

Graduate School of Integrated Science and Technology,
Nagasaki University
Doctoral Degree (3 Year Program)
Application Guidelines

October 2024 Admissions
Spring Application / Summer Application

General Examination
Examination for Those Currently Employed
Entrance Examinations for International Students

Graduate School of Integrated Science and Technology, Nagasaki University
Bunkyo 1-14, Nagasaki, 852-8521, Japan
TEL:(095)819-2491 (Direct)

1. Number of Students to be Admitted

Department	Category of Examinations	Program/Field	Number of Students to be Admitted	
			Spring Application	Summer Application
Department of Integrated Science and Technology	<ul style="list-style-type: none"> • General Examination • Examination for Those Currently Employed • Examination for International Students 	Program for Symbiotic Science and Technology/Field of Environment and Marine Resource Science	16	16
		Program for Symbiotic Science and Technology/Field of Chemistry and Materials Science		
		Program for Symbiotic Science and Technology/Field of Engineering and Information Data Science		
		Program for Frontiers of Marine Science		
		Program for Water and Environmental Science		

Note 1: The application numbers include the number of applicants for the selection of advancing students.

Note 2: If the total number of students enrolled in April 2024 and the successful candidates from the spring application for admission in October 2024 fall short of the quota; the shortfall will be added to the quota for the summer application.

In addition, the approximate number accepted for each program during the spring and summer application periods is as follows:

The target number of admissions for each program during the spring and summer application periods is as follows:
(Spring Application)

Program for Symbiotic Science and Technology / Field of Environment and Marine Resource Science: Approximately 3 candidates

Program for Symbiotic Science and Technology / Field of Chemistry and Materials Science: Approximately 5 candidates

Program for Symbiotic Science and Technology / Field of Engineering and Information Data Science: Approximately 3 candidates

Program for Frontiers of Marine Science: Approximately 3 candidates

Program for Water and Environmental Science: Approximately 2 candidates

(Summer Application)

Program for Symbiotic Science and Technology / Field of Environment and Marine Resource Science: Approximately 3 candidates

Program for Symbiotic Science and Technology / Field of Chemistry and Materials Science: Approximately 5 candidates

Program for Symbiotic Science and Technology / Field of Engineering and Information Data Science: Approximately 3 candidates

Program for Frontiers of Marine Science: Approximately 3 candidates

Program for Water and Environmental Science: Approximately 2 candidates

2. Eligibility for Application

To be eligible to apply for the program, one of the following requirements needs to be fulfilled.

Note: For “Examinations for Those Currently Employed,” the applicant must be working as a member of the management team or a regular employee of a public/private entity at the time of application, must have obtained consent from an authorized supervisor, and must fulfill one of the following requirements.

Note: For “Examination for International Students,” the applicant must be a non-Japanese citizen (excluding those with Japanese permanent resident status or those who have graduated from a Japanese university and completed education from a Japanese graduate school) who fulfills one of the following requirements.

- (1) Those who have obtained (or are expected to obtain by September 2024) a master’s or a professional degree.
- (2) Those who have been conferred (or will be conferred by September 2024) a degree equivalent to a master’s or a professional degree in countries other than Japan.
- (3) Those who have been conferred (or will be conferred by September 2024) a degree equivalent to a master’s or a professional degree in Japan after the completion of required correspondence courses conducted by an authorized school outside Japan.

- (4) Those who have been conferred (or are expected to be conferred by September 2024) a degree equivalent to a master's or a professional degree after completing postgraduate courses at a foreign education institute in Japan that is recognized by the Ministry of Education, Culture, Sports, Science, and Technology.
- (5) Those who have completed the courses from the United Nations University and have been conferred (or are expected to be conferred by September 2024) a degree equivalent to a master's degree.
- (6) Those who have completed or will complete the education program at a foreign school, the United Nations University, or an education facility specified in (4), and those who have passed or are expected to pass by September 2024 the examination and screening test prescribed in Article 16 section 2 of the Establish Standards of the Graduate School and have had their academic achievement recognized as equivalent to or greater than those with a master's degree. (See "3. Preliminary Eligibility Screening")
- (7) Those who are specified by the Ministry of Education Culture, Sports, Science and Technology. (1989 Ministry of Education, Public Notification No.118) as follows:
 - ① Those who have been engaged in research for more than two years at university or research institutes after their university graduation and have had their academic achievement through the relevant research result recognized as equivalent to or greater than those with a master's degree. (See "3. Preliminary Eligibility Screening")
 - ② Those who have been engaged in research for more than two years at a university or research institutes after completing 16 years of required school education in countries other than Japan or completing 16 years of required school education by a correspondence course conducted by other countries in Japan, and have had their academic achievement recognized as equivalent to or greater than those with a master's degree through the relevant research result by the Graduate School of Engineering. (See "3. Preliminary Eligibility Screening")
- (8) Those who have been deemed to have academic ability equivalent to or greater than those with a master's degree or a professional degree through individual preliminary screening in the institute will be at least 24 years of age by September 30, 2024. (See "3. Preliminary Eligibility Screening")

3. Preliminary Eligibility Screening

- (1) Applicants seeking qualification under options (6), (7), or (8) of the "Eligibility for Application" must submit the required documents to the Student Affairs Division of the Graduate School of Integrated Science and Technology for pre-screening by the deadlines specified below.

