JICA Knowledge Co-Creation Program for Long Term Participants (JICA Development Studies Program)

General Information on GX Human Resources Development for Energy Sector

Enrolment 2027 Autumn

「長期研修「GX 人材育成プログラム」
（2027 年秋入学）

This handout provides an overview of the “GX Human Resources Development for Energy Sector” program/course, which is one of Japan International Cooperation Agency (JICA)’s Knowledge Co-Creation Program (Long-Term). The program will be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between respective governments.

The objective of the Knowledge Co-Creation Program (Long-Term) is to offer opportunities to people from developing countries to study at Japanese universities and to help them build their network of people. This is intended to support the human resource development plans of the governments of developing countries and Japan, and eventually to expand and strengthen bilateral ties between the developing countries and Japan.

0. Background

What is JICA Knowledge Co-Creation Program (KCCP)

The Japanese Cabinet revised the Development Cooperation Charter in June 2023, which stated, “In its development cooperation, Japan has maintained the spirit of jointly creating things that suit partner countries while respecting ownership, intentions and intrinsic characteristics of the country concerned based on a field-oriented approach through dialogue and collaboration. It has also maintained the approach of building reciprocal relationships with developing countries in which both sides learn from each other and grow and develop together.” JICA believes that this ‘Knowledge Co-Creation Program’ will serve as a foundation of mutual learning process.

What is JICA Development Studies Program (JICA-DSP)

Japan is the very first country and still is one of the very few countries that has modernized from a non-Western background to establish a free, democratic, prosperous, and peace-loving nation based on the rule of law, without losing much of its tradition and identity. With such belief, JICA invites future leaders from partner countries to Japan under KCCP, and offers them opportunity to learn about Japan's unique modernization and development experiences. This special program is called, JICA Development Studies Program (JICA-DSP).

JICA-DSP is provided to all participants of KCCP during their stay in Japan. JICA will offer participants various opportunities through which they can learn about Japan's modernization and development experiences.

https://www.jica.go.jp/english/activities/schemes/dsp-chair/index.html

Voice from participants and alumni

JICA-VAN provides a variety of photos and short videos from participants and alumni. These insights will help you envision your future academic journey in Japan.

https://jica-van-cms.jica.go.jp/custom/scholarship/jica-scholarship.html

1. Overview

Until now, JICA has provided training programs as a part of technical cooperation in various fields. In order to strengthen networks between the target countries in respective fields, JICA established a new long-term training program to foster young/middle-aged bureaucrats, academicians and leading human resources in various fields of target countries who can influence policy-making processes in their countries or contribute to socioeconomic development in the near future.

The program on “GX Human Resources Development for Energy Sector” was established in JFY 2019 under the framework of JICA Development Studies Program (JICA-DSP) for the purpose of promoting the cooperation of sustainable development in the world.

Today, one of the greatest challenges we face is the issue of climate change. To achieve the goals confirmed in the Paris Agreement, an energy transition away from fossil fuel-dependent energy supplies system is necessary. Meanwhile, the methods for achieving the energy transition remain under exploration. Furthermore, the development of new technologies is essential for its realization, and research and development efforts continue to this day.

In addition, further challenges arise in developing countries. For countries projected to experience significant population growth and economic expansion in the future, securing a stable energy supply is essential to realizing that growth. What is needed now to tackle these difficult challenges in the energy sector are policymakers capable of evidence-based policy-making and scientists engaged in the research and development of new technologies.

Based on understanding above, JICA implements “GX Human Resources Development for Energy Sector” in order to develop core human resources for energy transition toward carbon neutrality in developing countries.

The program will offer participants with special curriculums on Japanese developmental experience（JICA-DSP） and internships, if necessary, in addition to obtaining a Master’s or PhD. degree.

2. Objectives

(1) To develop core human resources, such as governmental officials and scientists, who contribute to the energy transition toward carbon neutrality in developing countries. This program offers opportunities for such personnel to study following themes at graduate courses for master’s degree / doctor’s degree at graduate schools in Japan as international students (hereafter referred to as participants).

