KOBE UNIVERSITY
GRADUATE SCHOOL OF MARITIME SCIENCES

神戸大学大学院海事科学研究科

Voyage toward the Future

HIRAYAMA Katsutoshi, Ph. D.

Dean, the Graduate School of Maritime Sciences, Kobe University

Message from the Dean

The ocean is the last frontier on earth and is closely connected to our lives as a place that connects the global economy. There, a wide range of global industries and governments related to maritime affairs support our lives through their activities. In order for Japan to develop as a maritime and technology-based nation, and in order to achieve the ocean-related SDGs, it is essential to formulate international rules and promote international cooperation from a global perspective, and develop science and technology to realize them. Furthermore, amidst the trend of digital transformation driven by cutting-edge technologies such as AI, there is a need for a vision of how we will make maritime industry and society develop in the future. We hope that the students studying in our graduate school will cultivate the knowledge, skills, and interpersonal skills that will enable them to tackle such “big challenges” in their future paths.

The historic Fukae Campus, which has inherited Japan's merchant marine education from a long ago, has a port facing Osaka Bay and is equipped with some unique facilities, such as the high-performance training ship "Kaijin Maru", the Ship Navigation Simulator System, the Ship Model Basin Experimental Facilities, the Hyper-Cryogenic Laboratory, and the Accelerator and Particle Beam Experiment Facility. Our campus also has the library for maritime sciences, which is stocked with books related to the sea and ships, and the Maritime Museum, which has a large collection and display of historical materials related to Japan's ships. In addition to usual classroom lectures, we provide a learning environment where students can gain practical knowledge and skills by making effective use of these facilities.

Toward the aim of creating a sustainable future maritime society and marine technologies, the Graduate School of Maritime Sciences will actively and continuously carry out interdisciplinary co-creation activities that bring together science, engineering, and social sciences, and also will strive to educate, research, produce human resources, and contribute to society in this new interdisciplinary frontier of "maritime and ocean".

April.2024

Brief History

The predecessor of the Faculty of Maritime Sciences was Kobe University of Mercantile Marine, whose origin can be traced back about 100 years. Kobe University of Mercantile Marine had long contributed to the education of top-level professionals in the maritime industries. With such a long tradition and high reputation it was decided that Kobe University of Mercantile Marine would integrate into Kobe University in 2003. The mission of the Faculty of Maritime Sciences is to foster experts who possess both a comprehensive knowledge of the marine sciences and are able to use this knowledge to contribute to the field of global transportation and logistics.

Kobe City

The City of Kobe is located to the west of center on the Mainland of Japan. It is accessible by land, sea, and air via domestic and international destinations. It takes 2 hours and 50 minutes to get to Tokyo by Shinkansen Bullet Train, and 1 hour and 20 minutes by plane. Within easy reach of Kobe, there are several famous cities with many historical sites and spots of interest, such as Himeji, Kyoto, Nara and Osaka.

Ever since it was opened to the world, Kobe has developed as a cosmopolitan port city where people, goods and information from around the globe are in constant motion. Now, Kobe has a population of 1.5 million including 52,000 foreign residents from as many as 147 different countries and regions, and is well known throughout Japan as being an “international city”. With a diverse population of foreign residents and the resulting facilities and amenities established by and for such foreign communities, Kobe is uniquely qualified to support a comfortably refined lifestyle for any individual from any country.

Sandwiched by Mt. Rokko in the north and the Inland Sea of Seto in the south, Kobe is endowed with its overall mild climate averaging 17.3°C (63.1°F) with four seasonal changes.

Contents

Degree Programs

NEXT VOYAGE from Kobe

"We, The Graduate School of Maritime Sciences, are located in Kobe, an international port city, promoting education and research under the theme of global transportation."

Interdisciplinary Approach

We are conducting research in various maritime fields including safe and efficient navigation and management in maritime transportation, energy, preservation of the maritime environment, law, and economics through a scientific approach combining natural and social sciences.

International Academic Exchanges

We also have academic exchange agreements with universities in Australia, China, France, Indonesia, Korea, Philippines, Sweden, Taiwan, Thailand, Turkey, U.K., U.S.A., Vietnam and Croatia, thus actively promoting international exchanges. In addition, since the establishment of the International Association of Maritime Universities (IAMU) in 1999, we are proud that we have been playing a major role as one of its international executive leaders.

Employment Opportunities all over the world

Our students have received job offers from companies, universities and research institutions not only in Japan but also in various countries worldwide due to our global academic research field. Therefore, our alumni are active in a wide range of fields including Japanese private companies such as shipbuilding, logistics and electronics as well as public institutions like the Ministry of Land, Infrastructure, Transport and Tourism.

The Graduate School of Maritime Sciences

Doctoral Degree Program (3 years)

Marine Sciences	Marine Technologies	Maritime Policy Studies	Nautical Sciences

Master's Degree Program (2 years)

Marine Sciences	Marine Technologies	Maritime Policy Studies	Nautical Sciences

The International Maritime Research Center
affiliated with the Graduate School

The Training Ship "Kaijin Maru"
affiliated with the Graduate School

Sea Training Course (6 months)

The Faculty of Ocean Science and Technology (4 years)

The Organization of Advanced Science and Technology, Kobe University
cooperated with the Graduate School

We offer a 2-year Master's program and 3-year Doctoral program. The purpose of our education and research is dedicated to cultivating creative researchers, educators and top-level professionals who possess diverse global perspectives as well as problem-solving abilities. After completing the Master's program, students receive the degree of Master of Maritime Sciences and students who complete the Doctoral program can obtain the degree such as Doctor of Philosophy in Maritime Sciences and Technology, Doctor of Philosophy in Engineering, or Doctor of Philosophy. Our goal is to produce quality graduates who can provide a scientific approach in a highly advanced manner combining both natural and social sciences in the Maritime Sciences field.

Admission Information

Degree-Seeking students

Eligibility

Applicants who do not hold Japanese nationality should have successfully completed the equivalent of 16 years (for Master's program) or 18 years (for Doctoral program) of school education or the equivalent.

