

## Diploma Policy of Graduate School of Marine Science and Technology

In the light not only of specific local issues but also of a globalizing society and the various global-scale issues, such as climate change, the Graduate School of Marine Science and Technology aims to foster human resources who are interested in solving various issues related to the oceans and in the potential that oceans have to contribute to the development of humankind and society; who will pioneer cutting-edge fields through collaboration with other disciplines by making full use of high-level expertise and state-of-the-art technology in the marine field; and who have both a rich education that will enable them to play an active role internationally and ethics that will enable trust in science and technology to be gained from society. The competencies and core qualities that students should acquire are as follows:

### Master's Course:

- (1) Expert knowledge  
The ability to understand the social background, academic significance and practical value of research topics and to promote research appropriately
- (2) Rich internationality and wide-ranging education  
The ability to understand and explain specialized fields in English through English classes, and the ability to solve problems and research through interaction with a wide range of stakeholders through education, academic conferences and social activities
- (3) Ability to think and judge by oneself  
The ability to explain research results logically, ethics with regard to academic research and the ability to present research results based on these abilities
- (4) Practical skills that can be used on site  
The ability to design and implement measures to effectively utilize research results in society

### Doctoral Course:

- (1) Expert knowledge  
Interdisciplinary, cutting-edge and highly specialized knowledge related to basic and applied sciences
- (2) Rich internationality and wide-ranging education  
The ability to formulate and carry out plans for international-level research that has academic significance, novelty, originality and practical value, and to prepare academic papers of the results of same on their own initiative
- (3) Ability to think and judge by oneself  
The ability to evaluate others' research appropriately, the ability to promote research autonomously, the ability to explain research results logically, and ethics with regard to academic research
- (4) Practical skills that can be used on site  
The ability to design and implement measures to effectively utilize research results in society

### Policy for graduation accreditation and degree awarding

In the Master's Course, we shall recognize completion by and grant a master's degree (Marine Science or Engineering) to students who have earned the prescribed number of credits, who have satisfied the requirements for the granting of a degree as stipulated for each course and who have been recognized to have acquired the target abilities in the dissertation review and the final examination. In the Doctoral Course, we shall recognize completion by and grant a doctoral degree (Marine Science or Engineering) to students who have earned the prescribed number of credits, who have satisfied the requirements for the granting of a degree as stipulated for each course and who have been recognized to have abilities that are befitting of the granting of a degree, after evaluating English language proficiency necessary for academic papers and research presentations in the final examination, in addition to dissertations evaluated from the viewpoints of academic significance, novelty, originality and practical value in each research field, and expertise and the ability to explain things logically. Furthermore, on the basis of agreements with oversea universities, students who have completed the Joint/Double Degree Programs that satisfy the necessary criteria shall also be granted degrees from the universities that have concluded the agreements with us.

