September 2020



# JICA Scholarship Course

**OVERVIEW INFORMATION ON** 

# Disaster Risk Reduction (DRR) Leaders Capacity Development for the Sendai Framework Implementation (FY2021)

留学生プログラム「仙台防災枠組に貢献する防災中核人材育成」 2021 年度

This information pertains to one of the Japan International Cooperation Agency (JICA)'s Knowledge Co-Creation Program (Long-Term). This handout gives current information on the overview of the program. It may change depending on the situation and more precise information will be provided in case of any changes. This program will be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both governments.

Each country may have its own schedule and/or qualifications for the program. Please contact JICA office in your country if you have any questions.

In the context of the COVID-19 pandemic, please note that there is a possibility that the any changes will occur.

# I. Overview

# Background

Across the world, the number of natural disasters has increased in recent years, and in particular, there was a remarkable increase in economic damage. Disasters tend to occur in hazardous areas repeatedly and have huge impact on lives, livelihood and local economy. Much of the suffering caused by disaster damage affects the vulnerable, especially those in lower income brackets. Consequently, disaster risk reduction is regarded critical for sustainable economic growth.

Sendai Framework for Disaster Risk Reduction 2015–2030 was adopted at the Third UN World Conference on Disaster Risk Reduction held in March 2015, as a framework aiming to "substantially reduce disaster risk, and the loss of lives and livelihoods". The Sendai Framework aligns the post 2015 development agenda such as Sustainable Development Goals (SDGs) and Paris Agreement. In the Sendai Framework, seven global targets were agreed and only the Global Target (e) -- National and local disaster risk reduction strategies -- is planned to be achieved by 2020 as it is essential for all disaster risk reduction activities. Each country has a primary responsibility to implement and monitor the Sendai Framework in accordance with the Guiding Principal of that.

Japan is the one of the disaster-prone countries in the world and has a long history to coexist with natural disasters such as earthquakes, tsunamis, typhoons, floods and landslides. This history of natural disasters and disaster risk reduction in Japan has generated unique "culture of disaster risk reduction" and various DRR knowledge and activities have been passed down through the generations since old times. Based on the accumulation of experience, Japan is well known for the DRR leading country in the present day. During the formulation process of the Sendai Framework, Japan reiterated the importance of "Investment in Disaster Risk Reduction", "Mainstreaming Disaster Risk Reduction" and "Build Back Better" and these concepts were accepted in the framework.

Thus it will be the best opportunity to study and research on DRR field in Japan for deepening the understanding of the Sendai Framework and learning advanced DRR knowledge and technologies

#### Objectives

Disaster Risk Reduction (DRR) Leaders Capacity Development for the Sendai Framework Implementation (FY2021) is a Master/Doctor Degree Scholarship Program specially provided by the Japan International Cooperation Agency (JICA) in collaboration with Japan's top-ranked universities, which shall be implemented as part of the Official Development Assistance of the Government of Japan.

This Program provides excellent study and research opportunity for to-be leaders of DRR field to acquire high-level competence comprehensively covering both academic studies and practical knowledge.

The Program consists of a regular graduate program for study and research related to DRR at a Japanese university and additional DRR programs.

# II. Course Outline

### 1. Title

Disaster Risk Reduction (DRR) Leaders Capacity Development for the Sendai Framework Implementation (FY2021)

#### 2. Duration and Academic Year

Master Degree2 years (October 2021 – September 2023)Doctor Degree3 years (October 2021 – September 2024)

#### 3. Target Countries

Philippines, Vietnam, Indonesia, Myanmar, Fiji, India, Sri Lanka, Mongol, Nepal, Bangladesh, Pakistan, Iran

### 4. Target Organization

Central/National DRR agency and DRR-related agencies

# 5. Target Personnel

### (1) Essential Requirement

- ✓ Personnel working at target organizations
- ✓ Practical experience in DRR field especially working at governmental agencies
- ✓ Educational Background (at least Bachelor Degree)
- Linguistic skills required to take courses and receive research guidance in <u>English</u> (You need to meet English requirements described in the application guidance of each university.)
- ✓ Good health, both physically and mentally, to participate in the Program in Japan
- $\checkmark$  Other requirements for application to each university such as GPA, etc.