Admission Procedures

1	2	3	4	5
Contact Supervisor	Pre-Evaluation for Eligibility (if required)	Application	Examination	Announcement of the results

＊Prior to entering the graduate school, some of the international students spend from six months to a year as a research student (Non-degree seeking student), and then take the entrance examination for the graduate level degree programs.
＊Detailed information can be found at http://www.maritime.kobe-u.ac.jp/en/

	Application Form Available	Application Period	Pre-Evaluation for Eligibility	Examination Date	Examination Subjects	Announcement of the results	Start of the Semester
Master's Degree Program	Late May	Mid-July Early November	Mid-June Early October	Late August Mid-December	Paper-based examination, TOEFL/TOEIC scores and oral examination	Early September Late December	April or October
Doctoral Program	Late May	Early July Late October Mid-January	Early June Early October Early January	Late August Mid-December Early February	Oral examination	Early September Late-December Early March	

＊You can view (or obtain) samples of the past examinations' questions at the Library of Maritime Sciences.

Research students (Non-degree seeking students)

Eligibility

Applicants should have successfully completed the equivalent of 16 years (for Master's program) or 18 years (for Doctoral program) of school education or the equivalent.

Start of the Semester	Application Form Available	Application Period	Selection Method	Formal Consent by Supervisor
April	Anytime on Request	Mid-February *Non-Residents of Japan : Late-November of the previous year	Screening Examination	Required
October		Mid-August *Non-Residents of Japan: late May		

＊Applicants are required to contact a supervisor who is doing research in the same field as your interest to gain a consent of acceptance as a research student before applying.
＊Detailed information can be found at http://www.maritime.kobe-u.ac.jp/en/

Academic and Student Affairs Group
TEL : +81-78-431-6223 e-mail : fmsc-gakusei@office.kobe-u.ac.jp

Division of Marine Sciences

With a firm foundation of knowledge in the basic sciences, students will acquire specialized knowledge and academic ability through education and research aimed at solving various issues in the fields of the environment, disasters, resources, and energy related to the earth and oceans, and at realizing a sustainable society.

Education and Research Area

- Earth Environmental Sciences
- Environmental and Energy Sciences
- Mathematical and Physical Sciences

Courses at Master's Degree Program (_: Courses in English)

- Comparative Planetary Sciencet
- Marine Geochemistry
- Applied Meteorology
- Marine Biology
- SABO: Sediment Hazard & Disaster Prevention
- Applied Oceanography
- Atmospheric Environment Science
- Aquatic Environmental Science
- Functional Materials Science
- Radiation Science and Applications
- Cryogenic Science
- Quantum Beam Science
- Applications of Nuclear Reactions
- Applied Analytical Chemistry
- Hydrogen Energy Science
- Basic Mathematical Science
- Computational Science
- Thermal Physics for Maritime Sciences
- Phenomenological Mathematical Science
- Mathematical Science of Shapes
- Applied Physics
- Statistical Analysis
- Applied Mechanics for Maritime Sciences
- Regional Environmental Science
- Ocean Environment and Climate Studies
- Ocean Exploration Technology
- General Study of Ocean Floor Material
- General Study of Ocean Floor Physics
- General Legal Study of Marine Resources

Message from International Student

Mélody N. C. Dumont

Université Paris Cité

FRANCE

1.Why did you choose the Graduate School of Maritime Sciences, Kobe University?

I choose Kobe University for my cotutelle because of its relationships and agreements with my French University. It was the occasion to strengthen the links between those two institutions and to create new exchanges in my field, in geography.

Moreover, I had the opportunity to be guided by the Professor Christopher Gomez during my master degree and his expertise was extremely helpful. I wanted to continue to work with him during my PhD and be my co-director.

2.How do you feel after enrolling at Kobe University?

I feel lucky enrolling at Kobe University! The staff is always very helpful, reactive, and kind, when I am in Japan or even in France. The University offers several advantages to its student. For example, its documentary resources are very extensive, and it is a pleasure to visit its libraries. Kobe University campuses are also very pleasant!

3.Please explain briefly what your research is.

My research focuses on the evolution of fluvial hydrosystem management in Japan since the Meiji era. As you know, Japan is prone to natural hazards and the archipelago has developed several tools to protect its territory. The actual methods of post-disaster reconstruction, which are mainly based on engineering, come from a complex history influenced by environmental, but also political, economic and social factors. All these factors have influenced the way Japan copes with natural disasters.

Through the case of Northern Kyushu's disaster, which happened in July 2017, I analyse the actual post-disaster reconstruction choices and the role of each actor involved in this process. The study of constructed facilities or newly spaces for citizens permit to understand the political, economic, and social visions actors apply to the territory they reconstruct. It is also the opportunity to analyse the perception of inhabitants: how they receive, interpret, and take ownership of these visions. Thus, the study of post-disaster reconstruction policies is a way to understand Japanese society.

4.Do you have opportunities for cultural exchange?

I do have opportunity for cultural exchange, especially in my laboratory. I have the chance to share my laboratory with Japanese students and it is a real pleasure to interact with them. Living in the dormitory of Kobe University also helps to meet new people.

5.What are your plans after graduation?

I plan to continue to work in research and teaching after my graduation. My first plan would be to have a job in Japan to continue my research in Geography.

6.What was your biggest culture shock after coming to Japan?

When I first came in Japan few years ago, I was pleasantly surprised of how Japanese people behave in public transport, waiting in line to enter in the bus or the train!

7.What are the appeal points of the Graduate School of Maritime Sciences for you?

It is fascinating to have the opportunity to work with researchers from different backgrounds. During my years in Université Paris Cité, I explored physical and human geography. Being in the Graduate school of Maritimes Sciences is an occasion to explore new fields, and it is very stimulating.

In addition, the Graduate School of Maritime Sciences offers a great work environment to its students. When I am in Japan, I am very happy to participate to the life of my laboratory and exchange with teachers and students.

8.Please give a message or advice to anyone who wishes to study abroad.

