

Graduate School of Engineering,  
Nagasaki University  
Master's Degree  
Application Guidelines

2022, April Entrance (November Application)

Water and Environmental Science Program

**Entrance Examinations for  
International Students**

Published on August 2021

# Index

Admission Policy .....	1
Entrance Examinations for International Students	
2022, April Entrance (November Application) .....	3
Diploma Policy.....	10
Curriculum Policy.....	11
Research Focus of the Water and Environmental Science Program.....	12

# Admission Policy of the Department of Advanced Engineering Graduate School of Engineering, Nagasaki University

## **1. Educational Philosophy and Aim of the Graduate School of Engineering**

(Educational Philosophy)

As an educational and research base for advanced engineering which coexists with nature and commits to the sustainable development of human society, the Graduate School of Engineering will foster highly professional engineers and researchers who possess professional and interdisciplinary knowledge along with as high expertise across a wide range of engineering topics, and who will be able to play an active role in the international field. We will also contribute to promoting innovative science and technology of next generation through conducting pioneering and innovative research.

(Aim)

To develop in students professional and interdisciplinary knowledge along with high expertise across a wide range of engineering topics, and to cultivate their skills to explore and solve problems as well as their capabilities to conduct internationally pioneering research and development.

## **2. Educational Philosophy and Aim of the Department of Advanced Engineering of the Graduate School of Engineering**

The educational philosophy of the Department of Advanced Engineering, the Graduate School of Engineering is as follows: "As an education and research base for engineering that contributes to the development of technological society in coexistence with nature, we foster engineers who possess highly professional and practical skills and who will be able to play an active role globally, and we also promote innovative research to create a diversified intellectual asset." We accept graduates mainly from the School of Engineering and nurture their skills as highly professional engineers and researchers who can meet the demands of industrial society. Therefore, our educational aim is to foster highly professional engineers and researchers who can meet the demands with a high degree of internationality.

## **3. Admission Policy of the Department of Advanced Engineering of the Graduate School of Engineering**

The Department of Advanced Engineering expects its students to possess the following academic skills, competencies and attributes:

- High-level and fundamental academic skills in either discipline of engineering: Mechanical Engineering, Electrical and Electronic Engineering, Computer and Information Science, Structural Engineering, Civil and Environmental Engineering, Chemistry and Materials Engineering, Water and Environmental Science or Frontiers of Marine Science.
- Willingness to contribute to the development of technological society that coexists with nature.

- Willingness to acquire advanced professional knowledge and skills as well as to conduct innovative research which will invent a wide range of intellectual asset.
- Sense of ethics and high security awareness required to be a highly professional engineer and/or researcher.
- Strong willingness to help respond to the demand of industry and society.
- Knowledge and skills to explore and solve problems across a wide range of engineering topics.
- Communication skills in a global context.

#### Appendix about the Screening Method

Evaluation methods for the required aptitude and its priority (most prioritized : ◎, prioritized : ○)

Expected Competencies		High-level fundamental academic skills in engineering	Willingness to contribute to the development of technological society that coexists with nature	Willingness to acquire advanced professional knowledge and skills as well as to conduct innovative research which will invent a wide range of intellectual asset	Sense of ethics and high security awareness required to be a high professional engineer and/or researcher	Strong willingness to help respond to the demand of industry and society	Knowledge and skills to explore and solve problems in a wide range of engineering topics	Communication skills in a global context
Examination Type	General Examination (Excluding Water and Environmental Science Program)							
	Writing	◎					○	○
	Submitted Documents	○					○	○
	Interview		○	○	○	○		○
General Examination/ Examination for International Students (Water and Environmental Science Program)	Oral Examination	◎					○	○
	Written examination (essay)	○					○	○
	Interview		○	○	○	○		◎
Admission Examination on Recommendation (Excluding Water and Environmental Science Program)	Official Transcript	○					○	
	Oral Examination	○					○	
	Interview		○	○	○	○		○
Examination for International Students (Excluding Water and Environmental Science Program)	Oral Examination	○					○	○
	Interview		○	○	○	○		◎

## 1. Number of Students to be Admitted

Field	Course	Number of Students to be Admitted
Department of Advanced Engineering	Water and Environmental Science Program	5

(Note) The number includes students admitted through General Entrance Examination.

## 2. Eligibility for Application

Non-Japanese citizens (excluding foreigners with Japanese permanent permit) who falls into any of the following requirements.