• Spring Application: Tuesday, 26 March, 2024

• Summer Application: Thursday, 9 May, 2024

Submission Documents	Note
Application for Preliminary Screening (Form 5)	Application Form issued by the institute
Application Form (Form 1)	Application Form issued by the institute
Certified (original) Copy of Graduation Certificate/ Expected Gradation Certificate	Issued under the authority of the last institute from which the applicant has graduated. A photocopy of the diploma is not acceptable.
Official Transcript (Highest Education degree)	Issued under the authority of the last institute from which the applicant has graduated. In addition, submit the university's official grading scale that outlines the grading system.
Research Achievement (Form 6)	List the titles of papers, conference, dates of publications, presentations, and name of journals, publishers etc. on the prescribed form. (Only for those who have performance results)
Research Progress Report (Form 7)	Provide a detailed description of "Research Achievement (Form 6)" on the prescribed form, attaching supporting evidence (e.g., papers, reprint, excerpts).
Application Form issued by the institute	Those who have passed or are expected to pass the exam equivalent to the Qualifying Examination or those who apply under Eligibility for Application (6) must submit the (expected) Qualified Certificate issued under the authority of the president or the dean of the university.
Return Envelope for Preliminary Screening Result (Only for the applicants residing in Japan)	A return envelope with stamps worth 344 yen for express delivery as specified: No.3 Long Type (12cm×23.5cm). Clearly state your Postal Code, Address, and Name
Proof of legal status in Japan (International Applicants only)	Submit a photocopy of the name page of your passport. If you are already in Japan, also submit a copy of your residence card or passport visa page for verification. If arriving after acceptance, submit it upon arrival.
Others	If documents produced by foreign schools or institutions are in a language other than Japanese or English, a Japanese or English translation must be attached.

(*) The prescribed Application Form is available for download from the home page of the “Graduate School of Integrated Science and Technology, Nagasaki University.”

Website → “入試情報” (Entrance Examinations) → “募集要項” (Application Guidelines)

(URL : <https://www.ist.nagasaki-u.ac.jp/graduate/boshuyoukou>)

- (2) In principle, Preliminary Eligibility Screening is conducted based on the submitted documents. Applicants will be notified of the screening results prior to the start of the application period. Those who are deemed eligible for application must follow the procedures set out in “4. Period of Application” and “5. Application Procedure”.

4. Application Period

Spring Application: From Monday, 22 April, 2024, to Friday, 26 April, 2024, until 17:00 (JST).

Summer Application: From Monday, 3 June, 2024, to Friday, 7 June, 2024, until 17:00 (JST).

- (1) In principle, all of the following application documents as listed in article 5 below, must be scanned and converted to a PDF file and sent to the address stated below via email by the deadline.

Email Address: seisan_daigakuin@ml.nagasaki-u.ac.jp

The original Hard Copy must be posted by registered express mail.

Postal Address: Student Affairs Division for the Institute of Integrated Science and Technology
Administrative Department, Nagasaki University
1-14 Bunkyo, Nagasaki 852-8521, Japan

- (2) Applicants may submit the documents in person between 9:00 to 17:00. (JST)
(Except Saturdays, Sundays, and national holidays)

5. Application Procedures

Applicants must submit the following documents to the Student Affairs Division for the Institute of Integrated Science and Technology Administrative Department, Nagasaki University by the deadline.

Before applying, select a prospective supervisor who is willing to accept you and consult on your research plan.

* The prescribed Application Form is available for download from the home page of the “Graduate School of Integrated Science and Technology, Nagasaki University.”

Website → “入試情報” (Entrance Examinations) → “募集要項” (Application Guidelines)

(URL : <https://www.ist.nagasaki-u.ac.jp/graduate/boshuyoukou>)

Submission Documents	Note
Application Form [Form1]	Fill out the application form issued by the institute. * Consult with your prospective academic advisor (Refer to “Primary Faculty Supervisor List and Research Focus”) prior to filling in the form. Except for those already submitted for the preliminary eligibility screening.
Photo Card, Admission Ticket, and Payment of Certificate for the Entrance Examination Fee [Form2]	Attach your ID photos (size L 4cm x W 3 cm, upper body, no hat or cap, full face view, taken within the three months) on the prescribed Photo Card and Admission Ticket.
Certified (original) copy of Graduation Certificate or Expected Completion Certificate (Highest education degree)	Issued under the authority of the university from which the applicant has graduated or is expected to graduate. A photocopy of the diploma is not acceptable. Except for those already submitted for the preliminary eligibility screening.
Official Transcript (Highest education degree)	Issued under the authority of the university from which the applicant has graduated or is expected to graduate. Except for those already submitted for the preliminary eligibility screening. In addition, submit the university’s official grading scale that outlines the grading system.

