Curriculum Policy of the Graduate School of Maritime Sciences

Degree: Master of Maritime Science and Technology

Based on the Kobe University Curriculum Policy, the Graduate School of Maritime Sciences organizes its curriculum in accordance with the points below.

1. In order to impress upon students a sense of humanity, creativity and international awareness, the graduate school has established the necessary common courses to be taken by all students. The main learning objectives of these courses are as follows:

● Students taking part in Advanced Seminar and Advanced Research Works in order to acquire communication skills, report writing and presentation skills, scientific and logical thinking abilities, the ability to develop their expertise, varied perspectives, independent learning skills and attitudes, and the ability to solve problems by collaborating with people in other fields.

● Students acquire the skills to communicate with people from different cultures, to foster an acceptance of other cultures, ideas and values, and a cross-disciplinary understanding of global issues via General Project and Internship courses.

2. In order to foster deeper knowledge and cultivate expertise, the graduate school has established the following specialized courses in each of the following four divisions.

● The Nautical Sciences Course aims to develop technological innovations in management and operations within the framework of a“ship-people-environment-society” interconnected system. This development is supported through the creation of scientific and technological methods in order to realize stable maritime transportation on a global scale that does not stagnate economic activities. The department offers specialized courses to help students acquire specialized knowledge and academic skills in the field of navigation based on social sciences, and science and engineering in order to solve problems in various maritime fields.

● The Maritime Policy Studies Course offers specialized courses in the development and improvement of resources and systems that support transportation systems, as well as planning, design, operation, management, and policy for the construction of optimal logistics and logistics systems from a strategic and comprehensive perspective. These course goals have been created with the aim of effectively operating and upgrading international logistics and supply chains while contributing to global environmental conservation in relation to these systems. The department offers specialized courses to enable students to acquire specialized knowledge and academic skills related to the development and improvement of resources and systems that support transportation systems, as well as planning and design, operation and management, and policies for the construction of optimal logistics and logistics systems from a strategic and comprehensive perspective.

● The Marine Sciences Course offers specialized courses to enable students to acquire specialized knowledge and academic skills through education and research aimed at solving problems in the fields of environment, disaster, resources, and energy. These aspects are all related to the earth and oceans, and realizing a sustainable society based on solid knowledge of basic science.

● The Marine Technologies Course offers specialized courses in materials engineering, fluid engineering, thermal

engineering, power engineering, electrical and electronic engineering, control engineering, information engineering, computer science, and other fields to develop new academic fields and technologies that contribute to the development of industries related to oceans and ships. Specialized courses are offered to enable students to acquire specialized knowledge and academic skills in materials engineering, fluid engineering, thermal engineering, power engineering, electrical and electronic engineering, control engineering, information engineering and computer science.

Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.
The evaluation of learning outcomes shall be conducted in the following manner.

➢ For lecture courses, the level of achievement will be determined by written examinations, reports, participation, etc., in a multidimensional and comprehensive manner in line with the learning objectives.

➢ For exercises, experiments, practical training, and practical skills courses, the level of achievement will be determined by written examinations, reports, participation, content of presentations, practical skills, etc., in a multidimensional and comprehensive manner in line with the learning objectives.

Degree: Doctor of Philosophy in Maritime Science and Technology

Based on the Kobe University Curriculum Policy, Graduate School of Maritime Sciences organizes its curriculum in accordance with the points below.

1. In order to impress upon students a sense of humanity, creativity and international awareness, the graduate school has established the necessary common courses to be taken by all students. The main learning objectives of these courses are as follows.

● Students take part in the Advanced Seminar in order to acquire report writing and presentation skills, scientific and logical thinking abilities, the ability to develop and apply their expertise, varied perspectives, independent learning skills and attitudes, the ability to solve problems by collaborating with people in other fields, the ability to propose highly original and creative research themes, and the ability to construct and execute research plans. Note that the Advanced Seminar shall contain a high degree of expertise related to maritime and ocean affairs.

● Students acquire the skills to communicate with people from different cultures, to foster an acceptance of other cultures, ideas and values, and a cross-disciplinary understanding of global issues via General Project and Internship courses.

2. In order to foster deeper knowledge and cultivate expertise, the graduate school has established the following specialized courses in each of the following four divisions:

● The Nautical Sciences Course aims to develop technological innovations in management and operations within the framework of a“ship-people-environment-society” interconnected system. This development is supported through the creation of scientific and technological methods in order to realize stable maritime transportation on a global scale that does not stagnate economic activities. The department offers specialized courses to help students acquire

specialized knowledge and academic skills in the field of navigation based on social science and science and engineering in order to solve problems in various maritime fields.

● The Maritime Policy Studies Course offers specialized courses in the development and improvement of resources and systems that support transportation systems, as well as planning, design, operation, management, and policy for the construction of optimal logistics and logistics systems from a strategic and comprehensive perspective. These course goals have been created with the aim of effectively operating and upgrading international logistics and supply chains while contributing to global environmental conservation in relation to these systems. The department offers specialized courses to enable students to acquire specialized knowledge and academic skills related to the development and improvement of resources and systems that support transportation systems, as well as planning and design, operation and management, and policies for the construction of optimal logistics and logistics systems from a strategic and comprehensive perspective.

