



**The Graduate School of Marine Science and Technology,
Tokyo University of Marine Science and Technology**

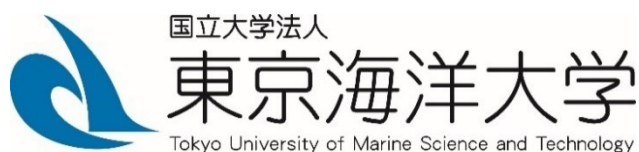
**“WISE (World-leading Innovative & Smart Education)
Program to foster AI (Artificial Intelligence) Professionals for
Marine Industries”**

**Application information for the October 2024 period
and**

**Application information for the April 2025 period
【Doctoral program】**

(Students by the special admission for full-time employees)

June 2024



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1 Application Schedule

- * Applications for Schedule B will be accepted only from those who are unable to apply for Schedule A due to special reasons (such as boarding for classes). Those who fail the Schedule A cannot apply.

For the October 2024 period

	Schedule A	Schedule B
(Only Schedule B) Prior Contact Period		June 5 - August 21, 2024
Application period	August 9 - 21, 2024	October 4 - 10, 2024
Announcement of the result of the first screening	August 27, 2024	October 17, 2024
Date of the second screening	August 28 and 29, 2024	October 21 and 22, 2024
Announcement of successful applicants	September 9, 2024	October 30, 2024

For the April 2025 period

	Schedule A	Prior Contact Period
(Only Schedule B) Prior Contact Period		June 5, 2024 - January 20, 2025
Application period	January 10 - 20, 2025	April 3 - 10, 2025
Announcement of the result of the first screening	January 27, 2025	April 15, 2025
Date of the second screening	February 3 - 5, 2025	April 17 and 18 2025
Announcement of successful applicants	February 21, 2025	April 30, 2025

2 Overview of the Program

Development of WISE (World-leading Innovative & Smart Education) Program to foster AI (Artificial Intelligence) Professionals for Marine Industries recruits program students (master's program at our university).

In modern society, the marine industry workforce is expected to decrease. Development of WISE Program to foster AI Professionals for Marine Industries develops researchers who will lead diverse fields in domestic and international research communities as well as in other countries. As such, we build innovative systems, create diverse values, and re-establish the international presence of Japan in the global marine industry. The Program is established as an educational program for a integrated graduate school course where all activities, including coursework, thesis writing, and evaluation of the written thesis, help students earn a degree in an organic and synergic manner.

We are soliciting proposals from students who understand the Program's vision and would like to participate in the program.

【Diploma policy】

① Characteristics of personnel in the Program

Innovators, advanced professional engineers, and marine policymakers with technical literacy in big data analysis and machine learning capable of evaluating AI performance accurately and leading the social implementation of AI based on expertise and extensive field experience learned at TUMSAT.

② Skills and qualities to be learned by students

In addition to the diploma policy of each graduate school, the Program's students acquire the following skills and qualities:

- Ability to apply scientific knowledge and skills required for its social implementation in Data science, including big data analysis and machine learning.
- Ability to plan and formulate the applied technologies to solve the issues, with clear understanding of those issues to which big data and AI should be applied in their respective fields of expertise.
- Ability to scientifically evaluate the effectiveness and appropriateness of the application of big data and AI to social issues.
- Ability to make appropriate decisions and disseminate information based on the results of big data analysis and machine learning.

3 Number of applicants and qualifications

For the October 2024 period

	Schedule A	Schedule B
Doctoral Program 2024 enrollment	About 5 peoples	Some people
Doctoral Program 2023 enrollment	Some people	Some people

Qualification requirements

Satisfy the following ① or ② or ③, and ④ ~ ⑦.

- ① Those who are scheduled to enroll in the first year of the doctoral program at our graduate school in October 2024.

* If you have applied for the selection of students for the master's program at our university, you can apply even before the announcement of the results.

② Those who are enrolled in the first year of the doctoral program at our graduate school in April 2024.

③ Those who enrolled in the first year of the doctoral program at our graduate school in October 2023.
- ④ To be a "The special admission for full-time employees ".
- ⑤ Have a track record of working for more than 2 years as regular employment at a company, etc.
- ⑥ Have research results or specialized level knowledge related to AI / data science.
- ⑦ Those who are willing to complete the doctoral program in 3 years and have goals that match the educational and research principles of this program.

For the April 2025 period

	Schedule A	Schedule B
Doctoral Program 2025 enrollment	About 5 peoples	Some people
Doctoral Program 2024 enrollment	Some people	Some people

Qualification requirements

Satisfy the following ① or ② or ③, and ④ ~ ⑦.

- ① Those who are scheduled to enroll in the first year of the doctoral program at our graduate school in April 2025.

* If you have applied for the selection of students for the master's program at our university, you can apply even before the announcement of the results.

② Those who are enrolled in the first year of the doctoral program at our graduate school in October 2024.

③ Those who are enrolled in the first year of the doctoral program at our graduate school in April 1 2024.
- ④ To be a "The special admission for full-time employees ".
- ⑤ Have a track record of working for more than 2 years as regular employment at a company, etc.
- ⑥ Have research results or specialized level knowledge related to AI / data science.
- ⑦ Those who are willing to complete the doctoral program in 3 years and have goals that match the educational and research principles of this program.