Research Achievement 〔Form 6〕	List the titles of papers, conference, dates of publications, presentations, and name of journals, publishers etc. on the prescribed form. (Only for those who have performance results) Except for those already submitted for the preliminary eligibility screening.
Research Progress Report 〔Form 7〕	Provide a detailed description of “Research Achievement (Form 6)” on the prescribed form, attaching supporting evidence (e.g., papers, reprint, excerpts). Except for those already submitted for the preliminary eligibility screening.
Dissertation Contents 〔Form 8〕	Describe the abstract of the Master’s Thesis in 1,000 words or less in the prescribed form. Except for applicants without master’s degrees.
Abstract of Your Research Plan 〔Form 9〕	Fill out the abstract of the research plan in the prescribed form after consulting with the prospective supervisor.
Consent form of the Examination and Enrollment 〔Form10〕	Those who are employed by the government or any private company must submit the prescribed consent form signed by the head of the organization.
Return Envelope for admission ticket (Only for the applicants residing in Japan)	A return envelope with stamps worth 344 yen for express delivery as specified: No.3 Long Type (12cm×23.5cm). Clearly state your Postal Code, Address, and Name
Proof of legal status in Japan (International Applicants only)	Submit a photocopy of the name page of your passport. If you are already in Japan, also submit a copy of your residence card or passport visa page for verification. If arriving after acceptance, submit it upon arrival.
Registration of Address and Other Information (In order to send Notification of Success, etc.)	Input the information via the form found under “入試情報” (Exam Information details) -> “募集要項” (Application Guidelines) on the “School of Integrated Production Science” website. (Submission of physical documents is not required) URL: https://www.ist.nagasaki-u.ac.jp/graduate/boshuyoukou Website Entry Availability Period: Spring Application: From Monday, 15 April, 2024, to Friday, 26 April, 2024, until 17:00 (JST). Summer Application: From Monday, 27 May, 2024, to Friday, 7 June, 2024, until 17:00 (JST).
Entrance Examination Fee ¥30,000 (JPY)	<p>Payment Period Spring Application: From Monday, 15 April, 2024, to Friday, 26 April, 2024, until 17:00 (JST). Summer Application: From Monday, 27 May, 2024, to Friday, 7 June, 2024, until 17:00 (JST).</p> <p>Payment Method Access the E-payment site as below: 1. Japanese: https://e-shiharai.net/ 2. English: https://e-shiharai.net/ecard/</p> <p>Note: Nagasaki University Graduate School is not listed on the “e-shiharai.net/english” page. On the Japanese page, click “大学院 (the graduate school)”, then “全ての学校を表示する (Show all schools)”, and then “長崎大学大学院(国立大学法人) (Graduate School, Nagasaki University (National University Corporation))”. On the English page, click “Examination Fee”. Please follow the instructions on the screen. The Entrance Examination Fee can be paid by either one of the following methods: (1) Convenience store payment, (2) Pay-easy ATM (payment at financial institutions), (3) Pay-easy net banking or other internet banking, (4) Credit card</p> <p>*For the E-payment service English version, ONLY Credit card settlement is available. The payer shall bear any fees required for payment. The transfer fee differs for each payment method, so please confirm the fee amount on the application screen.</p> <p>Payment Certificate</p>

	<p>The following form must be attached to the slip titled “Payment Certificate for the Entrance Examination Fee” (hereinafter referred to as the “SLIP”) for each payment method selected.</p> <p>In the case of (1) payment at a convenience store: After payment, cut along the dotted line of the “収納証明書 (Certificate of Receipt)” part of the “取扱明細書 (取扱明細書兼受領書) (Transaction Statement (Transaction Statement and Receipt))” that you received at the convenience store and affix it to the SLIP and submit it.</p> <p>In the case of (2) Pay-easy ATM (payment at financial institutions): After payment, affix the “ご利用明細票 (Transaction Details Slip)” that you received to the SLIP and submit it.</p> <p>In the case of (3) Pay-easy net banking or other internet banking, and (4) credit card: After payment, access the E-payment site, enter the [受付番号 (Receipt Number)] and [生年月日 (Date of Birth)], and you will be notified when the process is completed. Click “照会結果 (Inquiry Result),” print it out, and then submit it along with the SLIP.</p> <p>*Should you have any questions about the procedures of the E-payment service, click and check the “利用ガイド (user guide)” and “よくある質問 (Frequently Asked Questions)” on the Japanese page or “FAQ” on the English page of the service and reach out to the “E-Service Support Center” via its website.</p> <p>*If none of the above methods is available, please contact the Fund Management Team, Accounting and Procurement Division, Administration Department (Phone: 095-819-2060 (Except Saturdays, Sundays, and national holidays) / E-mail Address: sikin@ml.nagasaki-u.ac.jp).</p> <p>Note: Cancellations are not possible after payment has been made through the E-payment service. When payment is made using a credit card, the payment is completed once the payment process is finalized.</p> <p>Important Notice for your application Your application will not be accepted if a payment certificate is not affixed or attached. In principle, the Entrance Examination Fee paid will not be refunded. * Overseas students on Japanese Government (Monbukagakusho: MEXT) scholarship are not required to pay the fee.</p>
Others	<p>If documents produced by foreign schools or institutions are in a language other than Japanese or English, a Japanese or English translation must be attached. There is no need to resubmit documents that have already been submitted at the preliminary eligibility screening.</p>

6. Notes on the Application

- (1) In principle, changes to the content of applications are not permitted once application procedures have been completed.
- (2) All the submitted documents for the application cannot be returned.
- (3) Inquiries about the entrance examination should be made by e-mail or postal mail. When sending inquiries by postal mail, please be sure to enclose a self-addressed, stamped envelope for reply. Please note that inquiries by telephone will not be accepted.
(E-mail: seisan_daigakuin@ml.nagasaki-u.ac.jp)