- ① Those who have completed (or will complete by March, 2022) 16 years of standard school education in countries other than Japan.
  - ② Those who have completed (or will complete by March, 2022) 16 years of standard school education, in Japan, through the completion of required correspondence courses, conducted by authorized school outside of Japan.
  - ③ Those who have completed (or will complete by March, 2022) 16 years of standard school education after completing postgraduate courses at the foreign education institutes in Japan, recognized by the Ministry of Education, Culture, Sports, Science and Technology.
  - ④ Those who have a degree equivalent to Bachelor degree or are expected to be conferred by March 2022 by completing a course (\*1) of more than 3 years at overseas universities or educational institutions (\*2).
- \*1: completing corresponding course in Japan by the said overseas educational institutions or completing course at educational institutions authorized as educational institutions by the said countries and designated in the preceding item
- \*2: overseas universities or educational institutions which are evaluated by those whom are approved by the said country's government or government's related institutions or which are designated by the Minister of Education, Culture, Sports, Science and Technology of Japanese Government
- ⑤ Those who have an academic degree equivalent to or higher than Bachelor's Degree approved by this graduate school through individual preliminary screening, and will be at least 22 years of age by March 31, 2022. (Refer to "3. Eligibility Preliminary Screening")

### 3. Eligibility Preliminary Screening

(1) Candidates applying under the “Eligibility for Application ⑤” must submit the following documents to the Student Affairs Division of the Graduate School of Engineering by August 31, 2021 (Tue).

Submission Documents	Note
Certificate of Graduation / Expected Graduation	Issued under the authority of the president of the university where applicant graduated from.
Official Transcript	Issued and officially sealed under the authority of the president of the university where applicant graduated from.
Application for Preliminary Screening	Prescribed Application Form by this graduate school
Application Form	Prescribed Application Form by this graduate school
Certificate of Research Career	Prescribed certification form by this graduate school and verified by the head of the institution.
Outline of Research Content	Prescribed form by this graduate school

(\*) Prescribed Application Form is available for downloading from the home page “The Graduate School of Engineering, Nagasaki University”. (URL : <http://www.eng.nagasaki-u.ac.jp/english/contents/05.html>)

(2) The results of Eligibility Preliminary Screening will be sent to candidates by September 9, 2021 (Thu). Those who are deemed eligible for application must follow the procedures set out in “4. Period of Application” and “5. Application Procedure”.

### 4. Period of Application

From September 27, 2021 (Mon) to October 1, 2021 (Fri).

In principle, all of the following application documents must be scanned and converted to a PDF file and sent to the address stated below via email by the deadline.

The original must be posted by registered express mail.

Postal Address: Student Affairs Section for the Graduate School of Engineering  
West District Division, Nagasaki University  
1-14 Bunkyo, Nagasaki 852-8521, Japan

Email Address: [seisan\\_daigakuin@ml.nagasaki-u.ac.jp](mailto:seisan_daigakuin@ml.nagasaki-u.ac.jp)

## 5. Application Procedure

Applicants must submit the following documents by the deadline.