< Social Science Field>

- Strengthen policy development capabilities to support the energy transition.
- Enhance the management capacity of energy-related corporations in the transition to a sustainable energy future.

<Engineering Field>

- Promote the development of innovative energy technologies and establishment of related regulations and rules required to achieve carbon neutrality, including:
  ① Advanced nuclear technologies, such as Small Modular Reactors (SMRs)
  ② Fusion energy technology
  ③ Space-based solar power systems
  ④ Hydrogen

<Energy Systems Modeling Field>

- Build expertise in developing long-term energy supply and demand forecasting models.

(2) To establish and maintain mid-to-long-term collaborative relationships between the target countries and Japan.

3. Course Outline

The course consists of the acceptance of participants from 31 countries.

This handout provides information related to long-term courses including master's degree courses and PhD programs.
Applicants may select one of the three fields described below and apply to a university of their choice from among those listed under the selected field. Admission to the university is conditional upon the applicant's successful completion of the university's entrance examination requirements.

Social Science Field	・ Participants will pursue either 1) a Master of Business Administration (MBA) at the Graduate School of International Management, International University of Japan (IUJ) where they will acquire knowledge on the management of energy-related public corporations in a carbon-neutral economy or 2) a Master of Public Administration (MPA) at the Graduate School of Policy Studies, National Graduate Institute for Policy Studies (GRIPS), where they will acquire knowledge on policy formulation for achieving a carbon-neutral society. ・ Applicants are expected to be government officials or employees of public corporations from the target countries. ・ The program duration is two years (GRIPS also offers a one-year program). Upon completion, participants may undertake an internship of up to six months. ・ In addition, GRIPS offers a PhD program (three years), and applicants

	may also apply for this program. ・ Please refer to the links below for information on the curricula and other details of both universities. 【IUJ】 https://www.iuj.ac.jp/assets/img/2627_DegreeRequirements_MBA%28GX%29_0925.pdf https://www.youtube.com/watch?v=eTzKpF6Lksk 【GRIPS】 https://www.grips.ac.jp/uploads/education/2026/10/JICA_GX_policy_202610.pdf
Engineering Field	・ Participants will engage in research on fusion energy, nuclear energy, space-based solar power, or hydrogen technologies, with the objective of obtaining a doctoral degree (Ph.D.). Depending on the university of choice, applicants may also have the option of pursuing a two-year master's degree program. ・ Applicants are expected to have a proven research track record at universities or research institutions. ・ The standard duration is three years. Including up to six months as a research student prior to doctoral enrollment and up to six months of internship after obtaining the Ph.D., the total duration may be extended to a maximum of four years. ・ Applicants are encouraged to consult prospective supervisors at the universities listed below prior to applying. 【Nuclear Energy】 ・ Institute of Science Tokyo Graduate Major in Nuclear Engineering: https://www.ne.titech.ac.jp/en/index.html Member list of faculties: https://www.ne.titech.ac.jp/en/faculties/index.html ・ Hokkaido University Division of Energy and Environmental Systems https://www.eng.hokudai.ac.jp/edu/div/eneenv/english/index.html ・ Nagaoka University of Technology[1] (Applicants may also choose a master's degree program) Division of Quantum and Nuclear Engineering, Graduate School of Engineering: https://whs.nagaokaut.ac.jp/nt/ https://www.nagaokaut.ac.jp/j/nyuushi/gb/e/07_nuclear/index.html

[1] Participants will primarily pursue a doctoral degree in engineering field. Applicants to Nagaoka University of Technology may also choose a two-year master's degree program.