7. Screening Method

- (1) Examination Date (Designated by the Graduate School during the following period)
Examination for Spring Application: From Monday, 20 May, 2024, to Friday, 24 May, 2024
Examination for Summer Application: From Friday, 5 July, 2024, to Thursday, 11 July, 2024
- (2) Examination Venue
Faculty of Information and Data Science Building, School of Engineering Building, Faculty of Environmental Science Building, Faculty of Fisheries Building, Nagasaki University
1-14 Bunkyo, Nagasaki, Japan 852-8521
- (3) Allocation of points for the Academic Achievement Examination

Entrance Examination Category	Interview	Oral Examination	Total Score
General Examination, Examination For Those Currently Employed Examination for International Students	100	100	200

Interview and oral examination will be conducted individually by multiple interviewers.

*For the entrance examination of the Program for Water and Environmental Science, all examination sections will be conducted in English, and applicants are required to provide their responses in English as well.

(4) Acceptance Criteria

Successful applicants will be those who score more than 50% of the total score.

If your performance in the interview is significantly poor, you may be rejected regardless of your performance in the oral examination.

The oral examination and interview will be evaluated in the following manner.

Method of Evaluation

The application documents will be referenced during the examination to conduct a comprehensive evaluation of the applicant's motivation for applying, foundational knowledge and academic abilities at the master's completion level, and research plans, among other aspects.

(5) Entrance Examinations over the Internet

If you wish to have an interview and oral examination conducted via the internet, it is necessary to consult with the prospective supervisor in advance and ensure that thorough preparations are made.

8. Notes on Examination

- (1) Applicants must bring the Admission Ticket issued by this graduate school on the day of the examination.
- (2) Applicants must be at the designated rendezvous point 20 minutes before the examination starts.
(Latecomers will not be permitted to take the exam after it has started.)
- (3) Turn off your mobile phones and other electronic devices before entering the examination room.
- (4) Make arrangements to arrive at the university well in advance of the examination. Ensure you take into account the possibility of unforeseen events, such as severe weather, that may affect your arrival and/or participation in the examination. The examination date may be postponed in case of an unforeseen event, such as a natural disaster, on the examination day.
- (5) As a rule, there will be no make-up examination. However, if there are uncontrollable circumstances and it is deemed appropriate, a make-up exam may be conducted.
Furthermore, in the event of unforeseen circumstances, a postponed examination may be conducted as well.

9. Announcement of Successful Applicants

Spring Application: At 10:00 (JST) on Tuesday, 18 June, 2024

Summer Application: At 10:00 (JST) on Tuesday, 6 August, 2024

* The results for the successful applicant(s) will be announced on the board at the main entrance of the Faculty of Environmental Sciences: and sent by postal mail for domestic applicants and by email for overseas applicants.

* A list of successful applicants will be available on the following Nagasaki University Graduate School of Integrated Science and Technology website from 10:00 on the same day.

(URL : <https://www.ist.nagasaki-u.ac.jp/graduate/goukaku>)

* Inquiries regarding the examination results will not be accepted over the phone.

10. Enrollment Procedures

Successful applicants must follow the enrollment procedures outlined below. Details will be enclosed with the Notification of Success in the Examination.

- (1) Procedures Period
From Wednesday, 28 August, 2024 to Monday, 2 September, 2024
Reception hours: 9:00 to 17:00 (JST) (Except Saturdays, Sundays, and national holidays)
- (2) Fees
Enrollment Fee JPY 282,000
(Note) Enrollment fees shall not be refunded once paid.

Additional Information

- ① Tuition Fee for 2024 (Annually): JPY 535,800 (Previous Year's Data for Reference)
(First semester JPY 267,900; Second semester JPY 267,900)
- ② Payment periods for the tuition fee will be as follows.
The first semester : April
The second semester : October

If an amendment of the tuition fee has been conducted, the new tuition fee will apply from the date of revision.

The exemption or deferment of the enrollment fee and tuition fee is possible.

(Details will be enclosed with the enrollment procedural documents)

Admission and tuition fees are not required for international students supported by Japanese government (Monbukagakusho: MEXT) scholarships.

11. Handling of Personal Information

- (1) Personal information obtained from the application documents will be used to select incoming students. Additionally, the personal data of successful applicants will be used for the enrollment guidance procedures, and the personal information of enrolled students will be used for the student registration processes.
- (2) Results of the entrance examination and other personal information will be used in the screening process, for example, for exemption from admission and/or tuition fees, if applicable, and for various scholarships. They may also be used for various other academic matters.
- (3) Personal information obtained from the application documents and the entrance examination will be used for statistical surveys and studies related to the selection of incoming students.
- (4) Personal information obtained from the application documents and the entrance examination will not be used for purposes other than those mentioned above nor provided to third parties, except as provided for by the "Personal Information Protection Law."

12. For Applicants Requiring Disability-related Accommodations

Applicants with disabilities who require (assistance/special care) to complete their examination or attend classes may consult with the Student Administration Division of the Graduate School of Integrated Science and Technology. Please submit an application form (any format) with the following information and a medical certificate by Friday, 29 March, 2024 for the Spring Examination and by Tuesday, 14 May, 2024 for the Summer Examination.

