

# Guide to AOTS Industry-Academia collaborative programs FY2023



May 2023

The <u>Association for Overseas</u> <u>Technical Cooperation and Sustainable Partnerships</u>(AOTS)

### **Overview of the Organization**



Established	August 10, 1959 (establishment date of the surviving merging corporation (former AOTS))					
Aims	To promote mutual economic development of Japan and other countries and friendly relationships between them by conducting activities to facilitate industrial globalization, trade, investment, and international economic cooperation.					
Endowment of the organization	JPY 700,000,000					
Main activities	Training, experts dispatch, internship, business promotion, etc.					
Scale of operations	Approximately JPY 9,400,000,000 (FY2021 budget)					
Offices	Domestic bases: Kitasenju Office, Tokyo Training Center, Kansai Training Center Overseas bases: Bangkok, Jakarta, New Delhi					
Number of staff	Approx. 150 (as of Feb 2023) *Includes fixed-term contract staff					
Results	Training of overseas industrial human resources: 400,000 persons; Dispatch of Japanese experts: 10,000 persons Japanese internship in overseas countries: 1,000 persons					
Brief history	From the establishment in 1959, implementing training in Japan and overseas countries. (170 countries and regions, total 360,000 persons)         Jods         From the establishment in 1970, dispatching Japanese experts to the industry of overseas countries (60 countries and regions, total 7,100 persons)					
Brief history	AOTS and JODC merged on March 30, 2012, and the Overseas Human Resources and Industry Development Association (HIDA) was established.	is Human Resources and Industry Development				
	Its English name has been changed to AOTS, effective July 1, 2017.					

Technical cooperation utilization type/ Emerging market development program (Training/ Experts dispatch program/Industry-Academia collaborative programs)



Target countries	Developing countries and regions			
Aims	The aims of this program are <u>to develop local human</u> resources of private companies, etc. in developing <u>countries through public-private partnerships</u> in order to support the reinforcement of local bases required for overseas expansion of Japanese companies and to <u>improve the standard of local industry technology and</u> <u>develop the economy</u> .			
	(1) Technical Training	Japan		
	(2) Management Training	Japan		
Types of the programs	(3) Overseas Training			
	(4) Experts Dispatch	Overseas		
	(5) Industry-Academia collaborative programs			

## **Project Overview(1)**



### **Objectives**

Industry-Academia collaborative programs on <u>technical fields that play a key role</u> in the business activities of companies and the development of industry will be held for students at universities and other institutions in developing countries or for international students from developing countries at Japanese universities, utilizing the perspectives and technologies of Japanese companies/Japan affiliated companies in those countries with the aim of <u>helping students from</u> <u>developing countries through the course and internship to acquire knowledge</u> and skills needed by the companies and encouraging them to seek their <u>employment at the companies.</u> The purpose of the programs is to contribute for facilitating business activities and deepening cooperation between Japan and the relevant countries.

### **Overview**

- Courses: Lectures, exercises, practical training /experiments, research, workshops, visits, etc., etc.
- Internships:

Work experience at companies and organizations in Japan or local countries.

\* Internships are optional

X Both large and small sized companies can apply.

**2/3** of eligible costs

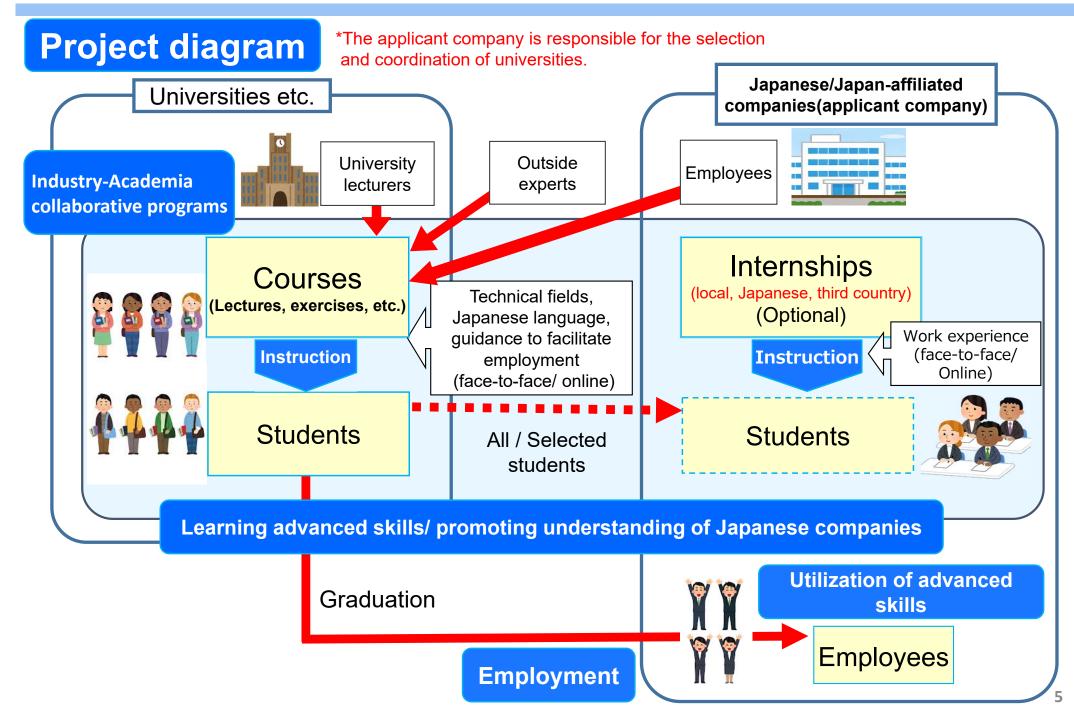
are subsidised,

regardless of the size

of the enterprise.