	【Fusion Energy】 ・ The Graduate University for Advanced Studies (SOKENDAI) Fusion Science Course, School of Advanced Sciences https://soken.nifs.ac.jp/ https://youtu.be/62ZqkDbxfII 【Hydrogen】 ・ Kyushu University International Institute for Carbon-Neutral Energy Research (I²CNER) https://i2cner.kyushu-u.ac.jp/~matsumoto/en/ ・ Kogakuin University Shiratori Laboratory https://sites.google.com/view/cec-lab 【Space-Based Solar Power】 ・ Kyoto University Space-Based Solar Power Systems Laboratory https://space.rish.kyoto-u.ac.jp/shinohara-lab/research.html
Energy Systems Modeling Field	・ Participants will conduct research on energy supply and demand modeling at Ritsumeikan Asia Pacific University (APU) and pursue a master's or Ph.D. degree. ・ Applicants are expected to be government officials and researchers from the target countries. ・ The program duration is two or three years. Upon completion, participants may undertake an internship of up to six months. ・ Please refer to the attached document for details. Examples of research themes are as follows: ➢ Optimization of Energy Mix for Reliable and Sustainable Power in Indonesia's New Capital by 2045 ➢ Assessing Impact of Power Development Plan VIII (PDP8) and Carbon Pricing on Vietnam Power Sector for Period 2025-2050 ➢ Socio-Technical Determinants of Commercial and Industrial (C & I) Solar Scalability in Weak Grid Environments: Evidence from Nigeria with Insights from Japan

＊Applications to doctoral programs in the social sciences and master's programs in engineering or technical fields may also be considered on an exceptional basis. Prospective applicants should consult with JICA before applying.

In addition to the curriculum of the master's and doctoral programs, JICA will organize supplementary programs, including "MATSUMOTO Juku" a forum which participants including Japanese students discuss energy-sector challenges with experts, and study tours of energy-related facilities. Participation in these programs will be mandatory for all participants. Furthermore, JICA will provide activities such as short-term programs (e.g.

Understanding the Japanese Development Experience), and/or internship programs will be planned in order to enrich the participants' academic and personal experiences of their programs of studies at the universities[2].

4. Duration

In principle, two years for master's program and three years for PhD program (depending on the program offered by universities). Both programs may be extended by adding a six-month research student period and a six-month internship period. As a result, the maximum duration is three years for master's program and four years for PhD program.

Master: from September 2027 to September 2029
PhD: from September 2027 to September 2030

5. Number of Participants

Country Name	Number
Indonesia Cambodia Laos Thailand Vietnam Palau Mongolia Kazakhstan Kyrgyzstan Tajikistan Sri Lanka Bhutan Pakistan Nepal Bangladesh India Brazil Peru El Salvador Ecuador	A maximum of 20 participants in total.

[2] As part of JICA-DSP, this program is co-organized by GRIPS, IUJ and JICA for JICA Knowledge Co-Creation Program for Long Term Participants. The program offers participants with opportunities to gain a deep understanding of the Japanese development experience, and to draw lessons and gain insights that will support their development work at their home countries and internationally

Colombia Costa Rica Nigeria Mozambique South Africa Kenya Tanzania Egypt Ukraine Jordan Turkey	

6. Language to be used in this Program

English

7. Eligibility

Applicants must satisfy the following requirements:

(1) Current Duties: young or middle-career government officials, prospective academics, who are expected to contribute to policy formulation or its implementation for tackling sustainable developmental issues in respective fields.
※ In principle, candidates without affiliations are not eligible for acceptance.

(2) Nationality: citizen of the above countries eligible for Japan's ODA

(3) Age:
for master's programs, thirty-five (35) years of age or under in principle (As of April 1, the year of enrolment).
for Ph.D. programs, forty (40) years of age or under in principle (As of April 1, the year of enrolment).

(4) Educational Background:
for master's programs, a Bachelor's Degree or Master's Degree holder
for Ph.D. programs, a Master's Degree holder

(5) Language: sufficient English proficiency (in reading, writing, listening and speaking) equivalent to or higher than the scores listed below, as required for the specialized and academic education necessary to complete a master's or doctoral program;
TOEFL iBT: 80
IELTS: 6.5
Duolingo: 120-125

* Because some Japanese universities require applicants to submit proof of English proficiency as part of the admissions process, those who received their university education in English are also strongly encouraged to take an English language proficiency test.