Please note that the results of the pre-consultation will not be used against you in the selection process.

Applicants will never be negatively affected in the screening process by the results of an advance consultation.

If necessary, an interview may be held with the applicant or the spokesperson from the university where the applicant received their last degree.

Failure to apply in advance might result in no assistance/special care being available.

- Description of the application form
 - (1) Category of the Entrance Examination and the name of the program (field/track) to which you are applying
 - (2) Type and condition of disabilities
 - (3) Description of assistance request at the entrance examination
 - (4) Description of the assistance request after enrollment
 - (5) Assistance service received at the former academic institute
 - (6) Condition of daily life
 - (7) Postal code, Address, Name, and the Contact Phone Number (FAX Number) of the applicant

Note: Nagasaki University Student Accessibility Office will support students and applicants with disabilities.

13. Security Export Control

Nagasaki University performs security export control based on the "Foreign Exchange and Foreign Trade Act" so that foreign students' education and research contents do not obstruct the maintenance of international peace and security.

Please note that the applicants may be required to change their desired education and research content. In addition, please inquire about the details of the department.

14. Other Information

The long-term enrollment system is designed for students who experience challenges in completing their educational programs within the standard term due to occupational or other reasons. In this system, students are permitted to extend their study period beyond the standard term, with maximum enrollment duration of up to six years.

If a student is admitted to this program, the total tuition fee for the standard study period (typically three years) will be evenly distributed across each semester during the approved extended enrollment period.

The following criteria determine eligibility for the long-term enrollment program:

- (1) Those currently employed who experience challenges in completing their studies within the standard term.
- (2) Individuals engaged in housework, childcare, or nursing care.
- (3) Individuals with disabilities.
- (4) Those who have other valid reasons impeding their ability to complete their studies within the standard term.

Should you wish to use the long-term enrollment system, you must consult your academic advisor beforehand.

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Environment and Marine Resource Science	
Faculty	Research Subjects / Research Themes
<u>Yasutake Atsuko</u>	Design and management method for maintaining and developing dwelling environment
<u>Yamaguchi Kohei</u>	Development of high-quality maintenance technology for infrastructure structures and diagnostic technology for social implementation
Asakura Hiroshi	Development of recycling technology, analysis of microplastics, development of technology for acceleration of stabilization of landfill sites
Iguchi Keiichiro	Conservation of freshwater biodiversity
Umakoshi Kodo	Seismic activity in Unzen Volcano Utilization of geothermal resources
Endo Aiko	Water-energy-food nexus, coastal and ocean policy, interdisciplinary studies
Okada Jiro	Behavioral and sensory mechanisms in invertebrates / Effects of anthropogenic environmental chemicals on invertebrate behavior
Katayama Kensuke	National, regional and urban planning under the depopulation, Regional cooperation, Analysis of transformation of European spatial planning
Kawamoto Kazuaki	Aerosol-cloud-precipitation interactions, cloud analysis using satellite data
Goto Seiko	Landscape Design, History of Japanese Gardens outside of Japan, Healing Effects of Viewing Japanese Gardens
Takao Yuji	Analytical chemistry of harmful organic compounds with trace level in the environment
Nagae Masaki	Effects of human medicines on fish behavior and reproductive functions / Toxicological evaluation of transboundary air pollution in East Asia
<u>Nakagawa Kei</u>	Fate of environmentally hazardous substances in the subsurface environment / Remediation of contaminated soil and groundwater Hydrogeochemistry
Nakayama Hideki	Elucidation and application of biological functions that contribute to the upcycling of environmental pollutants
Nishiyama Masaya	Microorganisms and minerals in soil and rhizosphere
Muto Tetsuji	Morphodynamics and genetic stratigraphy of alluvial-shelf sedimentary systems
Yamaguchi Noriyuki	Movement ecology of migratory birds
Watanabe Takashi	Identification of characteristics of open spaces and landscape / Evaluation of ecological functions of open spaces and landscape / Identification of present situation of local municipality managements and civic activities about conservation and restoration of open spaces and landscape
Ota Masahiko	Forest policy and economics, natural resource management, rural livelihoods, community development, and Education for Sustainable Development (ESD) both in developing and developed countries

