secure and prosperous society while accomplishing the sustainability of all life. To accomplish this goal, we are conducting professional and interdisciplinary education and research in the fields of environmental science, biotechnology, medical science, and social science. We use these activities to foster highly-educated professional researchers and engineers and facilitate their contribution to our society. The following standards must be met in order to receive a degree:

### (Master's degree)

The Master's degree is granted to those who have been enrolled for the required number of semesters, received specific training, acquired the necessary credits, and passed the graduate school's final examination. Specifically, the applicant must completed the following tasks:

(1) Have the skills and knowledge to perform research and engineering directed toward problem setting or solving in society while demonstrating highly-educated expertise.

(2) Created a clear and logical master's thesis that is based on reliable results and sincere consideration.

### (Doctoral degree)

A doctoral degree (Ph.D.) is granted to those who have been enrolled for the required number of semesters, received specific training, acquired the necessary credits, and passed the graduate school's final examination. Specifically, the applicant must have completed the following tasks:

(1) Have sufficient skills and knowledge to engage in independent research and engineering activities in society while demonstrating highly-educated expertise.

(2) Created a clear and logical dissertation that is based on reliable results and sincere consideration.

(3) Research results which are novel and valuable.

### Curriculum Policy

To implement an educational program to achieve the objectives stated in the diploma policy, the Graduate School of Environmental and Life Science sets two divisions in the doctoral course, namely "Environmental Science" and "Agricultural and Life Science," and five divisions in the master's course, namely "Social Engineering and Environmental Management," "Biological and Human Environment," "Sustainability of Resources," "Science for Bioresources," and "Science for Bio-Production."

### (Master's course)

In the master's course, students must enroll for at least two years and earn at least 30 credits. After conducting a research project advised by a supervisor, students have their dissertations reviewed by their supervisors and take a final examination.

(1) In "Introduction to the Major," which is a compulsory interdisciplinary course conducted with other graduate school teachers, students learn the fundamental basics through interdisciplinary education involving other divisions and courses, covering subjects such as the goals and philosophies of the graduate school, problem solving, logical thinking, research ethics, and responsibility of scientists.

(2) In the course work, students acquire advanced specialized knowledge through interdisciplinary classes and exercises, which are conducted by their own division or by others. Students also acquire the knowledge and skills needed for other fields through special and joint courses offered by other graduate schools.

(3) In research work, students work on issues in close relationship with teachers from various academic fields, while compiling the issues studied in a master's thesis. During this process, students improve their problem-solving and logical thinking skills through the acquisition of advanced general and technological knowledge in their research areas. (4) Students earn credits for research presentations at domestic/international meetings and for internships. Through these activities, students develop presentation, communication, and debate skills. Classes are actively conducted in English and students are encouraged to acquire and transmit knowledge in languages other than their native languages.

(5) In order to provide students with rich education and a high degree of expertise across fields, in addition to the main supervisor, a sub-supervisor is assigned to provide detailed guidance, tailored to the students' needs. Education and research are managed through a systematic process that encompasses, for example, mid-term achievement presentations and regular academic counseling.

The above educational program aims to develop human resources capable of conducting their tasks independently based on their advanced knowledge, in addition to taking the lead and playing an active role in the global society.

#### (Doctoral course)

The doctoral course requires a total of 12 credits, including one credit for the special course of the majors and two credits for exercises. After conducting a research advised by a supervisor, an examination committee is formed according to the criteria of each major. Then, students must have a dissertation review and take a final examination.

(1) In "Topics in Environmental Science/Agricultural and Life Science" which is a compulsory interdisciplinary course conducted with other graduate school teachers, students learn the fundamental basics through interdisciplinary education involving other majors and courses, covering subjects such as the goals and philosophies of the graduate school, intellectual property rights, research ethics, and pride that one should have as a scientist.

(2) In the course work, students acquire advanced specialized knowledge through cutting-edge lessons and exercises prepared by their own majors and others, as well as advanced knowledge and skills through discussions with their supervisors.

(3) In research work, while conducting original research and thesis writing, students independently tackle research topics and discuss with other researchers to develop world-class problem-solving and logical thinking skills.

(4) Students earn credits for research presentations at domestic/international meetings and for internships. Through these activities, students develop presentation, communication, and debate skills.

(5) In order to provide students with rich education and a high degree of expertise across fields, in addition to the main supervisor, two sub-supervisors are assigned to provide detailed guidance, tailored to the students' needs. Education and research are managed through a systematic process that encompasses, for example, midterm achievement presentations and regular academic counseling.

The above educational and research program aims to develop professional human resources with rich specialized knowledge, capable of elucidating challenges from various angles, leading the construction of a sustainable society, and playing an active role in the global society.

### Admission Policy

This graduate school develops human resources who can solve the problems of creating a recycling-based society and ensuring food security through education. The Graduate School seeks the following human resources from Japan and overseas.

(1) Those who have the rich culture, ethics, and expertise necessary for the sustainable development of civilization, and who have the language skills to be active internationally.

(2) Those who have a strong desire to acquire advanced expertise based on scientific knowledge for sustainable development of the global environment and elucidation of life phenomena.

Prior to admission, those who wish to enroll in this graduate school must have basic knowledge and abilities in their specialized fields in the bachelor's program, and have the ability to apply their knowledge and acquire international communication skills. Therefore, we will carry out various entrance examinations such as an examination to confirm the ability to communicate in English and the specialized knowledge of each major, and an oral examination to confirm whether or not the person is suitable for the ideal type of human resources being sought. Details of the entrance examinations and evaluation methods will be specified in the application guide-lines.