(6) Physical Presence: must physically come to Japan to carry out research activities to complete this program.

(7) Health: to be in good health to participate in the program.
(8) Others: must not be receiving nor plan to receive other scholarships from Japanese government, such as Japan Student Service Organization (JASSO), Japan Society for the Promotion of Science (JSPS), Japan Science and Technology Agency (JST), The Japan Foundation (JF) during the program.

8. Admissions

Applicants must be selected as JICA's official candidate through JICA's internal selection procedure and must pass the general entrance examination[3] of the university they have applied to, including examinations to enter the applicants' desired master's degree or Ph.D. degree course.

JICA seeks more female applicants due to the past records of fewer applications from women. JICA is committed to promoting gender equality and women's empowerment, and provides equal opportunities for all applicants regardless of their sexual orientation or gender identity.

9. Application Guidelines

Applicants must apply through the procedures as described below, which are necessary requirements by both applicant's Government and the Government of Japan for the Official Development Assistance.

(1) Procedures and Required Documents for Application:
Each applicant is required to submit the "Application Documents[4]" listed in (2) below to JICA overseas office in charge of the applicants' country.

(2) Application Documents
1) Required Documents for JICA when applicants apply to this program
   ① JICA Application Form (Part A, Part B, Annex1 and Annex2)
   ② Graduation certificate/Degree certificate
      * Officially certified copies of the original
      * Written in English or accompanied with official translation
   ③ Academic transcript
      * Must contain all the grades earned at the university attended by the applicant
      * Officially certified copies of the original transcript
      * Written in English or accompanied with official translation in English
   ④ Photocopy of certificate of English Test
   ⑤ A copy of Passport or ID with photo (for checking nationality, name, sex, and date of birth)
   ⑥ 2 ID photos (4cm × 3cm) pasted on application form (Original and copy)

[3] The results of JICA's screening procedure and University's general entrance examination will not accept any inquiry.
[4] Submitted documents will not be returned.

2) Required Documents for university when applicants apply to their preferred university
Please follow guidance from each university.

3) Required Documents for JICA after applicants apply to their preferred university
① Health Certificate
* Must be submitted in JICA format to JICA office of the applicants' country at the applicants' expense, no later than the end of April, the year of enrolment.
* The date of Health Certificate should be on or after April 1, the year of enrolment.
* Without the certificate, admission may be rejected.
* JICA will NOT reimburse the cost to the applicants.
② Medical History
* Must be submitted in JICA format to JICA office of the applicants' country, no later than the end of April, the year of enrolment.
* Applicants who require assistance due to a disability or medical condition are requested to specify the necessary support in Medical History (1-(c)) so that JICA can make appropriate logistical arrangements or provide alternatives.