Submission Documents	Note																
Application Form (designated by the Graduate School of Engineering)	Except for those already submitted for the eligibility preliminary screening.																
Photo Card / Admission Ticket / Payment Certificate for the Entrance Examination Fee (designated by the Graduate School of Engineering)																	
Certified (original) copy of Graduation Certificate / Expected Graduation Certificate (written in Japanese or English)	<p>Issued under the authority of the president of the university where applicant graduated from or is expected to graduate from.</p> <p>Except for those already submitted for the eligibility preliminary screening.</p> <p>A person who falls under the requirement ④ and whose certificate does not indicate that the he/she has been awarded with an academic degree equivalent to Bachelor's Degree needs to submit a degree conferral certificate separately.</p>																
Official Transcript (written in Japanese or English)	<p>Issued under the authority of the president of the university where applicant graduated from or is expected to graduate from.</p> <p>Except for those already submitted for the eligibility preliminary screening.</p> <p>In addition, the standard list for credits issued by the university must be submitted.</p>																
Entrance Examination Fee ¥30,000	<p><b>( Payment Period )</b> From September 27, 2021 (Mon) to October 1, 2021 (Fri)</p> <p><b>(Payment Places)</b> At the counter in any bank</p> <p><b>(Payment Method)</b> Payment from outside of Japan shall be made by Telegraphic Transfer. Applicants must transfer the fee into the designated bank account below and submit a receipt or statement attached with the other application documents. <u>Additional transfer fees shall be borne by the applicants.</u> <u>(Please ensure that the payment amount should not be insufficient due to additional fees or currency exchange rate.)</u> The box "Purpose of Remittance" should be filled in as "Screening Fee". Also the box "Message to payee" should be filled in with the applicant's name, nationality and name of the applying graduate school.</p> <table border="1" data-bbox="504 1444 1337 1794"> <tbody> <tr> <td>Entrance Examination Fee</td> <td>¥30,000</td> </tr> <tr> <td>Name of the Bank</td> <td>THE JUHACHI-SHINWA BANK, LTD</td> </tr> <tr> <td>Name of the Branch</td> <td>OHASHI BRANCH</td> </tr> <tr> <td>Address of the Bank</td> <td>8-28, Ohashi-machi, Nagasaki-shi, Nagasaki, JAPAN</td> </tr> <tr> <td>Deposit</td> <td>Ordinary</td> </tr> <tr> <td>Account Number</td> <td>191-01-226702 (branch code-deposit code-account number)</td> </tr> <tr> <td>Account Holder</td> <td>NAGASAKI UNIVERSITY</td> </tr> <tr> <td>SWIFT CODE</td> <td>SHWAJPJT</td> </tr> </tbody> </table> <p><b>(Important Notice for your application)</b> Application will not be accepted if the payment for the Entrance Examination has not been made. The Entrance Examination Fee is not refundable for any reason. The Entrance Examination Fee is not refundable except for the following circumstances. The applicant has made the payment but did not apply (Either did not submit the application or the application was refused), or accidentally made the payment twice. Request for the refund must be made within 14 days from the last day of the application period. * Overseas students on Japanese government (Monbukagakusho: MEXT) scholarship are not required to pay the fee.</p>	Entrance Examination Fee	¥30,000	Name of the Bank	THE JUHACHI-SHINWA BANK, LTD	Name of the Branch	OHASHI BRANCH	Address of the Bank	8-28, Ohashi-machi, Nagasaki-shi, Nagasaki, JAPAN	Deposit	Ordinary	Account Number	191-01-226702 (branch code-deposit code-account number)	Account Holder	NAGASAKI UNIVERSITY	SWIFT CODE	SHWAJPJT
Entrance Examination Fee	¥30,000																
Name of the Bank	THE JUHACHI-SHINWA BANK, LTD																
Name of the Branch	OHASHI BRANCH																
Address of the Bank	8-28, Ohashi-machi, Nagasaki-shi, Nagasaki, JAPAN																
Deposit	Ordinary																
Account Number	191-01-226702 (branch code-deposit code-account number)																
Account Holder	NAGASAKI UNIVERSITY																
SWIFT CODE	SHWAJPJT																

The score sheet of “TOEIC® Listening & Reading Test”, “TOEFL iBT®” or “IELTS”	The official score certificate is only valid if obtained within the past 3 years from the examination date ( <u>Applicants without any of those official score certificates are not eligible for taking the entrance examination.</u> ) If any of the certificates listed on the left are not available in time, or if you are able to submit recently obtained certificates other than those submitted at time of application, please submit it to the Student Affairs Section by noon of the day before the examination.
---	---

(\*) Prescribed Application Form is available for downloading from the home page “The Graduate School of Engineering, Nagasaki University”. (URL : <http://www.eng.nagasaki-u.ac.jp/english/contents/05.html>)

## 6. Application Precautions

- (1) Changes to the content of applications are not permitted once application procedures have been completed.
- (2) Application documents shall not be returned for any reason.

## 7. Methods of Selection

Enrollees are selected through an interview, an oral examination, a short essay and English proficiency evaluation.

Questions are to be given and answered in English.

### (1) Examination Date and Time

(Designated by the Graduate School of Engineering during the following period)  
From October 25, 2021 (Mon) to November 2, 2021 (Tue)

### (2) Examination Venue

At the applicant’s university or other places designated by the Graduate School of Engineering

### (3) Criteria for Acceptance

Interviews, oral examinations, a short essays and English proficiency are evaluated using the following methods and successful applicants of each course are selected respectively in the order of their total scores. However, applicants must score a minimum of 60 points.

[Method of Evaluation]

Individual interviews are held by multiple examiners. ① to ③ below are added to give scores of up to a maximum 100 points.

- ① Applicants are asked questions in reference to their application documents and are evaluated on topics such as motives behind application, motivation to study, general knowledge, and social skills (allocation of 20 points).
- ② Applicants are evaluated on such things as academic ability, fundamental knowledge of water environment and English language ability by an essay and oral examination (allocation of 60 points).