Studying abroad is a real opportunity for your professional, but also personal life. It is the occasion to meet new people, learn about culture, and open yourself to new way of thinking. So, if you decide to go abroad, be open-minded and curious and it will help you to live exciting adventures.

as of June, 2023

海洋基礎科学コース

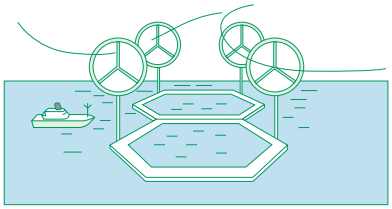
基礎科学の確かな知識を礎として，地球及び海洋に関わる環境・災害・資源・エネルギー分野の諸課題の解決に取り組み，持続可能な社会の実現を目指した教育研究を行い，専門的な知識および学力を身につける.

本コースの教育研究分野

- 地球環境科学
- 環境・エネルギー科学
- 数物科学

本コースの授業科目（英文表記は英語による授業科目）

- Comparative Planetary Science（比較惑星科学）
- 海洋地球化学
- 応用気象学
- 海洋生物学
- SABO: Sediment Hazard & Disaster Prevention（砂防理工学）
- 応用海洋学
- 大気環境科学
- 水環境学
- 機能性材料科学
- Radiation Science and Applications（放射線応用科学）
- 極低温科学
- 量子ビーム科学
- 核反応応用科学
- 応用分析化学
- 水素エネルギー科学
- Basic Mathematical Science（基礎数理）
- 計算科学
- 海事熱物理学
- 現象数理解析
- Mathematical Science of Shapes（形の数理）
- 応用物理学
- 統計解析
- 海事応用力学
- 地域環境科学論
- 海洋環境気候学
- 海洋探査技術
- 海洋底物質科学
- 海洋底物理学
- 海洋資源法学



卒業生からのメッセージ

M.T　海洋安全システム科学コース

日本

1. 海事科学研究科を選んだ理由は?

もともと学部卒業後は就職しようと考えていましたが，学部での講義や研究を通じてさらに専門性を深めたいと思い，海事科学研究科へ進学しました.

海事科学部では海洋学や基礎科学分野のみならず，経済学等の社会科学も学ぶことができました. 様々な分野に興味を持ちましたが，特に環境科学に興味を持ち，大学院では大気環境の研究に取り組みました.

2. あなたの研究された内容について説明してください。

船舶の排ガスが大気環境に及ぼす影響について研究しました. 研究を実施するにあたり，環境省や地方自治体が公開している測定データのみならず，練習船に乗船し瀬戸内海周辺海域で洋上大気を測定したり，粒子状物質の化学成分を兵庫県の研究施設にて分析させていただいたりと，多くの方にご協力いただき論文も出版することができました. この研究成果は，今後の船舶運航のあり方や海洋政策の立案などに生かされます. 研究を通じて，環境学は化学・物理学等の基礎科学から海洋学，気象学，さらには社会科学まで，幅広い分野の知見が必要であることを学びました.

3. 大学院進学の魅力について教えてください。

時間をかけて専門性を深められることです. 社会人になってから一層強く思いますが，学会や行き詰っていた時期も含め，研究に費やした時間はとても贅沢なものでした. 特に海洋科学の分野は未開の研究領域が多く，誰でもフロンティアとなれることも魅力的だと思います. また研究を通じて「こんな社会人になりたい」と思える方々に出会えたことも貴重な財産となりました.

4. 卒業後の進路について教えて下さい。

文部科学省所管の国立研究開発法人，海洋研究開発機構（JAMSTEC）で事務職として勤務しています. 専門性を直接生かせる研究職，技術職等の職種も魅力的でしたが，自分の専門性と能力を生かして活躍できること，ライフイベントにも理解があり，安心してキャリアを積める点が現在の進路を選ぶ決め手となりました. 大学での課外活動や研究で培われた周囲を巻き込む力，目的を見失わず粘り強く試行錯誤する力が業務に生かされています. 今後は，事務にとどまらず，大学院での研究経験を生かして，船舶運航管理等の現場に近い部署での業務や研究者とともに研究を推進する業務，海洋政策立案にかかわる業務に携わりたいと考えています.

5. 海事科学研究科を目指す高校生、大学生へのメッセージ

海事科学研究科には，他大学院では学べないユニークな分野・テーマの研究を行うための環境が整っています. 是非興味を持った研究室を訪問してみてください. 海事科学研究科の先生方・学生達が温かく迎えてくれると思います.

2023年6月現在

Division of Marine Technologies

Students will learn about the advanced knowledge and skills of materials engineering, fluid engineering, thermal engineering, power engineering, electrical and electronic engineering, control engineering, information engineering and computer science, by which they can develop new academic fields and technologies contributing to the research and development of the ship and maritime industry.

Education and Research Area

- Naval architecture, Ocean and Marine Engineering
- Electrical, Electronic and Information Engineering

Courses at Master's Degree Program (_: Courses in English)

- Ship and Marine Hydrodynamics
- Strength Mechanics for Ship and Marine Structure
- Basic Seakeeping Theory
- Marine Engine System Maintenance
- Heat and Mass Transfer
- Impact Engineering for Maritime Sciences
- Multiphase Flow Dynamics
- Marine Design and Manufacturing Engineering
- Energy and Environment
- Thermal Energy Conversion
- System Control Theory
- Topics in Applied Systems Development
- Network Analysis
- Applied Machine Learning
- Power Conversion Engineering
- Motion Control
- Solid-State Electronics
- Knowledge Engineering
- Applied Mathematical Programming
- Human Interface
- Ocean Wave Modelling
- Regional Environmental Science
- Ocean Environment and Climate Studies
- Ocean Exploration Technology
- General Study of Ocean Floor Material
- General Study of Ocean Floor Physics
- General Legal Study of Marine Resources

Message from International Student

章 誠豫 *Shanghai Maritime University*

CHINA

1.Why did you choose the Graduate School of Maritime Sciences, Kobe University?
I graduated from Shanghai Maritime University, majoring in Shipping and Marine Engineering, and I am interested in my current instructor's research related to superconductors and liquid hydrogen. For further study, I chose to study at Graduate School of Maritime Sciences, Kobe University.

2.How do you feel after enrolling at Kobe University?
As one of the leading universities in Japan, I can get the latest knowledge I require for research at Kobe University. Meanwhile, the Japanese and English immersion can also help me to develop my language skills, which will provide the foundation for me to work globally.

