

# Application Guidelines for JICA ABE Initiative

(Enrollment in September 2025)



*A vast green park-like site is YNU campus.  
It was founded in 1874 on the site of the first golf course in Japan.*

Graduate School of Engineering Science  
YOKOHAMA National University

# JICA ABE Initiative

## 1. Introduction

This is the Application guidelines for admission at the Graduate School of Engineering Science, Yokohama National University(YNU), under the JICA Development Studies Program (ABE Initiative).

## 2. Number of students to be admitted at YNU

Department	Unit / Specialization	Program	Educational Program	Number of Students admitted
Mechanical Engineering, Materials Science, and Ocean Engineering	Systems Design for Ocean-Space/ Systems Design for Ocean-Space, Aerospace Engineering	Master's Program	TED PED	A Few
Chemistry and Life Science	Chemistry Applications and Life Science/ Chemistry Applications and Life Science	Master's Program	TED PED	A Few
Mathematics, Physics, Electrical Engineering and Computer Science	Electrical and Computer Engineering/ Applied Physics Information Systems, Electrical And Computer Engineering	Master's Program	TED PED	A Few

※Units are categories for conducting entrance examinations. Admitted students are assigned to one of the above specializations

## 3. Eligibility

Applicants who have been screened by JICA overseas offices in their respective countries and passed the pre-application matching process and become final candidates (eligible to apply to the university as ABE Initiative candidates), and who fall under any of the following categories:

### ●For Master's program:

- Graduates or prospective graduates (prior to admission to our graduate school) from Japanese universities
- Applicants awarded a bachelor's degree or expected to be awarded the same prior to admission to our graduate school
- Applicants whose academic achievements were assessed individually by our graduate school and are acknowledged to be comparable or superior to graduates from universities, and who will reach age 22 by the time they enroll in our graduate school

## 4. Acceptance Status

Whether the applicant is admitted as a research student or a regular student will be determined during the time of admission screening, taking into consideration the applicant's preferences.

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## Standard Period of Study at YNU

- in case of starting as a research Student

The standard period of study is 6 months, during which scholarships are provided in the same amount as for regular students.

During the research student period, applicants prepare for admission as a regular student, and after this period ends, the applicant will apply to become a regular student.

- Research student: October 2025 - March 2026 (6 months)
- Master's Program: April 2026 - March 2028 (2 years)

- in case of starting as a regular student

Apply to become a regular student without going through the research student period.

An applicant wishing to enter the Master's program is scheduled to take an online examination.

These details are subject to change.

- Master's program: October 2025 - September 2027 (2 years)

## 5. 5 Reasons to Study at YNU

### Cutting-edge Research

YNU aims to be a world-class research university centered on knowledge integration. It has been selected for two R&D projects under the national "Moonshot Research and Development Program," which promotes challenging R&D based on revolutionary concepts that are not extension of existing technologies. YNU is also active in joint research with companies. In terms of research funding from foreign companies, YNU ranks 15<sup>th</sup> among 791 universities in Japan (FY 2023). The number of joint research projects with private companies ranks 26<sup>th</sup> among 791 universities in Japan (FY 2023).

### Practical Education

Yokohama is home to a concentration of industries such as automotive manufacturing, IT, and life sciences, as well as R&D centers of global companies. YNU, a national university located in Yokohama, has deepened its practical engineering education since its establishment in 1874. It also offers a diverse international education, benefitting from its location in the international port city of Yokohama. Internships are also actively conducted, mainly with major local companies.

### Ideal Location and Environment

Yokohama, where YNU has its campus, is the second largest city in Japan and is only 30 minutes from Tokyo. It is a metropolis that embodies cutting-edge culture with 150 years of history. The living environment is less crowded and more affordable than Tokyo, making the city safe and comfortable place to live.

## **Green One Campus**

Another attractive feature is that YNU has five undergraduate colleges and six graduate schools on one campus. The horizontal connections among students of different majors a unique benefit of having “one campus”. The 46,000 square meters of forested area, dotted with lecture halls and research buildings, make you forget for a moment that you are in Yokohama. There are two jogging courses on campus, where many runners pass through the shade of the trees in the mornings and evenings.

## **Excellent Facilities and Student Support**

There are four student dormitories with a total of over 1,000 rooms. On campus, there are a convenience store, two student cafeterias, and a co-op store. Additionally, a post office, a hospital, and other facilities necessary for daily life are immediately accessible from the campus gate. Students from the same laboratory will support newcomers as tutors (buddies) in both daily life and research. Japanese language and culture classes are available at no additional cost, with six levels from beginner to advanced, enabling students to experience various aspects of Japan.

## **6. Distinctive programs of Graduate School of Engineering Science**

All lectures, research activities, and thesis instruction in the graduate school are conducted in English.

The features of the educational programs are as follows:

### **T-type Engineering Degree (TED) Program**

The T-type Engineering Degree (TED) Program overcomes the shortcomings of excessively specialized and conventional I-shaped engineering education by offering broader perspectives. Our education model has undergone reform and moved away from parochial specialization towards a more integrated engineering education that combines a high degree of specialization and broad perspectives. The vertical line of the letter T from the TED Program represents the students' in-depth research in their area of expertise at their assigned laboratories. Students must write a master's or doctoral thesis in this program, which aims to produce highly advanced engineers and researchers.

### **Pi-type Engineering Degree (PED) Program**

The Pi-type Engineering Degree (PED) Program is a unique education method applied in Japan for the first time. The program is designed to produce practical engineers and researchers who can turn innovations resulting from the advancement of sciences and technologies into advanced manufacturing. As the symbol of Pi ( $\Pi$ ) from the PED Program represents, basic knowledge in engineering (horizontal line of  $\Pi$ ) is combined with more than one module of specialization (two vertical lines of  $\Pi$ ). Such a unique Yokohama-style graduate education system produces practical engineers and researchers who can respond to challenges faced by today's diversified and highly advanced industrial society. In our master's programs, students take coursework consisting of laboratory courses, exercises, and training (including long-term internship) instead of writing a master's thesis or being assigned to specific laboratories. Once

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they have completed the program, students are awarded a master's degree in engineering. In the doctoral programs, students are required to write a doctoral thesis, which is reviewed by keeping in mind that students are expected to become practical researchers who will lead advanced manufacturing.

### 7. Application Procedure

- 1<sup>st</sup> step: Selection at JICA overseas offices in their respective countries (November 2024)
- 2<sup>nd</sup> step: Matching (Pre-screening) at YNU Graduate School of Engineering Science (December 2024 - January 2025)
- 3<sup>rd</sup> step: Applying procedure to YNU - Regular Students: May 2025 / Research students: June 2025

### 8. Screening methods and Schedule

The detailed information will be announced once it is determined.

### 9. Inquiry

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