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Environment and Marine Resource Science	
Faculty	Research Subjects / Research Themes
Kagabu Makoto	Scientific assessment of the interaction between the hydrological cycle and human activities by adopting groundwater age dating and isotope hydrology methods
Koyama Mitsuhiko	Research on improving the efficiency and clarifying the mechanism of microbial processes that convert waste biomass into valuable resources
<u>Shirakawa Seiji</u>	Design of Organocatalysts and Its Application to Environmentally Benign Organic Synthesis
Seki Yoko	environmental philosophy, environmental ethics, ethics for co-existence
Suk Sunhee	Researches on the micro and macro impact of market-based environmental policies on the economy and environment
Takasu Hiroyuki	Evaluation of impact of terrestrial matter inflow on coastal environment
Takeshita Takayuki	Energy system modeling and analysis, Assessment of clean energy technologies
Nakayama Tomoki	Laboratory and observational studies of behavior and properties of gases and aerosol particles in the atmosphere
Hattori Mitsuru	Effects of species interactions on adaptation of organisms
Fukami Satoshi	Sustainable tourism, Biocultural diversity Island tourism, Ecotourism Geopark, UNESCO world heritage, Geographical and environmental education
Yamaguchi Masahiro	Effects of air pollution and global change on plants
Kubo Takashi	Evaluation of environmental risks caused by toxic chemicals
Amano Masao	Ecology and phylogeny of marine mammals
Arakawa Osamu	Distribution, dynamics, and physiologic functions of marine toxins that cause food poisoning
Inoue Tetsushi	Symbiotic associations between microbes and marine organisms
Osatomi Kiyoshi	Pathologic biochemistry of anti-oxidant enzymes in fishes Structures and functions of endogenous proteases in fishes and shellfishes
Kameda Kazuhiko	Study on the modern change of the supply-demand balance of marine products. Socioeconomic study on management of marine resources
Kiyota Masashi	Studies on the health and sustainability of local fisheries and marine ecosystems based on fish stock assessment, ecosystem modeling and ecological indicators
Kuwano Kazuyoshi	Study of sea desertification, Cryopreservation of seaweeds, Control of life cycle of seaweeds
Sakakura Yoshitaka	Larviculture and early life history of marine fishes

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Environment and Marine Resource Science	
Faculty	Research Subjects / Research Themes
Satuito Cyril Glenn Perez	Elucidating the settlement mechanism of sessile organisms. Developing new antifouling techniques
Shimizu Kenichi	Research on appropriate operation of nautical instruments, Research for on board working environment or sanitary environment
Suga Koushirou	Research on infectious diseases of aquaculture species
Suzuki Toshikazu	Plankton ecology, Marine microbial food webs
Takatani Tomohiro	Influence of environmental factors on the toxin production of microalgae Identification and characterization of marine toxins
Taniyama Shigeto	Research on the food and nutrition sciences of marine products /
Matsushita Yoshiki	Research on fishing technologies for sustainable use of fisheries resources
Yamaguchi Kenichi	Studies on protein synthesis systems and functional macromolecules in aquatic/marine organisms
Wada Minoru	Ecological studies on aquatic microbes
Kawabata Yuuki	Anti-predator behaviors of animals; Predator-prey behavioral interactions in marine organisms
Kim Hee-Jin	Physiological ecology of zooplankton • Anthropogenic pollutants in the marine environment
Kondo Yoshiko	Biogeochemical cycles of trace metals in the ocean
Takikawa Tetsutaro	Physical oceanography, Fluid dynamics of the ocean and atmosphere, Physical processes in the marine ecosystem
Takeuchi Seiji	Population and community dynamics in coastal marine benthos
Takegaki Takeshi	Evolutionary and behavioral ecology of fishes and cephalopods
Yagi Mitsuharu	Studies on ship navigation and seamanship, Microplastic studies
Yoshida Asami	Studies on the structures and functions of endogenous proteases in fish and shellfish, and their applications in food science
Wang Yao	Food science and histological research on aquatic products
Ohba Shinya	Behavioral ecology in insects / Conservation ecology in rare aquatic insects / Studies on the biodiversity in islands

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Chemistry and Materials Science	
Faculty	Research Subjects / Research Themes
Umakoshi Keisuke	Development and application of photofunctional metal complexes
Kimura Masanari	Development of Efficient Organic Synthesis for Functionalized Materials
Sagara Takamasa	Electrochemically regulated dynamics of organized soft matter/Construction of electrochemical element cycling system
Sakuda Eri	Synthesis and application of photofunctional compounds
Tanabe Shuji	Study on the preparation procedure of nano catalysts using sonochemical process
Nakatani Hisayuki	Study of Polymer Degradation Mechanism and Development of Biodegradable Polymer
Hyodo Takeo	Design of functional ceramics and their applications
Murakami Hiroto	Design of functional polyurethane elastomers and easily peelable pressure sensitive adhesives and their application
Moriguchi Isamu	Development of Energy Storage Device Materials via Nanostructural Control
Morimura Takao	Development and Structural Analysis of Thermoelectric Materials
Arikawa Yasuhiro	Activation of Small Molecules by Transition Metal Complexes
Urita Koki	Study on unique phenomena in nanopores
Unno Hideaki	Structural and functional analysis of proteins
Ohgai Takeshi	Fabrication of Functional Metallic Materials Using Electrodeposition Technique
Onodera Gen	Catalytic reaction for organic synthesis by use of transition-metal-complex
Kamada Kai	Bioapplication of low-dimensional ceramics
Sawai Hitomi	Structure-function analysis of membrane proteins involved in the physiological regulation of nutritional metals
Dao Thi Ngoc Anh	Research development of biopolymers in nanotechnology applications
Bun Chan	Data-based chemistry by quantum mechanics on supercomputer
Fukuda Tsutomu	Development of synthetic methodology for biologically active compounds
Yamada Hiroto	Electrochemical phenomena at interfaces between solids
Ueda Taro	Advancement of gas-detection function by controlling the reaction interfaces
Tahara Hironobu	Development of functional ionic liquids

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Chemistry and Materials Science	
Faculty	Research Subjects / Research Themes
Motokucho Suguru	Study of resource recycling of waste plastics
Shirakawa Seiji	Design of Organocatalysts and Its Application to Environmentally Benign Organic Synthesis
Hayashi Mikihiro	Synthesis and Property Investigation of Hydrogen Bonding Molecular Crystals