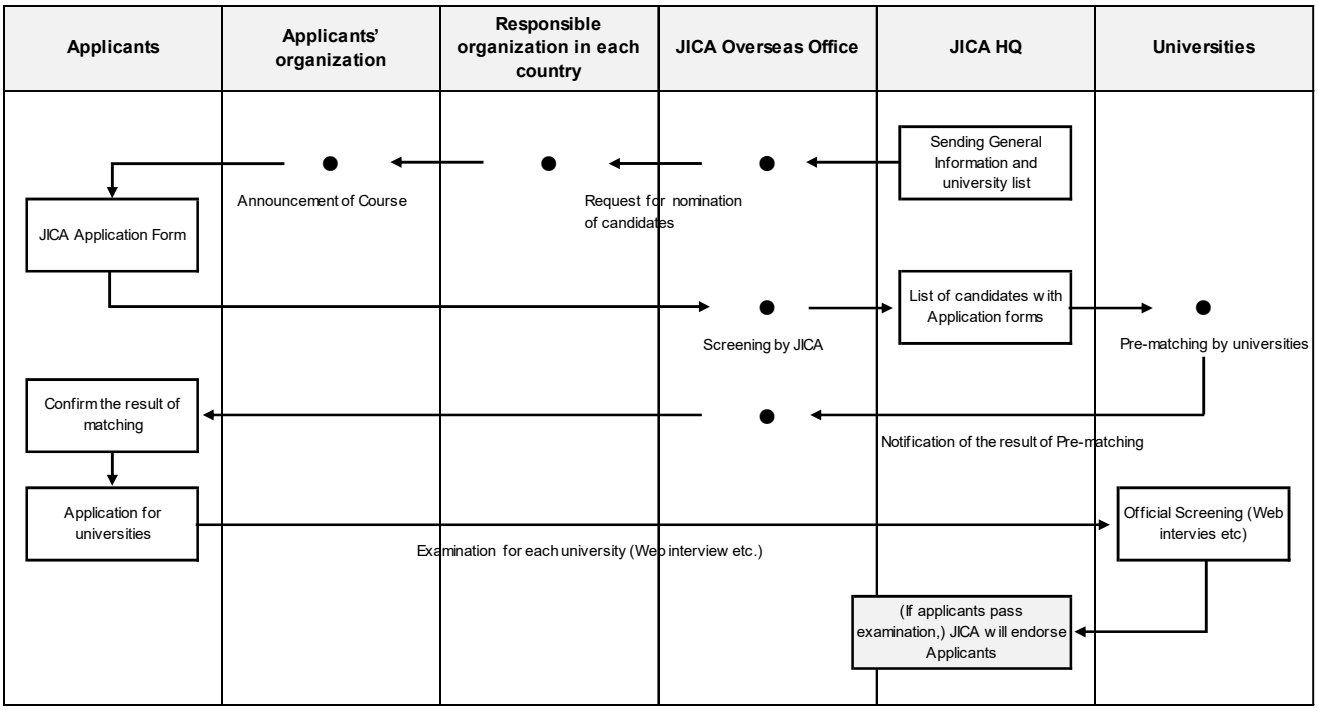
(3) Procedures in General

Based on the above documents, applicants are nominated and approved by their country's government, and later approved by JICA.[5] After this procedure, screening will be conducted at the universities chosen by the applicant.

Please note that universities may reject the applicant's application when the required documents, or the submitted research plan is not accepted by the universities.

Applicants must follow each university's application procedure after the screening. If the applicants withdraw their applications after their official applications to the universities, applicants must inform them of their withdrawal to the university by letter.

[5]The Government of Japan will examine applicants who belong to the military or other military-related organizations and/or who are enlisted in the military, taking into consideration of their duties, positions in the organization and other relevant information in a comprehensive manner to be consistent with the Development Cooperation Charter of Japan.



(4) Points to be Noted regarding Procedures

Fees for English proficiency test can be reimbursed only once when the general entrance examinations are taken. Details of the reimbursement vary by each area and should be consulted with the nearest JICA overseas office of each candidate.

JICA shall determine whether the candidate is eligible to participate in training in Japan. JICA shall make a decision on acceptance or rejection based on several factors such as entrance examination results, planned number of participants, medical examination results and others. Reason for the decision will not be disclosed.

10. Schedule

Universities Without Pre-application matching Process		Universities With Pre-application matching Process (APU, IUJ and GRIPS)	
The year prior to enrolment		The year prior to enrolment	
By the end of November	Nomination of applicants in respective organizations	By the end of November	Nomination of applicants in respective organizations
	Selection of applicants by responsible organization in each country		Selection of applicants by responsible organization in each country
By the end of December	"Application Documents" must be submitted to JICA overseas office in charge of the country of applicants.	By the end of December	"Application Documents" must be submitted to JICA overseas office in charge of the country of applicants.