3.Please explain briefly what your research is.
My research topic is fundamental research on a helical liquid hydrogen flowmeters. The research is to design and make a prototype flowmeter and optimize its accuracy by means of software simulation and 3D printing technology. It is expected to lay the foundation for the liquid hydrogen marine transportation project and the research of liquid hydrogen flowmeter.

4.Do you have opportunities for cultural exchange?
Yes, not only I can communicate with Japanese students in the research lab, but also the teaching associate members often announce exchange events for international students.

5.What are your plans for after graduation?
I want to work in Japan and become an engineer who can work globally.

6.What was your biggest culture shock after coming to Japan?
When boarding an escalator, people in the Kanto region stand on the left side of the escalator and leave the right side open to allow others to pass; people in the Kansai region stand on the right side and allow others to pass on the left side.

7.What are the appeal points of the Graduate School of Maritime Sciences for you?
The Fukae Campus, where the Marine Studies Course is located, is close to the ocean, so you can take a walk on the levees to relax and rejuvenate after researching.

8.Please give a message or advice to anyone who wishes to study abroad.
Once the decision is made, just do it. Studying abroad is a good opportunity to expand your horizons, see the world from a different perspective, and you will meet the bright future for yourself.

as of June, 2023

海洋応用科学コース

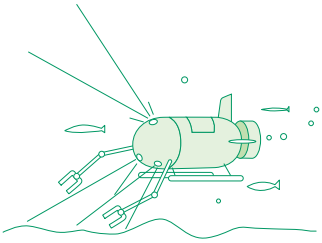
工学に基礎を置き，海や船に関わる産業分野の発展に寄与する新たな学問分野の開拓と技術開発のために，材料工学，流体工学，熱工学，動力工学，電気電子工学，制御工学，情報工学，計算機科学，などの専門的な知識および学力を身につける.

本コースの教育研究分野

- 船舶海洋動力工学
- 電気電子情報工学

本コースの授業科目（英文表記は英語による授業科目）

- 船舶海洋流体力学
- Strength Mechanics for Ship and Marine Structure（船舶海洋構造強度論）
- Basic Seakeeping Theory（船舶耐波力学）
- 機関システム保全論
- 熱物質輸送論
- 船舶海洋衝撃工学
- Multiphase Flow Dynamics（混相流体力学）
- Marine Design and Manufacturing Engineering（海洋設計加工学）
- Energy and Environment（エネルギー環境論）
- 熱エネルギー変換論
- System Control Theory（システム制御論）
- 応用システム開発論
- Network Analysis（ネットワーク解析論）
- Applied Machine Learning（応用機械学習）
- 電力変換工学
- モーションコントロール
- 電子物性工学
- 知識工学
- 応用数理計画
- ヒューマンインタフェース
- 海洋波モデリング
- 地域環境科学論
- 海洋環境気候学
- 海洋探査技術
- 海洋底物質科学
- 海洋底物理学
- 海洋資源法学



在学生からのメッセージ

杉原　弥悠加　　マリンエンジニアリングコース

日本

1. 海事科学研究科を選んだ理由は?

私は学部生の時にクリーンエネルギーについて興味・関心があり，水素社会実現に向けた最先端の研究ができる現在の研究室を選びました．卒業研究を行っていくうちに，さらに研究を深めたいと思い，大学院への進学を決めました．また，乗船実習科に進学し，海技免状取得後進路を決めたいという考えもありました．

2. 入学後の大学院の印象は?

卒業に必要な単位が少ないので，学部時代より自由な時間が多いです．研究や自主勉強，資格取得に時間を割くことができます．

3. あなたの研究内容について簡単に説明してください。

液体水素（沸点：20 K）のような極低温液体でも使用できる全く新たな原理に基づく配管外部取り付け型のひずみゲージを用いた流量計の開発に関する研究行っています．現在は，極低温下におけるGFRPのヤング率の温度依存性を調べています．

4. 大学院進学の魅力について教えてください。

学部ではできない研究の追求ができます．マンツーマンで丁寧に研究の指導をしてくださる先生や，困った時にアドバイスをしてくださる尊敬できる先輩がいることも魅力の一つです．

5. 卒業後のあなたの進路について教えて下さい。

私は大学院卒業後，船舶職員になる予定です．研究を通じて身に付けた論理的思考力は，どの職場でも必要なスキルだと考えています．2年間で培った知識や能力を船上でも最大限活かしていきたいと考えています．

6. 海事科学研究科の魅力は何ですか?

海洋に関わる様々な分野の教授が揃い，熱力学，流体力学，機械工学，低温工学，その他多種多様な分野について学ぶことができ，自分のやりたい研究を選ぶことができるのはこの海事科学研究科の魅力です．さらに，他大学合同の授業や，企業の方に授業をしてもらう機会があり，船舶系の他大学学生との交流や，最先端の海事産業について学ぶことができます．

7. 海事科学研究科を目指す高校生、大学生へのメッセージ

海事科学研究科を目指す高校生や大学生の方に私が一番伝えたいことは，多くの経験を積み重ねることで，多様な選択肢や手段を思い描くことが出来るということです．少しでも大学院に興味がある方は，経験の一つとして大学院進学をお勧めします．

2023年6月現在

Division of Maritime Policy Studies

Students will develop scientific and technological methods in the effective operation and advancement of international logistics and supply chain and their contribution to global environmental conservation, the development and improvement resources and institutions that support the transportation system. Students will also acquire specialized knowledge and improve their academic skills in planning, designing, operation, management and policies to establish the optimal logistics systems from a strategic and comprehensive perspective.