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Engineering and Information Data Science	
Faculty	Research Subjects / Research Themes
Ueki Masao	Development of methods and algorithms in statistics and biostatistics, especially for medical statistics and data analysis.
Ozaki Tomochika	Research on spatial computing, which fuses virtual information with real space
Kanaya Ichiroh	Study on relationship among human beings and artifacts by surveying world heritages and creating interactive arts.
Kiyasu Senya	Pattern information processing such as 3D measurement, medical image processing, and pattern recognition in remote sensing
Kobayashi Toru	Software system development technology that combines IoT and AI, advanced web application development technology. Metaverse related technology
Shibata Yuichiro	Research on next-generation computer architectures such as reconfigurable computing and quantum error correction
Takada Hideaki	Research on human-friendly communication media using high-reality 3D image and audio technology
Jun Byungdug	Measurement research using mobile objects such as drones applying GIS and remote sensing technology
Miyamoto Michiko	Empirical research in the fields of IT governance, marketing science, sports data science, management and social science
Mochida Keiichi	Data science research applied to enhance bio-productivity
Arai Kenichi	Research on evaluation of cryptographic protocol security
Ichifuji Yu	Research on Estimating Human Flow and Modeling Behavior, including the analysis of tourist behavior, examination of methods for controlling human flow, and support for tourism policies.
Ito Sohei	Software verification by formal methods, process mining, theoretical computer science
Umezu Yuta	Development of statistics and machine learning methodologies and its application
Kamiyama Takeshi	Research on Urban sensing and Smart mobility using mobile devices
Sakai Tomoya	Mathematical modeling and optimization for pattern recognition and machine learning. Applications encompass medical image processing, biomedical signal processing, and logistics data analysis.
Setozaki Norio	Development and Assessment of Effective Learning Environments Utilizing Virtual Reality (VR) Technology
Takahashi Masayoshi	Development and applications of the methods and algorithms in causal inference and missing-data analysis
Harasawa Ryuichi	Computational number theory, Cryptography

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Engineering and Information Data Science	
Faculty	Research Subjects / Research Themes
Fujimura Makoto	Image Processing. Development of virtual reality applications for rehabilitation.
Matsumoto Hiroataka	Research in bioinformatics. Specifically, the analysis of gene expression in diseases and the development of theories and algorithms for such analysis.
Miyajima Hirofumi	Research on machine learning algorithms. For example, research on machine learning algorithms combined with data security methods.
Kabata Yutaro	Singularity theory
MUTHU SUBASH KAVITHA	Development of Artificial intelligence techniques for medical and industrial applications.
<u>Abe Takashi</u>	Electric Machinery and motor drive systems
Ishizuka Yoichi	Power electronic and analog integrated circuits
Enami Yasufumi	Ultra-high-speed optical communication devices and quantum sensor for obserbation inside single cell
Oshima Tamiko	Study on fabrication of functional thin films using plasma process
Omine Kiyoshi	Advanced geotechnical engineering and geo-environmental engineering
Okumatsu Toshihiro	Development of measurement technology for structural health monitoring
Genjo Kahori	Study on environmental performance and biophilic design of building
Kondou Chieko	Study on Environmentally Benign Heat Pumps and High-Performance CPU Coolers
Saimoto Akihide	Prediction and Engineering Application of Fracture in Solids
<u>Sakaguchi Daisaku</u>	Multi-objective optimization of turbomachinery
<u>Jiang Yujing</u>	Ground disaster prevention and maintenance management for underground structures
<u>Tanaka Toshiyuki</u>	Research on non-invasive (non-destructive) diagnostic methods using electromagnetic waves
Nakano Masaki	Preparation of magnetic materials applied for electronic devices
<u>Nakahara Hiroyuki</u>	Aseismic design for building structure
<u>Nakamura Shozo</u>	Improvement of design and maintenance method for steel structures
Nishikawa Takafumi	Advanced sensing and monitoring techniques for bridges and civil structures
Momoki Satoru	Flow regime and heat transfer of gas-liquid two-phase flow evaporating
Yazawa Takanori	Machining and Measurement of Functional Material

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Symbiotic Science and Technology Field of Engineering and Information Data Science	
Faculty	Research Subjects / Research Themes
<u>Yasutake Atsuko</u>	Design and management method for maintaining and developing dwelling environment
Yamaguchi Tomohiko	Measurement and prediction of thermophysical properties of fluids
Ishibashi Tomoya	Practical research on landscape design and regional planning
<u>Okumura Tetsuya</u>	Fluid behavior in the vicinity of solid surfaces
Koyama Atsuhiko	Evaluation of fatigue strength of the various engineering materials, Development of scanning laser induced acoustic microscope
Sasaki Kenji	Advancement of evaluation method for material and construction performance toward improving quality and productivity of concrete structures
Sugimoto Satoshi	Development of monitoring system and mechanical evaluation for slopes and soil structures
<u>Suzuki Seiji</u>	Study on the substance transportation in aquatic environment considering behavior of lives
<u>Seto Shinta</u>	Satellite remote sensing of precipitation and its application for disaster prevention
Tanaka Yoshiyuki	Human-machine systems based on biological motor control mechanism
<u>Nagai Hiroto</u>	Multidisciplinary design analysis for aerospace vehicles and large structures
Hamasaki Shinichi	Application and control of power converter system for grid connection
<u>Fujishima Tomoyuki</u>	Simple lightning protection method, ground resistance measurement, ozone generation and its application
<u>Fujimoto Takafumi</u>	Research on high functional antennas
Furusato Tomohiro	Study on discharge plasma applications using pulsed power technology
Matsuoka Satoshi	Development of organic and optical electronics devices
Matsuda Yoshinobu	Production and diagnosis of industrial plasma
Maruta Hidenori	Power conversion technology based on digital signal processing
<u>Moriyama Toshifumi</u>	Direct/inverse scattering problems and microwave remote sensing
Yanai Takeshi	Development and application of magnetic films
<u>Yamaguchi Kohei</u>	Development of high-quality maintenance technology for infrastructure structures and diagnostic technology for social implementation
<u>Yokoi Yuichi</u>	Design of electrical machines and applied nonlinear dynamics