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Furthermore, these courses are often combined with active learning or experience-based learning in the form of lectures, practical learning, practical training or other classroom formats.
The evaluation of learning outcomes shall be conducted in the following manner.

➢ For lecture courses, the level of achievement will be determined by written examinations, reports, participation, etc., in a multidimensional and comprehensive manner in line with the learning objectives.

➢ For exercises, experiments, practical training, and practical skills courses, the level of achievement will be determined by written examinations, reports, participation, content of presentations, practical skills, etc., in a multidimensional and comprehensive manner in line with the learning objectives.

In addition to the guidance based on the common curriculum of the graduate school, such as supervisors offering research advice based on each divisions' specialization and the monitoring of research progress by multiple faculty members at research report meetings held in each academic year, the graduate school has set up a system that helps students smoothly submit their doctoral dissertations by providing guidance that fosters not only a high degree of expertise but also the ability to execute research plans, such as by providing students with active support for their education and research activities. These include support in making presentations or investigating the latest trends at domestic or overseas conferences and submitting research papers to academic journals.

Degree: Doctor of Philosophy in Engineering

Based on the Kobe University Curriculum Policy, the Graduate School of Maritime Sciences organizes its curriculum in accordance with the points below.

1. In order to impress upon students a sense of humanity, creativity and international awareness, the graduate school has established the necessary common courses to be taken by all students. The main learning objectives of these courses are as follows:

● Students take part in the Advanced Seminar in order to acquire report writing and presentation skills, scientific and logical thinking abilities, the ability to develop and apply their expertise, varied perspectives, independent learning skills and attitudes, the ability to solve problems by collaborating with people in other fields, the ability to propose highly original and creative research themes, and the ability to construct and execute research plans. Note that the Advanced Seminar shall contain a high degree of expertise related to the engineering field.

● Students acquire the skills to communicate with people from different cultures, to foster an acceptance of other cultures, ideas and values, and a cross-disciplinary understanding of global issues via General Project and Internship courses.

2. In order to foster deeper knowledge and cultivate expertise, the graduate school has established the following specialized courses in each of the following four divisions.

● The Nautical Sciences Course aims to develop technological innovations in management and operations within the framework of a“ship-people-environment-society” interconnected system. This development is supported through the creation of scientific and technological methods in order to realize stable maritime transportation on a global scale that does not stagnate economic activities. The department offers specialized courses to help students acquire specialized knowledge and academic skills in the field of navigation based on social science and science and engineering in order to solve problems in various maritime fields.

● The Maritime Policy Studies Course offers specialized courses in the development and improvement of resources and systems that support transportation systems, as well as planning, design, operation, management, and policy for the construction of optimal logistics and logistics systems from a strategic and comprehensive perspective. These course goals have been created with the aim of effectively operating and upgrading international logistics and supply chains while contributing to global environmental conservation in relation to these systems. The department offers specialized courses to enable students to acquire specialized knowledge and academic skills related to the development and improvement of resources and systems that support transportation systems, as well as planning and design, operation and management, and policies for the construction of optimal logistics and logistics systems from a strategic and comprehensive perspective.

● The Marine Sciences Course offers specialized courses to enable students to acquire specialized knowledge and academic skills through education and research aimed at solving problems in the fields of environment, disaster, resources, and energy. These aspects are all related to the earth and oceans, and realizing a sustainable society based on solid knowledge of basic science.

● The Marine Technologies Course offers specialized courses in materials engineering, fluid engineering, thermal engineering, power engineering, electrical and electronic engineering, control engineering, information engineering, computer science, and other fields to develop new academic fields and technologies that contribute to the development of industries related to oceans and ships. Specialized courses are offered to enable students to acquire specialized knowledge and academic skills in materials engineering, fluid engineering, thermal engineering, power engineering, electrical and electronic engineering, control engineering, information engineering and computer science.

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In addition to the guidance based on the common curriculum of the graduate school, such as supervisors offering research advice based on each divisions' specialization and the monitoring of research progress by multiple faculty members at research report meetings held in each academic year, the graduate school has set up a system that helps students smoothly submit their doctoral dissertations by providing guidance that fosters not only a high degree of expertise but also the ability to execute research plans, such as by providing students with active support for their education and research activities. These include support in making presentations or investigating the latest trends at domestic or overseas conferences and submitting research papers to academic journals.

Degree: Doctor of Philosophy

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●Students take part in the Advanced Seminar in order to acquire report writing and presentation skills, scientific and logical thinking abilities, the ability to develop and apply expertise, varied perspectives, independent learning skills and attitudes, the the ability to solve problems by cooperating with people in other fields, the ability to propose highly original and creative research themes, and the ability to construct and execute research plans. Note that the Advanced Seminar shall cover a wide range of expertise.

●Student acquire the skills to communicate with people from different cultures, to foster an acceptance of other

cultures, ideas and values, and a cross-disciplinary understanding of global issues via General Project and Internship courses.

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