Subject	Scope of the Examination
Short essay	Applicants will be requested to write a short essay in English. The topic of the essay is to be related to the topic that the student plans to study in regard to the water environment or water treatment. The maximum essay length is two A4 pages. We will evaluate the short essay in regard to logic, correct use of technical terms as well as general English competence, to assess the student’s academic ability, fundamental knowledge of the water environment and English writing ability.



Oral examination	Applicants are asked questions in reference to the short essay, in order to evaluate whether applicants have the necessary academic ability, fundamental knowledge of the water environment and English communication ability.
---------------------	--

- ③ English proficiency will be evaluated based on the official score of any one of “TOEIC® Listening & Reading Test”, “TOEFL iBT®” or “IELTS” (allocation of 20 points).
- (4) Use of Internet  
Internet may be used for interviews and oral examinations. Candidates for the online interviews and oral examinations must first contact his/her prospective academic advisor or the Student Affairs Division of the Graduate School of Engineering and send a resume and contents of their research at least a month before the first day of the application period.  
(More detailed notification will be given to each applicant respectively.)

## 8. Notes on the Examination

- (1) Applicants from distant areas need to plan the trip carefully in consideration of possibilities of the inconveniences caused by the weather conditions.
- (2) No supplementary examination will be available. However, re-examination may be conducted in case of unforeseen circumstances.
- (3) Applicants must bring the Admission Ticket issued by the Graduate School of Engineering on the day of the examination.
- (4) Applicants must be at the designated rendezvous point 20 minutes before examination starts. (Latecomers will not be permitted to take the examination.)
- (5) All cellular phones must be turned off before entering the examination room.

## 9. Announcement of Successful Applicants

November 26, 2021 (Fri) 10:00 (JST)

- ※ **Successful applicants will receive the notification of acceptance in PDF format via Email and an original posted later.**
- ※ A list of successful applicants will be made available on the following Nagasaki University Graduate School of Engineering website from 10:00 on the same day.  
(<http://www.eng.nagasaki-u.ac.jp/english/contents/05.html>)
- ※ Results are not declared over the telephone.

## 10. Enrollment Procedures

Successful applicants must follow the enrollment procedures outlined below.

- (1) Procedures Period  
From February 7, 2022 (Mon) to February 9, 2022 (Wed)  
※ The schedule of enrollment procedures may change if there is a time conflict with one's program schedule.
- (2) Payment of Fees  
Enrollment Fee . . . . . ¥282,000  
(Note) Enrollment fees shall not be refunded once paid.  
[Additional Information]  
① Tuition Fee for 2021 (Annually): ¥535,800  
(The first semester ¥267,900 / The second semester ¥267,900)  
② Payment periods for the tuition fee will be as follows.  
The first semester: April  
The second semester: October  
③ If the tuition fee has been changed, the new tuition fee will apply from the date of revision.

- ④ The Exemption or deferment of enrollment fee and tuition fee will be available.  
※Details will be enclosed with the procedural documents to successful applicants.
- ⑤ Admission and tuition fees are not required for international students supported by Japanese government (Monbukagakusho: MEXT) scholarships.

## 11. Reopened Recruitment

If successful candidates do not meet the number of accepting candidates, recruitment may be opened. Please contact the Student Affairs Division of Graduate School of Engineering, Bunkyo District Affairs for recruitment availability for additional candidates.

## 12. Handling of Personal Information

- (1) Obtained personal information is used for selecting enrollees. The personal information of successful applicants and enrollees are used for enrollment procedures, and the student registration.
- (2) The grades of the entrance examination and other personal information are used as the references for the recommendation of the 1st year scholarship students, as well as for the selection of the applicants for exemption of entrance fee and tuition fee.
- (3) Obtained personal information for the selection of enrollee and for the entrance examinations are also used in statistical surveys and research related to the selection of enrollees.
- (4) Obtained personal information for the selection of enrollee and for the entrance examinations are not used for the purposes other than the purposes mentioned above nor to provide to the third parties, except the case as provided in Article 9 of “Act on the Protection of Personal Information Held by Independent Administrative Agencies”.

## 13. For Applicants Requiring Disability-related Accommodations

Applicants with disabilities who require assistance or special care with their entrance examination as well as attending classes may consult with the Student Affairs Division of Graduate School of Engineering. The application (No specific form) should include the following information and be submitted along with a medical certificate by September 24, 2021. 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 his/her last degree. Failing to apply in advance may result in no assistance provided.