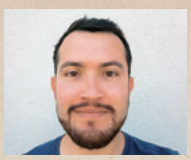
Education and Research Area

- Logistics Policy and Management

Courses at Master's Degree Program (_: Courses in English)

- Transport Engineering for Network Analysis
- Logistics Management
- Project Evaluation
- Logistics and Environment
- Transport Economics
- Network Industry
- Transportation System Planning
- Data Science for Transport
- Management Systems
- Law of Ocean Resource and Energy
- Regional Environmental Science
- Ocean Environment and Climate Studies
- Ocean Exploration Technology
- General Study of Ocean Floor Material
- General Study of Ocean Floor Physics
- General Legal Study of Marine Resources

Message from International Student



Sinar Noé Corzo García

Autonomous University of Sinaloa

MEXICO

1.Why did you choose the Graduate School of Maritime Sciences, Kobe University?
Along history, Kobe has been a crucial port city for Japan, being the busiest port in the world prior 1996 , now a days the city has all kind of transport connections, with 3 airports close-by, train lines, national highways, and a huge amount of docks that connect the city to the rest of the country and the world. The city has one of the best academic institutions in the country, Kobe University, which has a long history in the business/trade/transportation areas, and particularly, the faculty of Maritime Sciences has a history of more than 100 years, and I choose it immediately.

2.How do you feel after enrolling at Kobe University?
It is incredible, it is such an amazing place, where different ideas converge and new ones are born, the friendliness of the students and the staff makes you feel at home, while the guidance and expertise of the professors help you to focus and achieve your goals.

3.Please explain briefly what your research is.
My research is about air transportation, and airline competition between traditional airlines and low-cost airlines.

4.Do you have opportunities for cultural exchange?
So many; in the faculty of maritime sciences I have met many students from abroad, some of my professors are from overseas, and all of my professors have been abroad so the faculty itself is a melting pot of different cultures and experiences; but Kobe University as a whole is actively promoting cultural exchange through different activities and events along the year.

5.What are your plans for after graduation?
Currently I'm planning to extend my stay in Kobe University all the way up to PhD. If not, I'm aiming to work for a prestigious Japanese logistics company in the international division to work all around the globe.

6.What was your biggest culture shock after coming to Japan?
Punctuality and personal space. First, being on time is highly important in Japan, in my country, being late by 5-10 mins it is not only accepted, but expected, whereas in Japan everything is on time. Second, the strict respect for personal space is something that being from a country where shaking hands, hugging, kissing the cheeks, fist bumping and high five-ing is normal, it is a shock to suddenly stop doing it.

7.What are the appeal points of the Graduate School of Maritime Sciences for you?
The long academic history of the faculty, the expertise of the professors, and the multidisciplinary of its students create an amazing academic spirit between the people within the faculty. The connections of the faculty with the stakeholders on all the areas of the faculty's research interests. And finally, all the equipment that the faculty has to conduct research such as the many boats, specialized laboratories, testing facilities, simulation equipment, and even its own ship, the Kaijin Maru

8.Please give a message or advice to anyone who wishes to study abroad.
Study abroad is a life-changing experience that cannot be described by words, it opens your mind and allow you to appreciate both your origins and other countries/cultures, just remember to face everything with an open mind and be flexible to change, otherwise you would have a not-so-good experience. Thanks to studying abroad I have friends all around the world, in every single continent which otherwise I would never have met o; if you decide to study abroad, my advice is that, even though it might be a little frightening at the beginning, remember that other exchange students face the same difficulties and are in a somewhat equal situation, you are not alone, so don't be afraid and talk to new people, you never know who would turn out to be one of your best friends in the world.

as of June, 2023

海洋ガバナンスコース

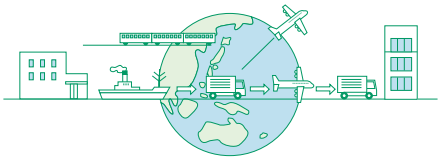
国際物流・サプライチェーンの効果的運用と高度化，およびこれに係る地球環境保全への貢献を目的として，輸送体系を支えるリソースや制度の整備・改善ならびに戦略的かつ総合的な視点から最適な物流・ロジスティクスシステム構築の計画設計，運用管理および政策などに関する専門的な知識および学力を身につける.

本コースの教育研究分野

・ロジスティクス政策科学

本コースの授業科目（英文表記は英語による授業科目）

・Transport Engineering for Network Analysis（交通計画とネットワーク）
・Logistics Management（ロジスティクスマネジメント）
・Project Evaluation（プロジェクト評価論）
・Logistics and Environment（ロジスティクスと環境）
・交通産業の経済学
・ネットワーク産業論
・交通システム計画論
・Data Science for Transport（交通データサイエンス）
・マネジメントシステム論
・海洋資源・エネルギー制度論
・地域環境科学論
・海洋環境気候学
・海洋探査技術
・海洋底物質科学
・海洋底物理学
・海洋資源法学



在学生からのメッセージ

高嶋　晃琉　　グローバル輸送科学コース

日本

1. 海事科学研究科を選んだ理由は?
私は海上コンテナ輸送に強い関心を持っており，この分野に関連する研究を深めたいと考え，海事科学研究科を選びました．研究室を選ぶ際には，自分の興味や研究テーマに最も合致する分野を提供している研究室を見つけ，その環境で学ぶことを決めました．

2. 入学後の大学院の印象は?
学生の数が少なく，授業では教員との距離が非常に近いです．研究室においても学生同士のみならず，留学生や教員とも関わりがあり，和やかな研究環境です．研究テーマについて，計画性をもって向き合うことができます．

3. あなたの研究内容について簡単に教えてください。
私の研究は，コンテナターミナルゲート前に仮置きデポを設置することで，トラックの待ち時間問題を解決することを目指しています．コンテナ輸送量が増加する中で，港湾での荷役作業や内陸との輸送が増加し，その結果，ゲート前でトラックの待ち行列が発生しています．この待ち時間は，トラックの生産性低下，ドライバーの労働環境の悪化，そして環境汚染を引き起こします．これらの問題を緩和する一つの解決策として仮置きデポの運用を検討します．

4. 大学院進学の魅力について教えてください。
大学院では学部時代には経験できない長期的かつ深い研究を行うことができます．自分の興味に基づいたテーマで，しっかりと目標を持ちながら取り組むことができる点が，大学院進学の最大の魅力です．

5. 卒業後のあなたの進路について教えてください。
現在修士1年生で，具体的な進路はまだ決まっていませんが，海事・ロジスティクス・交通分野の課題に対して理解を深め，これらの問題を解決するための仕事に携わりたいと考えています．

