Course Title	Exercise in Machine Learning		
Department/Course	Graduate School of Marine Science and Technology　Master's Course		
Category/Spacializations	<Graduate School Subjects>、<Other Courses' Subjects>		
Year Offered	1st	Class	10
Required or Elective	elective	Credit	1
Semester	Intensive Course	Course Type	
Day/Period	INTENSIVE	Lecture Room	Others
Chief Instructor	Okazaki Tadatsugi		
Instructors	Okazaki Tadatsugi		
Theme & Objects	In order to understand the machine learning method well, the students implement the machine learning method on the automatic traveling robot and the ship robot and perform experiments. MATLAB is used as the development platform.		
Learning Outcomes	By conducting exercises to implement machine learning methods on hardware, students aim to understand the effectiveness and problems of machine learning methods.		
Styles of Class	combination: in-person classes/online classes (on-demand) Note: Combination includes hybrid-flexible classes or different styels (in-person class/online) for each class or both.		
Course Contents	(1) Basic MATLAB exercise (2) Basic exercise of machine learning method (3) Experimental exercises using an automatic traveling robot (4) Experimental exercises using ship robots		
Prerequisites			
Textbook / References			
Preparation & Review	Students should review using the MATLAB online content explained in the lecture.		
Assessment and Examinations	The grade will be evaluated by averaging the score of all professors.		
Evaluation Criteria	It is considered as the evaluation criteria of this course that you understand the principle and process of the analysis of each experiment (exercise).		
Teaching activities & methods			
Instructor Contact Information	Please contact us in advance by e-mail and visit the teacher's room. (okazaki@kaiyodai.ac.jp)		
Other Information	If there are many applicants, students of WISE program may be given priority.		
URL			
Code			
Teaching Language			
Workload Calculation	(1)Teaching hours in class: 90hours (2)Contact hours (Laboratory time): (3)Preparation hours before classes: (4)Review hours after classes: 30hours (5)Preparation hours for presentation: (6)Preparation hours for Examination: (7)Supervised Study Hours (Meeting with the course instructor or TA): (8)Participation in related seminars: (9)Other activities: (10)Total Work Load: 120hours		
Related Degree Awarding Policy			
Relation to SDGs	9 Industry, innovation and infrastructure 14 Life below water		