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

	Program for Symbiotic Science and Technology Field of Engineering and Information Data Science
Faculty	Research Subjects / Research Themes
<u>Yoshikawa Sayaka</u>	Hydrological and environmental assessments of land use and climate change
Otsubo Tatsuki	Research on Precision Manufacturing Technology
<u>Sasaki Soichi</u>	Study on energy conversion of fluid machinery based on machine learning
Morinaga Akihiro	Research on Ocean Robotics
Muto Cosy	Development of high performance signal processing and RF analog circuits, theory and application of complex signal processing
Fukuyama Takao	Physics research on nonlinear phenomena in laboratory plasmas

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Frontiers of Marine Science	
Faculty	Research Subjects / Research Themes
<u>Abe Takashi</u>	Electric Machinery and motor drive systems
<u>Sakaguchi Daisaku</u>	Multi-objective optimization of turbomachinery
<u>Tanaka Toshiyuki</u>	Research on non-invasive (non-destructive) diagnostic methods using electromagnetic waves
<u>Nakatani Hisayuki</u>	Study of Polymer Degradation Mechanism and Development of Biodegradable Polymer
<u>Nakahara Hiroyuki</u>	Development of floating structure coupling system
<u>Nakamura Shozo</u>	Improvement of design and maintenance method for steel structures
Yamamoto Ikuo	Research on advanced robot systems
<u>Unno Hideaki</u>	Structural and functional analysis of proteins
<u>Okumura Tetsuya</u>	Fluid behavior in the vicinity of solid surfaces
<u>Nagai Hiroto</u>	Multidisciplinary design analysis for offshore structures
<u>Fukuda Tsutomu</u>	Development of synthetic methodology for biologically active compounds
<u>Fujishima Tomoyuki</u>	Simple lightning protection system for electrical and electronic equipment installed offshore
<u>Fujimoto Takafumi</u>	Research on high functional antennas
<u>Moriyama Toshifumi</u>	Direct/inverse scattering problems and microwave remote sensing
<u>Yokoi Yuichi</u>	Design of electrical machines, applied nonlinear dynamics, and wave energy conversion
<u>Sasaki Soichi</u>	Study on energy conversion of fluid machinery based on machine learning
<u>Motokucho Suguru</u>	Study of resource recycling of waste plastics
Kawabe Ryo	Development of methodology for monitoring behavioral and environmental information with animal-borne data recorders / Analysis of behavioral response of marine fish to marine environmental changes
Soyano Kiyoshi	Physiological and endocrinological studies on fish reproduction Effect of environmental factors on fish reproduction Technology development of artificial seed production and aquaculture
Nishihara Gregory Naoki	Research regarding the restoration and conservation ecology of marine forests and blue carbon
Hirasaka Katsuya	Research on the functional nutrition derived from marine products

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

	Program for Frontiers of Marine Science
Faculty	Research Subjects / Research Themes
Nakamura Itsumi	Behavioural ecology and physiology of fishes
Murata Ryosuke	Environmental effects on the reproduction of marine organisms

Primary Faculty Supervisor List and Research Focus

Faculty with underscored names are also listed in other programs/fields. Review these before making your selection.

Program for Water and Environmental Science	
Faculty	Research Subjects / Research Themes
Itayama Tomoaki	Application of ecological engineering technology and aqua-informatics to developing countries
<u>Jiang Yujing</u>	The hydraulic transport mechanism of underground fractured rocks
<u>Tanabe Shuji</u>	Development and application of new materials for water treatment in developing countries
Fujioka Takahiro	Water treatment technologies using membrane separation
<u>Murakami Hiroto</u>	Development of functional polymer materials for water treatment
<u>Kamada Kai</u>	Low dimensional ceramics for water treatment
<u>Suzuki Seiji</u>	Study on the substance transportation in aquatic environment considering behavior of lives
<u>Seto Shinta</u>	Water resources assessment based on hydrological simulation
<u>Dao Thi Ngoc Anh</u>	Research development of biopolymers for water treatment in nanotechnology applications
<u>Yoshikawa Sayaka</u>	Hydrological and environmental assessments of land use and climate change
<u>Nakagawa Kei</u>	Groundwater flow and contaminant transport / Remediation of soil and groundwater pollution