#### (2) **Recommendable Qualifications**

- Those who are expected to play a leading role in Disaster Risk Reduction in the future
- Those who have flexible adaptability and receptivity for study and research in a foreign country
- Age of under 35 years old for a master degree or 40 years old for a doctoral degree
- ✓ More than five (5) years of working experience in DRR

# 6. Number of participants

Maximum 5 participants

7. Language to be used in this program English

# 8. Overall Goal

Participants will be pro-Japan leaders on DRR field in their countries and contribute to implementing the Sendai Framework and playing a vital role in leading the discussion on international level.

#### 9. Program Purpose

Participants of the Long-term Program are expected:

- (1) To obtain Master's or Doctor's degree in Japanese Universities
- (2) To learn Japanese experiences and knowledge on disaster risk reduction
- (3) To enhance relationship and network among participants and DRR human resources in Japan

#### 10. Program Outlines:

The program consists of three (3) large components as below.

#### (1) Study and research (Master/doctor degree course)

- ✓ Acquire theoretical knowledge systematically
- ✓ Improve the ability to solve problems through research activities
- Acquire master/doctor degree in the following Universities/Schools/ Departments;

University	School	Department/Lab Disaster Management Ph.D. Program (Doctor only) collaborated with "International Centre for Water Hazard and Risk Management (ICHARM)"			
National Graduate Institute for Policy Studies (GRIPS)	-				
Tohoku University	Graduate School of Science and Faculty of Science	<ul> <li>Department of Geophysics</li> <li>Department of Earth Science</li> </ul>			
	Graduate School of Information Sciences	<ul> <li>Department of Human-Social Information Sciences, Infrastructure Planning Division</li> </ul>			
	Graduate School of Engineering	- Department of Civil and Environmental Engineering			
	International Research Institute of Disaster Sciences	- Hazard and Risk Evaluation Research Division			
	(IRIDeS)	- Human and Social Response Research Division			
		- Regional and Urban Reconstruction Research Division			
		- Disaster Information Management and Public Collaboration Division			

Please refer the Annex 1 for the detailed information on the available universities/departments.

#### (2) Additional DRR program

JICA will provide additional program for the purpose to improve practical abilities, strengthen networks and deep understanding of Japanese DRR field knowledge.

#### (3) Common program (Optional)

In addition to the above-mentioned programs, JICA will implement the common programs for JICA participants. Some programs will be conducted by JICA domestic offices to promote international exchanges and cultural understandings between JICA participants and regional residents.

Also JICA will conduct a program, offering participants an opportunities to gain a deep understanding of the Japanese development experience, and to draw lessons and gain insights that will support their development work in their home countries and internationally.

# III. Application Guidance

Selection process contains the following steps. Please find the Annex 2 "Selection Schedule" for the detailed schedule.

- 1. Course Entry to JICA
- 2. Matching Process (Tohoku University only)
- 3. University's Academic Selection
- 4. JICA's Selection
- 5. Final Acceptance Decision by JICA

# 1. Course Entry to JICA

Applicants to the course must submit the completed entry format (Attached Document 1) to JICA Office in your country by the closing dates through the appropriate procedure of your country. The closing date is defined by the JICA office in each country based on the following timelines; therefore, please inquire the closing date for the entry of each schedule to the JICA office in your country.