January	Screening by JICA	January	Screening by JICA
[<u>No Pre-application Matching Process</u> conducted but <u>apply for the general entrance examination directly</u> to the university]			Pre-application Matching Process by university
The year of enrolment		The year of enrolment	
By the end of February	Application to take University's general entrance examination by the applicant	By the end of February	Notification of the results of Pre-application Matching Process from each university through JICA overseas office
	University's application procedure *General entrance examination schedule is followed by each university	February - June(approximately)	Application to take University's general entrance examination by the applicant
			University's application procedure *General entrance examination schedule is followed by each university
February – July	Arrival of results of general entrance examination from the university	June - July	Arrival of results of general entrance examination from the university
	Determination of JICA KCCP (Long-term) participants		Determination of JICA KCCP (Long-term) participants
July - August	Preparation for study in Japan if candidates are determined as KCCP participants	July - August	Preparation for study in Japan if candidates are determined as KCCP participants
August-October	Orientation by JICA overseas office before departure	August-October	Orientation by JICA overseas office before departure
	Arrival in Japan		Arrival in Japan
	Orientation by JICA Domestic Offices		Orientation by JICA Domestic Offices
	Beginning of Fall Term		Beginning of Fall Term

***<u>The application form must be submitted to the JICA office by the end of December 2026. If you anticipate any difficulty in meeting this deadline, please contact us separately to discuss your situation</u>**.
*Schedule for the application period for the general entrance examination depends on each university.
*Schedule and program contents might be adjusted appropriately due to unforeseen circumstances.

11. Expenses To Be Borne By JICA

Under the JICA Long-term Trainee Allowance standards, JICA will cover expenses and allowance to participants accepted to the program/course. See the table below for further details. Note that the payments (e.g., for tuition, research support expenses, school support expenses) will not be paid to the candidates/participants themselves, but directly to the

university or other relevant institutions.

Expense category	Payment amount	Payment frequency
Tuition (examination fees, entrance fees, course fees)	Actual costs	According to the request from universities
Living Allowance	JPY 143,000–148,000 per month*	Every month via university
Airfare	Actual costs	Upon arrival in Japan and upon returning home
Outfit Allowance**	JPY100,000	Once (upon arrival in Japan)
Moving Allowance***	Up to JPY164,000-224,000	Once (during the training period)**
Research Support Expenses****	Actual costs (up to JPY360,000 per year)	
Medical care for participants who become ill after arriving in Japan (the costs related to pre-existing illness, pregnancy, or dental treatment are NOT included).	In accordance with the provisions of the medical insurance	

*Varies according to living area in Japan, type of accommodation, etc.

**Once, after opening bank account in Japan. As it takes several weeks to have the bank account opened, it is strongly recommended to bring cash for personal expenses during the period.

***Depending on the accommodation facility. Consultation with the university is required.

****Research Support Expenses are allowed to be provided via the university and be disbursed with the consultation and approval of the applicant's supervisor.

12. Expenses Not To Be Borne By JICA

JICA will not bear costs other than the allowances described above. JICA is not responsible for the following expenses:

(1) Passport fees (for re-issuance and extensions, etc.)
(2) Visa fees of a transit country and transportation expenses to obtain Visa
(3) Transportation expenses to obtain Japanese Visa
(4) Domestic travel expenses at the applicant's home country
(5) Departure tax
(6) Airport tax/airport facility charges outside of Japan, including third countries
(7) Customs duty
(8) Excess baggage charges
(9) Compensation for lost and/or damaged baggage

(10) “No show charge” to the transit airport hotel (non-refundable)
(11) Lost - ticket fee
(12) Accommodation fee for day-use hotel in return flight
(13) Transportation expenses other than official programs
(14) Telephone bill or mini-bar tab at accommodation
(15) Medical costs related to pre-existing illness, pregnancy, or dental treatment
(16) Medical cost related to the same illness over 180 days
(17) National Health Insurance fee

Note: If participants/candidates do not follow the regulation of JICA, the participants may have to bear such other costs of necessary expenses.