Course of Marine Life Sciences	Course of Food Science and Technology	Course of Marine Resources and Environment
<p>The Course of Marine Life Sciences aims to foster human resources who are interested in solving the issues in relation to the marine life sciences, in elucidating the mechanisms of the biological activities that are specific to marine organisms, and in research that makes use of the characteristics of same; who will teach and research academic theories and applications for applying the results of same to the conservation and sustainable utilization of living marine resources; and who will have advanced expertise, originality, education that will enable them to play an active role internationally and a high level of ethics. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge The ability to promote research appropriately with an extensive range of advanced expertise related to the basic science and applied science of marine organisms</li> <li>(2) Rich internationality and wide-ranging education The ability to understand and explain specialized fields in English through English classes and to prepare papers that have academic significance, novelty, originality and practical value in each research field of marine life sciences</li> <li>(3) Ability to think and judge by oneself The ability to promote research, the ability to explain research results logically and ethics with regard to academic research</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Marine Science) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>	<p>The Course of Food Science and Technology aims to foster human resources who are interested in subjects related to securing/improving the safety and healthiness of foods, processing methods, issues related to quality maintenance and distribution and issues related to the improvement of food functionality, at all stages from selection of raw materials up to consumption; who will master theoretical principles and advanced technology with regard to these; and who will contribute to health promotion and the maintenance of homeostasis for people and effective use of, and loss reduction for, food resources. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge The ability to have an extensive range of advanced expertise related to the basic science and applied science of food, to promote research appropriately and to prepare papers that have academic significance, novelty, originality and practical value in each research field of the food science and technology</li> <li>(2) Rich internationality and wide-ranging education The ability to understand and explain specialized fields in English through English classes and the ability to research extensively through interaction with a wide range of researchers through academic conferences</li> <li>(3) Ability to think and judge by oneself The ability to explain research results logically, ethics with regard to academic research and the ability to present research results based on these abilities</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Marine Science) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>	<p>The Course of Marine Resources and Environment aims to foster high-level professionals who are interested in various issues pertaining to the marine environment and its conservation, the relationships between aquatic organisms and the environment, and the practical development and sustainable utilization of marine resources and energy; who have the ability to research the deep concepts, academic theories and applied technologies pertaining to these from the viewpoint of science and engineering; and who have advanced expertise that will open up leading edge fields. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge An extensive range of advanced expertise related to the basic science and applied science of marine environment and resources</li> <li>(2) Rich internationality and wide-ranging education The ability to understand and explain the specialized field in English acquired through English classes, to deliver presentations and have discussions at highly specialized research meetings, and to prepare papers, as well as communication skills in foreign languages</li> <li>(3) Ability to think and judge by oneself Strong ethics in academic research, ability to consider academic significance, novelty, originality and practical value, and ability to carry out research and open up leading - edge fields with a high ideal</li> <li>(4) Practical skills that can be used on site The ability to integrate acquired specialized knowledge, information technology, and skills, to view problems on site from a broader perspective and to explore, solve and act independently and practically.</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Marine Science or Engineering) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>
Course of Marine Policy and Management	Course of Marine System Engineering	Course of Maritime Technology and Logistics
<p>The Course of Marine Policy and Management aims to foster human resources who have an interest in comprehensive management and policies for systematically utilizing and conserving the oceans, which are used multilaterally; who proactively research academic theories and their applications in relation to the study of marine management and policies; who have the ability to formulate marine policy from a long-term and multilateral perspective; and who can play an active role internationally. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge The ability to understand the social background, academic significance and practical value of research topics in each research field of marine policy and management and the ability to promote research appropriately</li> <li>(2) Rich internationality and wide-ranging education The ability to understand and explain specialized fields in English through English classes, and the ability to solve problems and research through interaction with a wide range of stakeholders through education, academic conferences and social activities</li> <li>(3) Ability to think, judge and express by oneself The ability to explain research results logically, ethics with regard to academic research and the ability to present research results based on these abilities</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in each field of marine policy and management in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Marine Science) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>	<p>The Course of Marine System Engineering aims to foster human resources who have advanced expertise and originality in the fields of the engines and mechanical systems that are the elemental technologies for ships and marine structures, of mechatronics and of environmental technology, as well as a rich education that will enable them to play an active role internationally and a high level of ethics. