



Knowledge Co-Creation Program (Group & Region Focus)

GENERAL INFORMATION ON

DEVELOPMENT OF ADVANCED INDUSTRIAL HUMAN RESOURCE THROUGH JAPANESE STYLE ENGINEERING EDUCATION

課題別研修「日本型工学教育を活用した

高度産業人材育成」

JFY 2018

No. J1804407 / ID. 1884480

Course Period in Japan: From January 14, 2019 to January 30, 2019

This information pertains to one of the JICA Knowledge Co-Creation Program (Group & Region Focus) of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

‘JICA Knowledge Co-Creation Program (KCCP)’ as a New Start

In the Development Cooperation Charter which was released from the Japanese Cabinet on February 2015, it is clearly pointed out that *“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.”* We believe that this ‘Knowledge Co-Creation Program’ will serve as a center of mutual learning process.

I. Concept

Background

From the late 1950s to the late 1960s, since Japanese government and industries supported newly established universities under the policy for human resource development in science and technology, higher education in this field expanded rapidly and developed human resources in engineering, who supported high economic growth.

For What?

To learn Japanese case of practical engineering education, teaching method, curriculum and collaboration among industry, government and academic.

For Whom?

Faculty members of engineering education at universities and colleges of technology.
Government officials in charge of higher education and engineering education at concerned ministries.

How?

To have presentations of country reports and discussion among participants and lecturer.

Then, several lectures related engineering education of a Japanese style, and observation tours are provided.

Finally, to have presentations of your findings through this course and discussion among participants and lecturer.

II. Description

1. **Title (J-No): Development of advanced industrial human resource through Japanese Style Engineering Education (J1804407)**
2. **Period of program**
January 14 to January 30, 2019
3. **Target Regions or Countries**
Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan
4. **Eligible / Target Organization**
This program is designed for faculty members at universities and colleges of technology in charge of Higher Education and Engineering Education and for government officials at concerned ministries.
5. **Total Number of Participants**
11 participants
6. **Language to be used in this program**
Russian
7. **Course Objective:**
To learn Japanese case of practical engineering education, teaching method, curriculum and collaboration among industry, government and academic.
8. **Overall Goal**
Japanese style engineering education will be utilized for highly skilled human resource development in Central Asian countries by the persons who will have learned it through this training.

9. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below:

Expected Module Output	Subjects/Agendas	Methodology
Foundation	Presentation of country report, Discussion among fellow participants	Presentation/ Discussion
	Outline of engineering education of a Japanese Style(Toyohashi University of Technology, National Institute of Technology)	Lecture
	Teaching methods, curriculum, evaluation and quality assurance in technical college and engineering university	Lecture

Applied / Specialized	Lecture of technical college and engineering university	Observation tour
	Collaboration among industry, government and academic (private company, local government)	Lecture/ Observation tour
Finalization	Presentation of output obtained through this training course	Presentation/ Discussion

III. Conditions and Procedures for Application

1. Expectations from the Participating Organizations:

- (1) This program is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Participating organizations are expected to use the project for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.

2. Nominee Qualifications:

Applying Organizations are expected to select nominees who meet the following qualifications.

(1) Essential Qualifications

- 1) Current Duties: personnel who engaged in the field of engineering education
- 2) Experience in the relevant field: have more than 10 years' experience in the field of engineering education
- 3) Educational Background: be a graduate of university or equivalent
- 4) Health: must be in good health, both physically and mentally, to participate in the Program in Japan. Pregnant applicants are not recommended to apply due to the potential risk of health and life issues of mother and fetus.

(2) Recommendable Qualifications

- 1) Age: be between the ages of thirty-five (35) and fifty-five (55) years

3. Required Documents for Application

(1) Application Form: The Application Form is available at **the JICA office (or the Embassy of Japan)**.

(2) Photocopy of passport: to be submitted with the application form, if you possess your passport which you will carry when entering Japan for this program.

*Photocopy should include the followings:

Name, Date of birth, Nationality, Sex, Passport number and Expire date.

4. Procedures for Application and Selection :

(1) Submission of the Application Documents:

Closing date for applications: **Please inquire to the JICA office (or the Embassy of Japan)**.

(After receiving applications, the JICA office (or the Embassy of Japan) will send them to **the JICA Center in JAPAN** by **November 16, 2018**)

(2) Selection:

After receiving the documents through proper channels from your government, the JICA office (or the embassy of Japan) will conduct screenings, and then forward the documents to the JICA Center in Japan. Selection will be made by the JICA Center in consultation with concerned organizations in Japan. *The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection.* Qualifications of applicants who belong to the military or other military-related organizations and/or who are enlisted in the military will be examined by the Government of Japan on a case-by-case basis, consistent with the Development Cooperation Charter of Japan, taking into consideration their duties, positions in the organization, and other relevant information in a comprehensive manner.

(3) Notice of Acceptance

Notification of results will be made by the JICA office (or the Embassy of Japan) **not later than December 7, 2018**.