6. 海事科学研究科の魅力は何ですか?
海事，ロジスティクス，交通分野を多角的に学び，それぞれの分野における専門知識を深められることが魅力です．理論をしっかりと理解し，幅広い視点を養うことで，将来的に現場で応用可能なスキルが培われる点も大きな強みだと感じています．分野横断的な視野を広げることができる環境が，特に魅力的です．

7. 海事科学研究科を目指す高校生、大学生へのメッセージ
海事科学は，物流やエネルギー輸送，環境保全など，私たちの生活を支えるさまざまな分野に深く関わる非常に重要な学問です．しかし，大学院レベルでこの分野を専門に研究している機関は少なく，また一般的な学生にはあまり知られていない地味な分野でもあります．この希少性ゆえに，海事科学の専門知識を持った人材は非常に求められており，社会的にも大きな価値を持っていると思います．海事科学研究科を目指す皆さんには，ぜひ他大学の研究室のテーマや環境を比較し，自分の興味や将来の目標に合った研究室を見つけてほしいと思います．

2024年10月現在

Division of Nautical Sciences

Students will develop scientific and technological methods to promote technological innovation in ship operation and system management in ways that link “ships, people, the environment, and society,” with an overall goal of maintaining stable maritime transport on a global scale without stalling economic activity. Students will also acquire specialized knowledge and improve their academic abilities in the field of navigation based on social sciences and engineering in order to solve various problems in the maritime field.

Education and Research Area

- Nautical Sciences

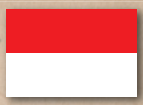
Courses at Master’s Degree Program (_: Courses in English)

- Nautical Environmental Science
- Ship Operation & Management
- Maritime Safety
- Maritime Law
- Theory of Shiphandling Operations
- Maritime Sensing Studies
- Regional Environmental Science
- Ocean Environment and Climate Studies
- Ocean Exploration Technology
- General Study of Ocean Floor Material
- General Study of Ocean Floor Physics
- General Legal Study of Marine Resources

Message from International Student

I Made Raditya Wicaksana

Sepuluh Nopember Institute of Technology



Indonesia

1.Why did you choose the Graduate School of Maritime Sciences, Kobe University?

Japan has always been one of the countries I admired whether it's technological advancement or cultural influences. Which made it the place that I want to visit. Kobe University was first introduced to me by my undergraduate professor through his PhD experience. From that point, I came to know that the Graduate School of Maritime Science of Kobe University has a strong academic standing and is one of the most prestigious universities in Japan. Especially in fields that I am interested in. Luckily, I was met with an opportunity to pursue higher education in Japan, and made Kobe University my choice.

2.How do you feel after enrolling at Kobe University?

I felt excited about new experiences, but at the same time, I was nervous about adapting to a totally different environment. Fortunately, I met with a lot of helpful people that assisted me in my first time in Japan and I’m grateful I can learn a lot of new things through it.

3.Please explain briefly what your research is.

My laboratory focuses on researching human factors and currently, my research is about ship navigation resilience related to operator or navigator performance.

4.Do you have opportunities for cultural exchange?

Kobe University offers lots of opportunities for cultural exchange. For example, when I was in my Japanese class, I participated in a study tour of a village in Japan and learned about the culture there. Other than that, there are also many international students with different cultural backgrounds where you can talk to and learn further about their culture.

5.What are your plans for after graduation?

After I graduate from my master's program, I am planning to continue to get a PhD. For my career, I am planning to go back and contribute to developing my country, but I am also interested in joining an International Company.

6.What was your biggest culture shock after coming to Japan?

At first, I was amazed by the cleanliness of the environment and the public transportation system that seems to reach every place. The biggest shock is about the weather or season. Especially the winter season when the temperature is so low which is very different from my countries that have only two seasons. Although the temperature felt harsher, I quite like it in the winter. Also, every other season has its beautiful charm.

7.What are the appeal points of the Graduate School of Maritime Sciences for you?

Graduate Schools of Maritime Sciences have a great academic resource and one of the best campuses in maritime study in Japan. The lecturer has a deep background and gave a lot of insight into their experience regarding the class materials. There are also advanced research facilities such as ship simulators and a real research ship that give hands-on experience and valuable research data. The laboratory facilities and supportive professors create a great research environment for my academic and professional growth.

8.Please give a message or advice to anyone who wishes to study abroad.

Studying abroad will be a life-changing experience that broadens your perspective on many things. However, to fully enjoy these experiences, it’s important to approach them with an open mind. Of course, a lot of preparation is needed, but take on these opportunities as it is worth the struggle. While not every moment will be easy, and you may face challenges, remember that mistakes are a natural part of the learning process. Don’t be afraid to make them; just be sure to learn from them and correct them. And finally, don’t hesitate to reach out for help from those around you.

as of October,2024

航海学コース

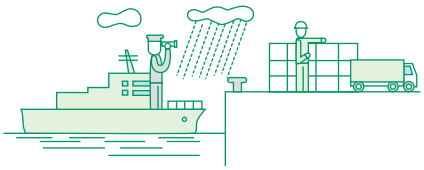
経済活動を停滞させない安定な海上輸送を地球規模で実現するために，科学技術的手法の創出によって，「船・ひと・環境・社会」連関システムの管理運営と船舶運航に関する技術革新を図り，海事分野の諸課題の解決のための，社会科学及び理工学に基づいた航海学分野の専門的知識および学力を身につける.

本コースの教育研究分野

・航海学

本コースの授業科目（英文表記は英語による授業科目）

・Nautical Environmental Science（航海環境論）
・Ship Operation & Management（海事安全管理論）
・海事安全論
・Maritime Law（海事関連法）
・操船運用論
・航海計測論
・地域環境科学論
・海洋環境気候学
・海洋探査技術
・海洋底物質科学
・海洋底物理学
・海洋資源法学



在学生からのメッセージ

近藤　大祐　　グローバル輸送科学コース

日本

1. 海事科学研究科を選んだ理由は?
私は学部4年生の時に行っていた卒業研究をさらに深め，それを自律運航船に関する研究につなげていきたいと考え海事科学研究科を選びました. 海事科学研究科での研究室を選ぶにあたっては，一番自分のやりたい分野の研究ができ，かつ自分に合った研究室を選びました.