- Schedule A Entry shown in as the Annex 2: the JICA office will inform them to the JICA Headquarter in JAPAN by <u>October 28, 2020</u> for
  - School of Science and Faculty of Science, Tohoku University
- Schedule B Entry shown in as the Annex 2: the JICA office will inform them to the JICA Headquarter in JAPAN by <u>February 8, 2021</u> for
  - National Graduate Institute for Policy Studies (GRIPS) PH.D Program collaborated with "International Centre for Water Hazard and Risk Management (ICHARM)";
  - Graduate School of Information Sciences, Tohoku University
  - Graduate School of Engineering, Tohoku University
  - International Research Institute of Disaster Sciences (IRIDeS), Tohoku University

Note:

- A) This entry process is essential to accept an applicant as a JICA Scholarship Course.
- B) Prior to submitting the entry format to the JICA Office, <u>please carefully confirm</u> that you meet the application requirement (ex: English skill, evaluation point, etc.) of the interested department or program and describe the result on the <u>entry format</u>.

# ATTENTION!

You must confirm requirements for application of each university/ department. Some information may be updated or revised.

Graduate School of Science and Faculty of Science, Tohoku University

See Annex3 (the example of application document list of FY2020).

National Graduate Institute for Policy Studies (GRIPS) PH.D Program collaborated with "International Centre for Water Hazard and Risk Management (ICHARM)";

http://www.icharm.pwri.go.jp/training/phd/phd\_index.html

- Graduate School of Information Sciences, Graduate School of Engineering, International Research Institute of Disaster Sciences (IRIDeS), Tohoku University (common application guidance for 3 schools and institute) (See Annex 4) <u>http://www.civil.tohoku.ac.jp/english/I-CEEC/admission/index.html</u>
- C) Matching procedure will be based on information described in the submitted entry format. Especially, <u>research theme is very critical information to consider</u> <u>the available supervisor</u>; therefore please carefully explain details within 200 words.
- D) JICA will not accept or consider any entries received after the stated deadline or any incomplete entry formats.
- E) You must follow the governmental procedure to submit the entry format to JICA Office in your country.
- F) You must not contact universities directly until the completion of next matching procedure.

# 2. Matching Process (Tohoku University only)

JICA provides entry information to the Tohoku University and the university conducts the Matching Process. The result of the Matching Process will be mainly judged by whether there is the available supervisor who can instruct the research theme or not. The result is informed by JICA Office in your country and only applicants who pass the Matching Process can apply for the next step (university application).

Note:

- A) Generally, Matching Process will be proceeded based on information described in the submitted entry format; however, the university contacts to an applicant to clarify some points as needed.
- B) Applicants for GRIPS/ICHARM Disaster Management Ph.D. Program do not need this Matching Process. Please proceed to the next step of academic application to the university.

# 3. University's Academic Selection

Applicants who pass the Matching Process submit required documents in accordance with the application guidance of the applied university/department. Application qualifications, procedures and application period vary depending on each university/ department; therefore, please access to the website or contact to the admission division of the university to confirm the latest information and

schedule. The academic selection will be made by each university based on the application, academic transcripts, related documents, screening and interview processes including an Internet-based interview, etc. Notifications of academic selection results will be announced by the applied university.

# 4. JICA's Selection

- (1) The applicants who applied for the university application must submit the essay about the following theme to the JICA Office in your country within 1 month after the submission of university's application.
  - A) Theme: My Contribution to achievement of the Sendai Framework in my country after the JICA Scholarship Course
  - B) Key questions: You need to include your thoughts to the following questions in the essay
    - What is the most critical issue or challenge to achieve the Sendai Framework in your country?
    - What would you like to learn through this course to solve the issue or challenge mentioned above?
    - How will you utilize your experience and learning from the course after returning to your country?
  - C) Format: Free format by using Microsoft Word or text editor within 800 words
- (2) The result of JICA's selection based on the university's selection and essay evaluation is informed within 1 week after the result notification by the university. The applicant who passes JICA's selection is called as 'candidate'.

# 5. Final Acceptance Decision by JICA

(1) Submission of required documents for acceptance decision

In response to passing the JICA selection, each candidate is required to submit the "Required documents" listed in as below **by the end of July 2021** to JICA office in your country in accordance with the appropriate procedure of your country.