5. Document(s) to be submitted by accepted candidates:

Before coming to Japan, only accepted candidates are required to prepare reports in order to share the current situation of your country. (detailed information is provided in the ANNEX 1-4.)

These reports should be sent directly to JICA Center in Japan by **January 4, 2019**, preferably by e-mail to cbictp1@jica.go.jp

Please refer to VI. Annex1-4: Requirement for applicants is Country Report

6. Conditions for Attendance:

- (1)** to strictly adhere to the program schedule.
- (2)** not to change the program topics.
- (3)** not to extend the period of stay in Japan.
- (4)** not to be accompanied by family members during the program.
- (5)** to return to home countries at the end of the program in accordance with the travel schedule designated by JICA.
- (6)** to refrain from engaging in any political activities, or any form of employment for profit or gain.
- (7)** to observe Japanese laws and ordinances. If there is any violation of said laws and ordinances, participants may be required to return part or all of the training expenditure depending on the severity of said violation.

(8) to observe the rules and regulations of the accommodation and not to change the accommodation designated by JICA.

IV. Administrative Arrangements

1. Organizer:

(1) **Name:** JICA Chubu

(2) **Contact:** Mr. ITOYAMA Hiroshi (mail to: cbictp1@jica.go.jp)

※Please insert “training course number & the title” in the subject when emailing.

For instance, “J1804407 & Development of advanced industrial human resource through Japanese Style Engineering Education”

2. Implementing Partner:

(1) **Name:** Toyohashi University of Technology

(2) **Contact:** Mr.KOIKE Seiichi (Professor of Toyohashi University of Technology)

(3) **URL:** <https://www.tut.ac.jp/english/>

(4) **Remark:** Toyohashi University of Technology (Toyohashi Tech) was established in 1976 to respond to the societal need to foster practical, creative engineers and cultivate qualified individuals who would show initiative and display leadership abilities. With this guiding philosophy, Toyohashi Tech focused largely on recruiting graduates of technical colleges. In implementing this mission, Toyohashi Tech has overseen a comprehensive program involving education and research in technology. Correspondingly, Toyohashi Tech has produced a great number of highly skilled engineers and researchers who have made valuable contributions to academic life while also contributing to society through technological development and industry-academic cooperation.

<https://www.tut.ac.jp/english/introduction/charter.html>

3. Travel to Japan:

(1) **Air Ticket:** The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.

(2) **Travel Insurance:** Term of Insurance: From arrival to departure in Japan. Thus traveling time outside Japan shall not be covered.

4. Accommodation in Japan:

JICA will arrange all accommodations in Japan for the participants, including the following accommodation:

JICA Chubu Center (JICA Chubu)

Address: 4-60-7 Hiraikecho, Nakamura-ku, Nagoya 453-0872, Japan

TEL: +81-52-533-0220 FAX: +81-52-564-3751

(where “81” is the country code for Japan, and “52” is the local area code)

5. Expenses:

The following expenses will be provided for the participants by JICA:

(1) Allowances for accommodation, meals, living expenses, outfit, and shipping

- (2) Expenses for study tours (basically in the form of train tickets.)
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
- (4) Expenses for program implementation, including materials
For more details, please see “III. ALLOWANCES” of the brochure for participants titled “KENSU-IN GUIDE BOOK,” which will be given before departure for Japan.

6. Pre-departure Orientation:

A pre-departure orientation will be held at the respective country’s JICA office (or Embassy of Japan), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

V. Other Information

Personal-use computer

It is suggested for the participants to wrap up their findings by computer applications. Information on schedule and some of the training materials will be delivered through Internet during the training program. JICA CHUBU, where participants stay, has the room with computers for these purposes. For better and effective work, it would be advisable to bring your own lap-top computer. Minimum requirements of applications would be MS Word and Excel together with an anti-virus soft built-in. Also mobile computers with complement of JICA will be available for the participants who do not have their own.

English

Because Japanese-Russian translator is assigned only for the time of training (lecture, observation tour, presentation and discussion), it is recommendable for a participant to be able to speak English so that he/she can communicate with participants of other courses and JICA Chubu staffs.

VI. ANNEX:

Requirement for applicants

Please describe Country report.

The report should be 4 page slides of power point. Each page shows the followings;

1. Position of engineering education in your country's education system
2. Current situation and challenges of engineering education (including human resource development)
3. Relation between engineering education and industry
4. Level of engineering education expected in your country

The report is to be presented in presentation session at the beginning of this training course.

For Your Reference

JICA and Capacity Development

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that “capacity development” is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

Japanese Development Experience

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the “*adopt and adapt*” concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this “*adoption and adaptation*” process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan’s developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of “tacit knowledge,” a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



CORRESPONDENCE

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

JICA Chubu Center (JICA Chubu)

Address: 4-60-7 Hiraikecho, Nakamura-ku, Nagoya 453-0872, Japan

TEL: 81-52-533-0220 FAX: 81-52-564-3751