2. 入学後の大学院の印象は?
学生の数が少なく，授業では教員との距離が非常に近いです. 研究室においても学生同士のみならず，留学生や教員とも密接に関わりがあり，和やかな研究環境です. 英語での授業や留学生と交流することで英語力の向上にもつながります. 自分の研究したいことを自由に選択でき，計画性をもって研究を行うことができます.

3. あなたの研究内容について簡単に教えてください。
私は海難審判における「無難に航過する」に関して研究を行っています.「無難に航過する」は具体的な数値基準が存在せず，そのような状況では数値的なアルゴリズムで動く自律運航船の出現に影響が出ると考え，「無難に航過する」距離に関して明らかにすることを目的として研究を行っています.

4. 大学院進学の魅力について教えてください。
学部ではできない長期的な研究を行うことができます. 自分のやりたい研究を，目標をもって行うことができるのは大学院進学の魅力です. また，TA として教育の場にも立つことで自身の知識を深めることもできます.

5. 卒業後のあなたの進路について教えてください。
私は卒業後，博士課程後期課程への進学を予定しています. 進学後は学部，前期課程で培った自身の考えや知識をより深めたいと考えています. 前期課程で得た専門性を発展させ，今後出現が予想される自律運航船と船隊管理に関して研究を行う予定です.

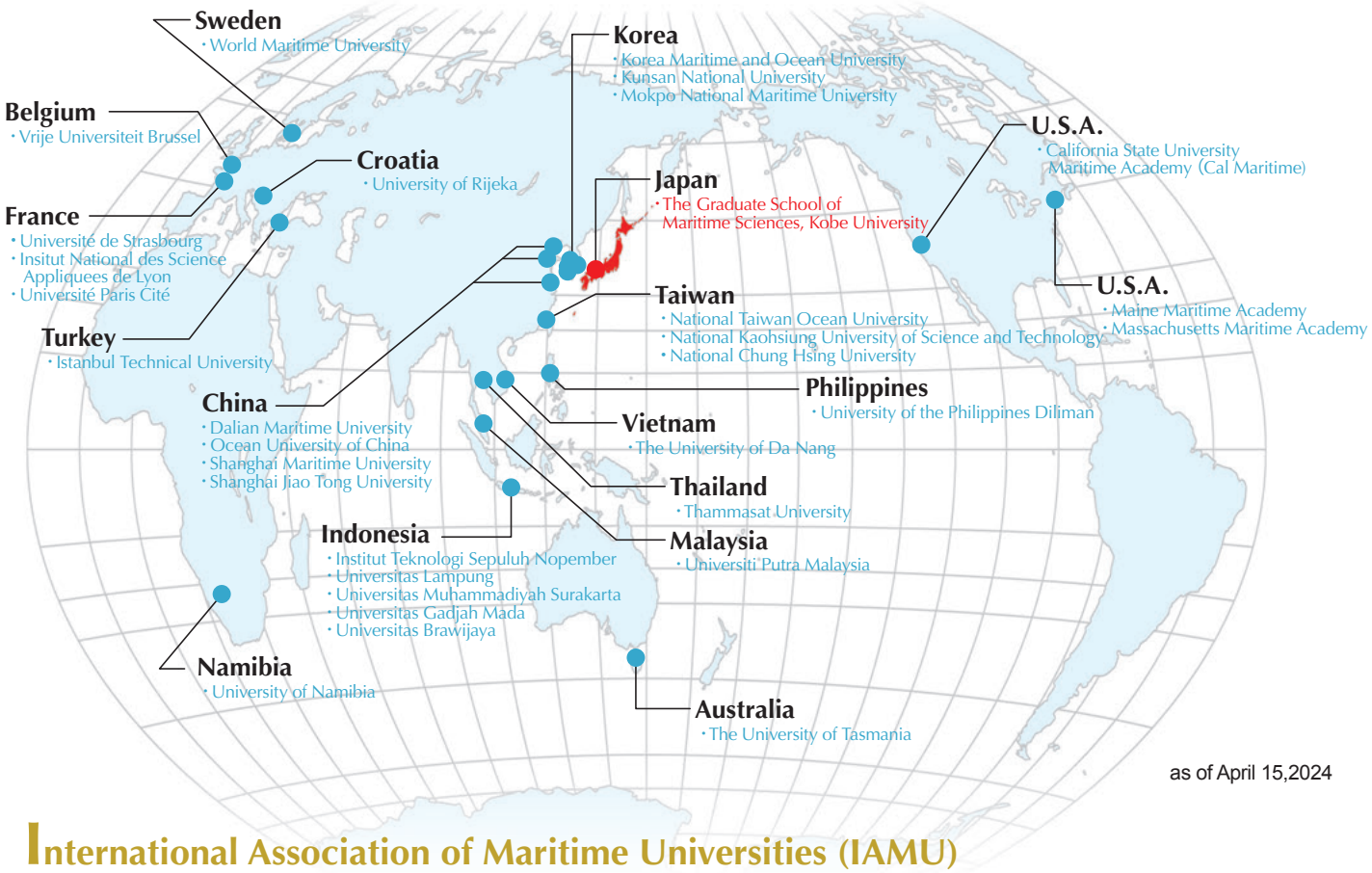
6. 海事科学研究科の魅力は何ですか?
海事科学研究科は教員との距離が近く，多くのことを学べる機会，様々なことに挑戦できる環境に恵まれています. 練習船を所有しており，実際の船や港湾の見学もあるため海事科学に関する見識を深めることができます.

7. 海事科学研究科を目指す高校生、大学生へのメッセージ
海事科学研究科は他大学と比べて比較的学生の数が少なく，教員との距離が近いことが特徴です. 海事科学分野を研究することができる大学院は少ないと考えます. 海事科学研究科を目指す高校生，大学生は他大学の研究室の研究や環境を比較し，自分に合った研究室を選択することをお勧めします. 同じ分野を学びあえる後輩に会える日を，楽しみにしています.