Required Documents

- A) JICA Application Form for the JICA Knowledge Co-Creation Program
- B) A passport copy (for checking nationality, name, sex, and date of birth).
   \*National ID and birth certificate are acceptable as a draft document if the participant does not have a passport. Certified English translation must be attached if ID is not written in English
- C) 2 ID photos (4cm × 3cm) pasted on application form (Original and copy) and another 6 same photos.
- D) Health certificate with the JICA's specific format
- (2) Announcement of acceptance decision

JICA confirms there are no issues such as diplomacy, health, etc. and makes a final acceptance decision with submitted documents by the middle of August 2021. With this, a candidate will be officially approved as a participant of JICA Scholarship Course.

#### 6. Administrative Information

Please refer the Attached Document 2 "Handbook for JICA Scholarship Courses" about the general rules and conditions for JICA Scholarship Courses.

#### **Attached Documents**

- 1. Entry format (MS Excel sheet)
- 2. Handbook for KCCP for JICA Scholarship Courses 2019

# IV. ANNEX:

# Annex 1 Universities and Program Information

 National Graduate Institute for Policy Studies (GRIPS) collaborated with International Centre for Water Hazard and Risk Management (ICHARM) Disaster Management Ph.D. Program <u>Doctoral course only</u> <u>http://www.icharm.pwri.go.jp/training/phd/phd\_index.html</u> Keywords: Water-related disasters, Disaster risk management policy Target Groups : Officials and researchers with either natural or cultural/social sciences who are highly motivated to study science-based policy making. This program is designed for individuals who aspire to master science, technology, and policy studies in water-related risk management, thereby becoming highly skilled professionals who can train other researchers and practitioners and take leadership in planning and implementing practical strategies and policies at national and international levels to contribute to the sustainable development of their countries and regions through disaster risk reduction.

# 2. Tohoku University <u>Both Master's and Doctoral degrees</u>

- (1) Graduate School of Science and Faculty of Science https://www.sci.tohoku.ac.jp/english/
  - Department of Geophysics Keywords: Solid earth physics (seismology, geodesy, volcanology), Atmospheric and oceanic sciences (meteorology, physical oceanography), Planetary and space physics http://www.gp.tohoku.ac.jp/index-en.html

 Department of Earth Science Keywords: Geo-environmental science (geology, paleontology, geography, geochemistry), Earth and planetary materials science (petrology, mineralogy, resource geology, geochemistry)
 <u>http://www.es.tohoku.ac.jp/EN/index.html</u>

- (2) Graduate School of Information Sciences (GSIS) Infrastructure Planning https://www.is.tohoku.ac.jp/en/
  - Transportation and Geographic Information Science Keywords: Traffic Control, Geographic Information Science, Spatial Statistical Analysis https://www.is.tohoku.ac.jp/en/laboratory/list\_dept/c11.html
  - ② Regional and Urban Planning Keywords: Project evaluation, Urban/regional planning process and policy, Urban/transport planning <u>https://www.is.tohoku.ac.jp/en/laboratory/list\_dept/c12.html</u>
  - ③ Road Transportation and Traffic

Keywords: Transportation planning, Spatial economic systems, Infrastructure, System optimization, Mathematical programming, Equilibrium problems <u>https://www.is.tohoku.ac.jp/en/laboratory/list\_dept/c13.html</u>