The necessary information described on the application form

- (1) Category of the Entrance Examination and the name of the course applied for
- (2) Type and condition of disability(ies)
- (3) Description of assistance request with the entrance examination
- (4) Description of the assistance request after enrollment
- (5) The assistance service(s) received at the former academic institute
- (6) Additional information
- (7) Applicant’s Name, Address, and Contact Phone Number (FAX Number)

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

## 14. Security Export Control

Nagasaki University performs the security export control based on "Foreign Exchange and Foreign Trade Act" so that education and study contents to foreign students do not obstruct maintenance of international peace and the security. Please thereby note it because the applicants may demand the change of education and study contents to hope for. In addition, please inquire for the details of each department.

## **15. Measures on the Novel Coronavirus Infection**

Before submitting your application, should you aware that the following measures may be taken depending on the situation of spread of the COVID-19. The examination date may be postponed or the selecting method may be changed ( Ex.Interviews may be conducted online) and additional examination may be conducted. Further more, the postponement of the examination date will be announced on the website of the Graduate School of Engineering, Nagasaki University.

(URL : [http://www.eng.nagasaki-u.ac.jp/english/contents/01\\_g\\_admission.html](http://www.eng.nagasaki-u.ac.jp/english/contents/01_g_admission.html))

## Diploma Policy

Master's Degree of Engineering will be conferred on a student who has been enrolled in the Graduate School of Engineering for more than two years, and who has earned the credits (more than 30 credits) prescribed in the educational program (refer to [1]). The student must also be recognized to have the following skills and attributes:

- Truly professional knowledge, diversified academic knowledge, professional practical skills, technical innovation skills and problem solving skills in either discipline of Mechanical Engineering, Electrical and Electronic Engineering, Computer and Information Science, Structural Engineering, Civil and Environmental Engineering, Chemistry and Materials Engineering, Water and Environmental Science, or Frontiers of Marine Science
- Willingness to contribute to the development of technological society in coexistence with nature
- Highly professional practical skills and global perspectives

In addition to the above, the student's master's thesis must meet the requirements for a degree conferral (refer to [2]).

[1] A student who has achieved outstanding performance might be conferred degree even if he/she has been enrolled only for one year.

[2] The Master's thesis must be relevant to engineering and must have academic value in creativeness, applicability and demonstrability.

## Curriculum Policy

• There are 8 specific programs available: Mechanical Engineering, Electrical and Electronic Engineering, Computer and Information Science, Structural Engineering, Civil and Environmental Engineering, Chemistry and Materials Engineering, Water and Environmental Science, and Frontiers of Marine Science. Each program defines its mandatory classes and elective classes depending on its study field and nurtures students' knowledge and skills in each discipline. Students can also acquire a wide range of interdisciplinary knowledge through taking classes offered by other programs or other courses (refer to [3]).

• "1) Advanced Fundamental Course", "2) Practical English Course" and "3) Practical Course for Engineers and Researchers" are the common courses regardless of which program the student is enrolled in. Each course will respectively nurture 1) fundamental knowledge of mathematics and physics, 2) communication skills in English and 3) basic knowledge of industry, intellectual property and environment. These common courses also aim to nurture students' willingness to contribute to the development of technological society as well as to develop their global perspective.

Academic achievement will be measured by submitted report, oral examination, writing examination, presentation and debate, depending on the contents of each course.

• "Program-Customized Special Course" will develop highly professional knowledge on each program as well as practical skills through participating in practical activities.

Academic achievement will be measured by submitted report, oral examination, writing examination, presentation and debate, depending on the contents of each course.

• "Advanced Specialized Course" will develop further professional knowledge and will cultivate excellent skills to create technology and to solve problems.

Academic achievement will be measured by submitted report, oral examination, writing examination, presentation and debate, depending on the contents of each course.

[3]: According to the students' interest

Please refer to the website of the Graduate School of Engineering, Nagasaki University for the Curriculum Policy of each program.

## Research Focus of the Water and Environmental Science Program

Program	Research Focus
Water and Environmental Science Program	<ul style="list-style-type: none"><li>• Membrane-based water treatment technologies and analytical techniques to produce high-quality and reliable recycled water</li><li>• New materials such as new catalyst and nano-particle for water treatment</li><li>• Appropriate water and wastewater treatment technologies for developing countries</li><li>• Hydrosphere environment such as gulfs, lakes and reservoirs by on-site monitoring of hydrodynamic flow field and water quality, eco-hydraulic computer simulation and molecular ecology</li><li>• Hydrology, water resources and remote sensing related to meteorology, disaster prevention and climate change</li><li>• Groundwater hydrology and geo-environment</li></ul>