2023年6月現在

International Exchanges

Kobe University has concluded academic exchange agreements with more than 400 overseas universities and institutions for both inter-university and inter-faculty / graduate school exchanges. The Graduate School of Maritime Sciences is conducting intensive exchanges in education and research with the partner universities shown below.



as of April 15,2024

International Association of Maritime Universities (IAMU)

IAMU was founded by seven universities representing the five continents of the world (Representative Universities) in November, 1999, with a shared recognition of significance of maritime education and training in the rapid globalization of the international shipping arena. Since then, IAMU has significantly expanded its membership, and now boasts 73 universities/academies/faculties of the world's maritime education and training institutions, and The Nippon Foundation as its members, totaling 74 altogether.

The Graduate School of Maritime Sciences (the former Kobe University of Mercantile Marine) was a founding member of IAMU, and has been a representative of the Asian area, playing a key role in promoting IAMU's development.

IAMU http://www.iamu-edu.org/

Asia Maritime and Fisheries Universities Forum (AMFUF)

Asia Maritime & Fisheries Universities Forum was founded on 7 November 2002, at the Korea Maritime University (KMOU) in Busan. It was the first permanent private organization in Asia, joined by 9 institutions including KMOU.

The overall objective of this Forum, which is to be held annually, is to promote the academic exchange among the Asian Maritime & Fisheries Education Institutes and to further foster international cooperation on the education and research for the maritime & fisheries experts.

The annual forum will be held in each member's institution, alternately, for advertising this linkage and activities of the programs to the society all over Asian countries.

Campus Life

Campus Calendar

1Q	April	Entrance Ceremony Orientation for New Students Medical Check-up First Quarter begins
	June	First Quarter Examination
2Q		Second Quarter begins
	July	
	August	Second Quarter Examination Summer Vacation begins
	September	Summer Vacation ends
3Q	October	Orientation for New Students Third Quarter begins
	November	University Festival (Rokkodai Campus) Third Quarter Examination
4Q	December	Fourth Quarter begins Winter Vacation begins
	January	Winter Vacation ends
	February	Fourth Quarter Examination
	March	Commencement Ceremony

Scholarships

There are scholarships offered by Japanese government, local governments, and private organizations. Most of the scholarships can be applied for after entering a university. They are mostly for undergraduate and graduate students.

Number of International Students by Nationality

as of October 1,2024

China	25	Mexico	1
Indonesia	4	Republic of Namibia	1
Korea	2	Spain	1
France	1	Taiwan	1
Total			36

Career Opportunities

Career Options

After completing graduate programs, many students find employment in private companies or public/educational institutions to show their highly advanced skills and knowledge.

Graduate jobs (Including Japanese Students)

Private Companies

- Daikin Industries, Ltd.
- Hitachi Zosen Corporation
- JFE Engineering Corporation
- Kawasaki Heavy Industries, Ltd.
- Komatsu Ltd.
- Konica Minolta, Inc.
- Kowa Seisaku Co., Ltd.
- Kubota Corporation
- Mitsubishi Electric Corporation
- Nippon Steel & Sumitomo Metal Corporation
- Nippon Telegraph And Telephone West Corporation
- Nippon Yusen Kabushiki Kaisha
- Noevir Holdings Co., Ltd.
- NSK Ltd.
- NTT Data Corporation
- Senko Co., Ltd.
- Shimadzu Corporation
- Suzuki Motor Corporation
- The Asahi Shimbun Company
- Toppan Printing Co., Ltd
- Toshiba Corporation
- Toyota Industries Corporation
- Toyota Motor Corporation

Public Institutions

- District Police Bureau
- Japan Meteorological Agency
- Japan Nuclear Energy Safety Organization, an incorporated administrative agency (JNES)
- Ministry of Land, Infrastructure, Transport and Tourism

Educational Institutions

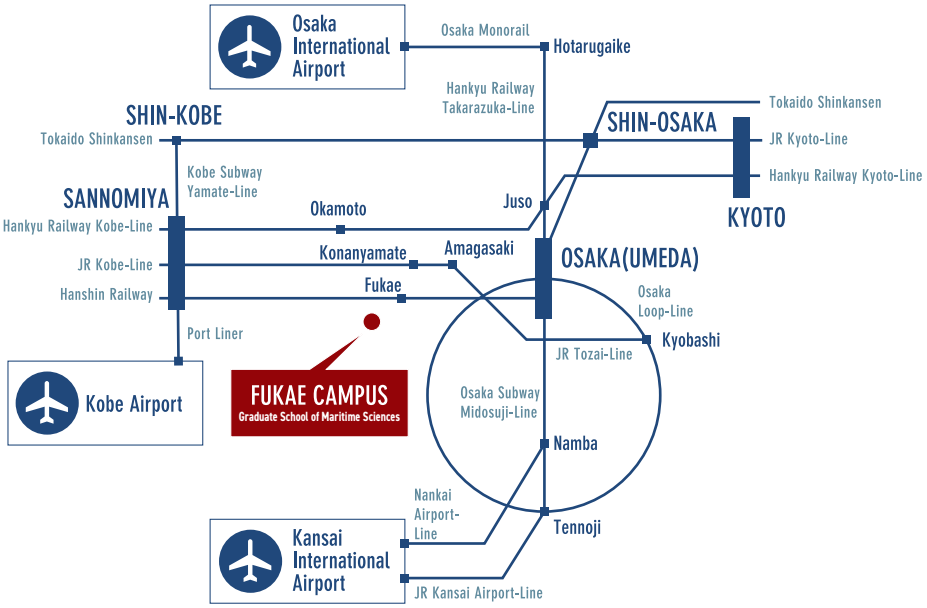
- Istanbul Technical University (Turkey)
- Rajamangala University of Technology Thanyaburi (Thailand)

Kobe University Global Education Center

The Global Education Center was established as a university wide research/teaching facility in April 1993. The Center takes overall responsibility for international students, including providing teaching in Japanese language, Japanese studies, advising on studying and living in Japan, internships career advising, and alumni networking. We are also carrying out research and development aimed at promoting international study exchange programs such as providing support for overseas study for Japanese students registered at Kobe University. In addition, the Center is actively promoting the support of Japanese language teaching, and international exchange programs in the local community, working with regional government agencies, local volunteer organizations, schools, companies etc.
http://www.kisc.kobe-u.ac.jp/english/

MAP

ACCESS



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