

Course Title	Data Engineering		
Department/Course	Graduate School of Marine Science and Technology Master's Course		
Category/Specializations	<Graduate School Subjects>, <Other Courses' Subjects>		
Year Offered	1st	Class	10
Required or Elective	elective	Credit	2
Semester	Second Semester	Course Type	
Day/Period	WED2	Lecture Room	
Chief Instructor	Hyodo Tetsuro		
Instructors	Hyodo Tetsuro, Shimizu Etsuro, Kubo Mikio, Tamaru Hitoi, Mizobata Kohei, Kondo Hidehiro, Yasuike Motoshige		
Theme & Objects	Learning actual big data analyses.		
Learning Outcomes	Learning many actual big data projects such as probe data, mobile phone, genome editing, POS...		
Styles of Class	online classes (real-time) *This class will start from the first week on October.*		
Course Contents	1-6: R & Big Data (POS, truck probe etc.): HYODO tetsuro 7-8: Supply Chain in the Age of Big Data: KUBO mikio 9: Energy Management of Water Transportation Systems: SHIMIZU ikuo 10: Big Data by Satellite Observation: MIZOBATA kohei 11: Fundamentals for handling aquatic organism genome sequence information: KONDO hidehiro 12: Introduction of examples of aquatic organism genome sequencing: YASUIKE motoshige 13: Characteristics and Analysis Methods of Maritime Traffic Data: TAMARU hitoi		
Prerequisites			
Textbook / References			
Preparation & Review	For each faculty member's topic, it is advisable to review the relevant items on the Internet or other sources.		
Assessment and Examinations	Reports and number of attendances		
Evaluation Criteria	Reports and number of attendances		
Teaching activities & methods			
Instructor Contact Information	hyodo@kaiyodai.ac.jp		
Other Information			
URL			
Code			
Teaching Language	E		
Workload Calculation			
Related Degree Awarding Policy			
Relation to SDGs	11 Sustainable cities and communities 12 Responsible consumption and production 13 Climate action		