(3) Graduate School of Engineering, Department of Civil and Environmental Engineering

http://www.civil.tohoku.ac.jp/english/index-e.html

Keywords: Infrastructure, Water Environment

- ① Mathematical System Design Division
  - Mathematical System Design: <u>http://msd.civil.tohoku.ac.jp/english/</u>
- 2 Infrastructural Materials Division
  - Mechanics of Materials: http://mm.civil.tohoku.ac.jp/
  - Concrete Engineering: http://cm.civil.tohoku.ac.jp/
  - Geotechnical Engineering: <u>http://soil1.civil.tohoku.ac.jp/</u>
- ③ Engineering Mechanics of Infrastructures Division
  - Structural Mechanics : http://mechanics.civil.tohoku.ac.jp/c-indexe.html
  - Structural Design Engineering: <u>http://design.civil.tohoku.ac.jp/c-indexe.html</u>
- ④ Water Environmental Engineering and Science
  - Hydro-Environment System: <u>http://kaigan.civil.tohoku.ac.jp/HEST/</u>
  - Environnemental Hydrodynamics: <u>http://donko.civil.tohoku.ac.jp/c-indexe.html</u>
  - Environmental Protection Engineering: <u>http://epl1.civil.tohoku.ac.jp/index.html</u>
  - Water Quality Engineering : <u>https://waterqualitytohoku.com/en/</u>
- 5 Science of Regional Systems
  - Regional System Engineering
  - Ecological Engineering
- (4) International Research Institute of Disaster Sciences (IRIDeS) <u>http://irides.tohoku.ac.jp/eng/index.html</u>
  - $(1)\,$  Hazard and Risk Evaluation Research Division
    - Tsunami Engineering: http://irides.tohoku.ac.jp/eng/organization/risk/02.html
    - Environmental Change Risk http://irides.tohoku.ac.jp/eng/organization/risk/03-2.html
    - Remote Sensing and Geo-informatics for Disaster Management http://irides.tohoku.ac.jp/eng/organization/risk/04.html
  - ② Human and Social Response Research Division
    - Disaster Area Support http://irides.tohoku.ac.jp/eng/organization/humansociety/02.html
  - ③ Regional and Urban Reconstruction Research Division
    - Computational Safety Engineering http://www.cae.civil.tohoku.ac.jp/en/

- ④ Disaster Information Management and Public Collaboration Division
  - Disaster Reconstruction design & Management http://irides.tohoku.ac.jp/eng/organization/faculty/infosociety/hirano.html

# Annex 2 Selection schedule

			Schedule A		Schedule B	
Year M		onth	Tohoku University, Graduate School of Science	Tohoku University, Graduate School of Information Science, Graduate School of Engineering, International Research Institute of Disaster Sciences (IRIDeS)	GRIPS/ICHARM, Disaster Management Ph.D Program	
		Early				
	Sep	Mid		JICA announces the detailed selection information		
		Late				
		Early				
	Oct	Mid	Output a fitte second stad			
		Late	Submission of the completed entry format to JICA HQ by October 28			
2020	Nov	Early	Matching Process (The result may be informed by			
		Mid	November 17)			
		Late				
		Early	Submission of the application documents to the University by December 11			
	Dec	Mid				
		Late	Submission of the Essay to JICA Office by December 25			
		Early				
	Jan	Mid	Academic examination			
		Late				
	Feb	Early	Notification of the result of academic selection	Deadline to submit the completed entry format	to JICA HQ by February 8	
		Mid	Notification of the result of JICA's selection (based on the Essay)			
		Late	by mid February	Matching Process		
		Early		(The result may be informed by early March)	Submission of the application documents to the University by early March	
	Mar	Mid				
		Late				
		Early		Out mining of the analization documents to the University	Submission of the Essay to JICA Office by April 5	
	Apr	Mid		Submission of the application documents to the University by mid April		
		Late				
		Early				
2021	May	Mid		Submission of the Essay to JICA Office		
		Late		by May 14	Academic examination	
		Early				
	1	Mid		Academic examination		
	Jun Late				Notification of the result of academic selection	
	Jul	Early		Notification of the result of academic selection	Notification of the result of JICA's selection by early July	
		Mid		Notification of the result of JICA's selection by mid July		
		Late		Submission of required documents for acceptance decision	n	
		Early				
	Aug	Mid		Final Acceptance decision		
		Late				
	800	Early				
	Sep	Mid				
		Late Early		Arrival at Japan Academiy year starts		
	1 1.			, ioudonny your orano	т	
	Oct	Mid				

# Annex 3 Example of application document list of Tohoku University (Graduate School of Science and Faculty of Science)

For your reference, please find the following list for FY2020 application documents. The necessary forms will be sent to the applicants who pass the Matching Process.