13. Conditions for Participation

The applicants/participants of KCCP are required
(1) to understand that participants must physically come to Japan to participate in this program at the date designated by JICA,
(2) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants on their own,
(3) not to change course subjects or extend the course period,
(4) to understand that inviting participants’ family members is not recommended before their stay in Japan has passed more than 6 months,
(5) to return to their home country on a flight designated by JICA, when they finish the program/course or when it is deemed impossible to finish the program within the program period, or when the participant is not successful on the regular course examination,
(6) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating Government and the Japanese Government in respect of the course,
(7) to enroll and complete JICA-DSP online courses, when you receive JICA’s instructions to do so.
(8) to observe the rules and regulations of the program implementing partners to provide the program or establishments, (“Plagiarism” especially is taken severely by enrolling university, regardless of whether it is direct plagiarism or self-plagiarism and participants may be subjected to disciplinary action such as suspension),
(9) not to engage in political activities, or any form of employment for profit,
(10) to agree to be discontinued from the program, should the participant (a)violate Japanese laws, JICA’s regulations, or University’s regulations, (b)commit illegal or any type of immoral conduct including sexual harassment, (c)become critically ill or seriously injured after arrival in Japan.
(11) to be responsible for paying any cost for treatment of the said health conditions except for the medical care expenses described in the table of “11. Expenses To be borne by JICA,”
(12) to return the total amount or a part of the expenditure for KCCP depending on the severity

of such violation, should the participants violate the laws and ordinances,

(13) not to drive a car or motorbike in Japan, regardless of an international driving license possessed,

(14) to observe the rules and regulations at the place of the participants' accommodation,

(15) to refund allowances or other benefits paid by JICA in the case of a change in schedule,

(16) to accept that the Government of Japan will examine applicants who belong to the military or other military-related organizations and/or who are enlisted in the military, taking into consideration of their duties, positions in the organization and other relevant information in a comprehensive manner to be consistent with the Development Cooperation Charter of Japan,

(17) to submit a Health Certificate with Medical History in JICA format to JICA office of the applicants' country at the applicants' expense, no later than the end of April, the year of enrolment. The date of Health Certificate should be on or after April 1, the year of enrolment. JICA will NOT reimburse the cost to the applicants.

(18) to accept to submit a second Health Certificate in JICA format if deemed necessary by JICA. The cost of acquiring the Health Certificate will be borne by JICA unless it is required due to the candidates' fault.

(19) to promptly resubmit their medical history, if there are changes in their health condition, such as pregnancy or a pre-existing disease,

(20) to be in good health to participate in the program. In order to reduce the risk of worsening symptoms associated with respiratory tract infection, please be honest when consulting the doctor for their Health Certificate,

(21) not to be receiving nor plan to receive other scholarships from Japanese government, such as Japan Student Service Organization (JASSO), Japan Society for the Promotion of Science (JSPS), Japan Science and Technology Agency (JST), The Japan Foundation (JF) during the program

(22) to understand not to make other applications for different JICA training courses at the same time,

(23) to understand that the maximum duration of "Overseas research" and "Temporary Leave (leaving Japan for private purpose)" is 60 days, in principle.

(24) to accept to take tuberculosis related inspections organized by JICA after arriving in Japan and to submit the results to JICA and university.

(25) to approve the following conditions on summary of my thesis;
①Summary of the thesis shall be kept at JICA.
②Summary of the thesis can be read by anyone who made a request to JICA .
③Summary of the thesis can be used for publication by JICA or JICA website.
④Taking Photocopy of the thesis shall be allowed by anyone with JICA's permission.

(26) to acknowledge that a leave of absence from school is not permitted in principle,

(27) to understand that the maximum duration of research student is 6 months for both master's and doctor's courses, and duration of acceptance as a regular student is based on the course years determined by the university,

(28) to indicate all educational background, including currently enrolled university, if any.

(29) to understand that the use of Generative AI such as Chat GPT to create Application

Forms including Research Plans, and your research papers may not be acceptable and may result in rejection of your application or termination of training if discovered, according to each University policy.



CORRESPONDENCE

For enquiries and further information, please contact your nearest JICA office.