4 Application method

Please submit 1-4 documents within the applicable period.

As a general rule, application documents should be submitted by email.

[Address for the submission] marine-ai_office@o.kaiyodai.ac.jp

- 1) Application form of the Program
 - 2) Research plan (The dedicated form is attached to this document. The plan must include the motivation for applying for this program, content related to AI or big data, and future plans after completing this program and obtaining a degree).
 - 3) Transcript of the final school (submitted in the doctoral program entrance examination)
 - 4) Recommendation letter from the faculty member who will be accepted
- * No examination fee is required to apply to the Program.
- * If the applicant studied at any School (master's course) of TUMSAT, a certificate of academic results is not required. Instead, the applicant must include the student number given at the School in the application.
- * Prior to submitting an application and research plan, the applicant must obtain approval of the main academic advisor.

5 Selection criteria

(1) First selection: document screening

Screening will be conducted based on Transcript of the final school, motivation for the application, and research plan in a comprehensive manner.

- * Please note that the submitted documents may not be changed and will not be returned.

(2) Second selection: interview screening

The interview screening includes a presentation regarding the contents of the submitted research plan (10 minutes) and a subsequent question and answer session (total 20 minutes). The sessions evaluate applicants in a comprehensive manner based on their academic abilities, research skills, and understanding about and motivation for the Program.

* Interviews will be conducted online using Cisco Webex.

* Details will be notified separately by e-mail.

6 Briefing session for students

An online briefing session will be held by Cisco Webex before the application period.

① July 4, 2024 from 15:00 to 15:30

② December 12, 2024 from 15:00 to 15:30

7 Announcement of successful applicants

Successful applicants will be announced on the Program website.

(<https://www.g2.kaiyodai.ac.jp/marine-ai/>)

Successful applicants will be also notified individually.

8 Procedures for participating in the Program

The Program's administration personnel will notify successful applicants of the procedures to participate in the Program.

No additional fee is needed for entry or study in the Program.

9 Curriculum and requirements for completion of the Program

In addition to completing the coursework of the Graduate School to which the student belongs, all students who study in the Program must take subjects that are offered by the Program and earn credits as shown below. Students must pass Qualifying Examination and the Program's completion review provided by Quality Assurance Unit ("QAU") .

Students who complete the Program earn doctor's degree of Marine Science or doctor's degree of Engineering. They also receive a certificate of degree with a note stating that they have completed the Development of WISE Program to foster AI Professionals for Marine Industries.

*About the Program completion review

The Program completion review will be conducted by QAU during the third year of the doctoral course.

Doctoral course completion requirements

Doctoral course completion requirements			
	Division of subjects	Subject title etc. (number of credits)	Required numbers of credits
Required subjects	Common subjects ※1		
	Topics in AI (machine learning)	Advanced Artificial Intelligence and Machine Learning (2)	4
	Topics in Big data	Social Implementation of Data Science (2)	
		Interdisciplinary subjects	Marine AI Workshop II
Required Electives	Specialization subjects ※2	Lectures Exercises / experiments / practices required in your specialization field	2
	Courses ※3		
	Course on Advanced Reliability Assessments	Advanced Evaluation of Ship Navigation Safety (2)	2
	Course on Social Implementation Impact Assessments	Interlaboratory Seminar in Social Implementation (2)	
Required subjects	Marine AI Residency Program		2
	Seminars for Doctoral Academics		2
	Advanced Research of Specialization		4
Total			17

* 1 Each common subject is offered as a common subject for all graduate programs.

* 2 Each specialization subject will be determined by your academic advisor.

* 3 You need to select one course when you proceed to Doctoral Program.

10 Supports for students

Students who participate in the Program may receive support for travel expenses for overseas training opportunities offered by the Program.

Expenses for implementing the Program may also be supported. Please consult with the Academic Affairs Division in charge of the WISE Program for the details of available supports.

In addition to the above supports, the Marine AI Consortium, which is an industry-academia-government collaboration, provides different support opportunities, including 1) matching needs and interests between students studying in the Program and private companies, 2) in-residence projects, where students work in actual projects at partner institutes. In-residence projects will be offered to doctoral course students.

11 Marine Industry AI Professional Faculty

The program provided training for faculty members with the aim of further utilizing AI in research and certified the completion of AI training.

Please use it as a reference when deciding on an academic advisor.

<https://www.g2.kaiyodai.ac.jp/marine-ai/students/>

12 Handling of personal information

Personal information that is provided in the application documents, including supporting documents and those provided by the Course to which the applicant belongs, will be used to select successful students who will participate in the Program and to prepare for acceptance, education, and research guidance of successful students.

13 About security export control

TUMSAT thoroughly vets international students when accepting them. The examination is conducted pursuant to the Rules for Security Export Control at the Tokyo University of Marine Science and Technology, which is established according to the Foreign Exchange and Foreign Trade Act of Japan.

14 Document submission destination

WISE Program Promotion Support Office [Academic affairs division]

2-1-6 Etchujima, Koto-ku, Tokyo, 135-8533

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