JIC	JICA_TU 2020 Application Documents & Checklist		
		Name	
	*Place check marks to the appropriate boxes (or choose " $\blacksquare$ ")		
_			
	Documents	Check	Remarks
1	Form 1: Application for Admission		
2	Form 2: Statement of Reason for Applying for the Program		
3	Form 3: Research Proposal		
4	Form 4: Summary of Past Research and/or Job Experience		
5	Form 5: List of Publications, Presentations, and Awards		
6	Official academic transcript(s) (both from undergraduate & graduate programs are required f	or applicant	s of the doctoral program)
	Transcripts of Undergraduate Program		
	Transcripts of Graduate Program		
7	Certificate(s) of graduation or photocopy of diploma(s) (both from undergraduate/graduate	programs ar	re required for applicants of the doctoral program)
	Undergraduate (either one of the followings)		
	•Certificate of Graduation		
	•Bachelor Diploma		
	Graduate Program(s) (either one of the followings)	<u>.</u>	1
	Certificate of Graduation		
	•Master's Diploma		
8	Document(s) to prove academic ability: at least ONE of the followings but NOT more	e than 3 m	aterials
	1) Bachelor thesis in full with English abstract		
	2) Master thesis in full with English abstract		
	<ol> <li>Research papers published in journals or conference proceedings</li> </ol>		
	4) GRE® Test score report		
	5) Other ( )		
9	Document(s) to prove English ability: at least ONE of the followings	1	
	1) Score report of TOEFL iBT® Test, TOEFL PBT® Test, or IELTS		
	2) Score report of other English tests	П	
	(Tests conducted at your university, organized locally, TOEFL ITP®, and TOEI		this category)
	<ol> <li>Certificate/letter/website to show that the medium of instruction (of undergraduate/graduate program) was English</li> </ol>		
	4) Other ( )		
10	Photocopy of passport: If unavailable, a document proving your citizenship is required*		*e.g., photocopy of citizenship card, birth certificate, census resigter
11	Application Checklist (this sheet)		

# Annex 4 Requirement of Tohoku University (except Graduate School of Science and Faculty of Science)

Tohoku University (Graduate School of Engineering, Graduate School of Information Science, IRIDeS) must need the following requirement for the application.

(1) Applicants must have taken one of the following on or after June 1, 2019: TOEFL iBT, TOEFL PBT, TOEIC or IELTS (Academic Module).

By the time of their application, applicants must have obtained a score equal to or greater than that required by the school of engineering as shown below.

- TOEFL iBT 70 or higher
- TOEFL PBT 500 or higher
- TOEIC 700 or higher
- IELTS 6.0 or higher
- (2) Applicants must have earned 2.30 or more evaluation points as calculated from their coursework grades in their latest submitted transcripts, as shown below.

Scale Grade						
Scale	Grade	Grade				
4-Grade	А	A 100-80		С	F	
Scale	100-80			69-60	59-	
5-Grade	S	А	В	С	F	
Scale	А	В	С	D	F	
	100-90	89-90	79-70	69-60	59-	
Points	3	3	2	1	0	
Total Credit	N4	N3	N2	N1	N0	
(N4+N3)×3+N2×2+N1×1+N0×0						

Evaluation Point = -----

$$N4 + N3 + N2 + N1$$

Note:

1. Applicants for the Master's Degree Program

Evaluation points are calculated based on the undergraduate transcript.

2. Applicants for the Doctoral Degree Program

Evaluation points are calculated based on graduate school (Master's course) transcripts.