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge An extensive range of advanced expertise related to marine artificial objects and environmental response technologies and the ability to understand the social background, academic significance and practical value of research topics in each field of marine system engineering and to promote research appropriately</li> <li>(2) Rich internationality and wide-ranging education The ability to understand and explain specialized fields (those related to marine artificial objects and environmental response technologies for the same, in specific) through English classes and the ability to research extensively through interaction with a wide range of researchers through academic conferences</li> <li>(3) Ability to think and judge by oneself The ability to explain research results logically, ethics with regard to academic research and the ability to present research results based on these abilities</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Engineering) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>	<p>The Course of Maritime Technology and Logistics aims to foster human resources who are interested in various issues in relation to marine transportation and logistics; who will actively address solutions for the same on their own initiative in collaboration with experts in various fields on the basis of expertise in maritime affairs, ships and logistics; and who will be able to suggest measures that will contribute to the rich development of human society that take into consideration the marine environment and the global environment. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge The ability to understand the social background, academic significance and practical value of research topics in the field of maritime technology and logistics and to promote research appropriately</li> <li>(2) Rich internationality and wide-ranging education The ability to understand and explain specialized fields in English through English classes and the ability to research extensively through interaction with a wide range of researchers through academic conferences</li> <li>(3) Ability to think and judge by oneself The ability to explain research results logically, ethics with regard to academic research and the ability to present research results based on these abilities</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Marine Science or Engineering) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>
Course of Safety Management in Food Supply Chain	Course of Applied Marine Biosciences	Course of Applied Marine Environmental Studies
<p>The Course of Safety Management in Food Supply Chain aims to foster human resources who will attentively observe and accurately analyze various issues throughout the food chain from the production of agricultural, livestock and fishery products to processing and distribution, find response measures in appropriate ways and also have the ability to explain and persuade in order to implement them, a high level of education that will be accepted internationally and engineering ethics. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge The ability to understand the social background, academic significance and practical value of research topics in the field of safety management in food supply chain and to promote research appropriately</li> <li>(2) Rich internationality and wide-ranging education A rich education that will enable them to play an active role internationally in the field of safety management in food supply chain, and the ability to research extensively through interaction with a wide range of researchers</li> <li>(3) Ability to think and judge by oneself The ability to explain research results logically, ethics with regard to academic research and the ability to present research results based on these abilities</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a master's degree (Marine Science) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>	<p>The Course of Applied Marine Biosciences aims to foster human resources who will master leading-edge theoretical principles and technologies aimed at conservation, resource management, propagation and cultivation, use as foods, and the isolation and production of useful substances with regard to aquatic organisms and who will promote on their own initiative research and development / technological development in the fields of the applied marine biosciences on the basis of same. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge The ability to promote research appropriately with an extensive range of interdisciplinary and advanced expertise related to the basic science and applied science of applied marine biosciences</li> <li>(2) Rich internationality and wide-ranging education The ability to formulate and carry out plans for international-level research that has academic significance, novelty, originality and practical value in each field of applied marine biosciences, and to prepare academic papers of the results on their own initiative</li> <li>(3) Ability to think and judge by oneself The ability to conduct peer reviews, to promote research autonomously and to explain research results logically and effectively, and ethics with regard to academic research</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a doctoral degree (Marine Science) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>	<p>The Course of Applied Marine Environmental Studies aims to foster human resources who will pioneer, teach and research interdisciplinary fields in relation to theoretical principles and technologies for the elucidation, utilization and conservation of the marine environment; who will have comprehensive ability from the viewpoint of the symbiotic relationship between the oceans and humans in relation to the measurement and prediction of mechanisms of oceanic current movements and substance diffusion, the creation of resource exploration techniques, the relationships between aquatic organisms and the environment, the construction of safe and effective marine transportation systems, the development of leading-edge thrust systems, the proposal of marine management policies, etc.; and who will be able to assume leading roles. The competencies and core qualities that students should acquire are as follows:</p> <ol style="list-style-type: none"> <li>(1) Expert knowledge Interdisciplinary, cutting-edge and highly specialized knowledge related to basic and applied sciences of applied marine environmental studies</li> <li>(2) Rich internationality and wide-ranging education The ability to formulate and carry out plans for international-level research that has academic significance, novelty, originality and practical value in each field of applied marine environmental studies, and to prepare academic papers of the results on their own initiative</li> <li>(3) Ability to think and judge by oneself The ability to evaluate others' research appropriately, the ability to promote research autonomously, the ability to explain research results logically, and ethics with regard to academic research</li> <li>(4) Practical skills that can be used on site The ability to design and implement measures to effectively utilize research results in society</li> </ol> <p>Policy for graduation accreditation and degree awarding We shall recognize completion by and grant a doctoral degree (Marine Science or Engineering) to students who have earned the prescribed number of credits, who have the competencies and core qualities listed above, and who have been recognized to have academic significance, novelty, originality, and practical value in each research field in the dissertation review and the final examination.</p>