## **Project Overview(2)**





#### Benefits from Implementing Industry-Academia Collaborative Programs



- \*Lead to the recruitment of highly skilled human resources.
- \* Reduce cost burden of course and internship.
- \* Subsidies partially apply to travel expenses for internships in Japan.

\* Can build and strengthen networks with local universities through implementing courses.

\* Employees as instructors can improve their abilities to instruct others.

\* Contributes to training local industrial human resources, which leads to fulfillment of corporate social responsibility (CSR).

## Basic Requirements for application (1)

#### <Applicant companies(Japanese or local Japan-affiliated companies)>

- Companies and organizations with corporate status in Japan (with more than 50% Japanese ownership), or local Japan-affiliated corporations in which such companies and organizations have invested more than 50% or representative offices of such companies and organizations \*Companies such as employment agency or temporary personnel agency may also apply (please contact us for details).
- Those with plans to employ students from local universities etc. in developing countries that are eligible for Industry-Academia collaborative programs \*Graduates from eligible universities for setting up course can also participate (please contact us for details).
- Those with the abilities to implement and manage courses and internships and to pay associated costs
- Those able to arrange companies and organizations to assist with preparation and implementation of Industry-Academia collaborative programs in the countries and regions where they are conducted, as necessary

## Basic Requirements for application (2)

#### Courses

- Lectures, seminars, exercises, practical training and experiments, research, etc. at eligible universities etc.
- Total course hours: 450 minutes or more (ex.: 90 minutes x 5 sessions)
- Number of students: 5 or more
- \* Content must concern key technical fields directly related to company activities
- \* Include content to encourage promotion of employment with Japanese or local Japan-affiliated firms

Note: Online remote courses also are eligible

#### Internships (optional)

 Work experience and/or practical experience at the applicant company or its affiliates, for all or selected students attending courses (Minimum 2 days)

## Basic Requirements for application (3)

#### ■Course content

Course content will include the following subjects, to contribute to learning and improving abilities in the advanced knowledge and technologies that Japanese and Japan-affiliated companies require when recruit human resources overseas and to lead to employment of students at Japanese and Japan-affiliated companies:

#### 1. Key technical fields etc. directly related to company activities

(Ex.) Automation, AI, IoT, robotics, information security, big-data processing, next-generation automotive technologies, mechatronics, carbon recycling, clean energy, optics/quantum technology, biotechnology, nanotechnology/materials, expertise that is key to business activities and industrial development etc.

2. Contents related to recruitment for businesses that contribute to technology transfer that contributes to industrial development in developing countries and regions

\* Please consult with us regarding specific subject fields etc.

In addition to 1. or 2. above, the course includes content to encourage employment with Japanese and Japan-affiliated companies.

\*The technical fields mentioned above 1. or 2. should account for more than half of the total course hours.

(Ex.) Introductions to companies and products, advantages of employment with Japanese and Japan-affiliated companies (career development, advantages in treatment), language skills for communication after employment

## **Basic Requirements for application (4)**

#### <Schools and institutions where courses are held>

Schools and other educational institutions in developing countries or in Japan that are providing <u>education on the</u> <u>technical fields to be taught in the course\*</u> to students from developing countries.

This may be education in basic or peripheral fields related to the content of the courses to be provided as Industry-Academia collaborative programs.

Schools and other educational institutions that have established and operate programs awarding degrees of the level of Associate Degree or Foundation Degree, or higher

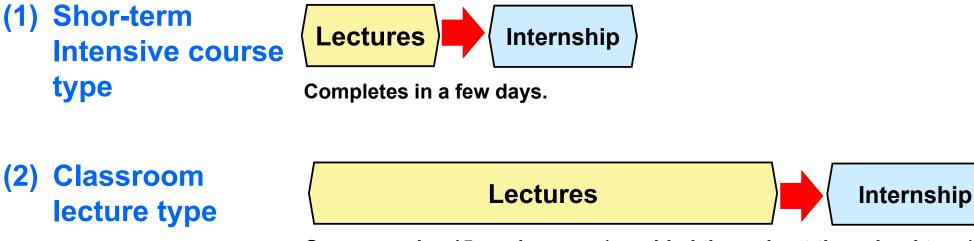
Schools and other educational institutions that graduate human resources who can be expected to play active role at Japanese companies or local Japan-affiliated companies

\*Multiple specific local universities and other institutions may be identified as eligible for setting up courses.

#### Example types of Industry-Academia collaborative programs



#### Programs can be provided in different types as below:



Once a week x 15 weeks or so (provided throughout the school term).

(3) Joint research type



Research guidance given to participants in units of lab and project-based learning in which participants carry out research while working at their university and a company.

#### (4) Combination of the above

### SORIMACHI Vietnam Co., Ltd.

A shortage of human resources with IT competence has been a serious issue in Vietnam, leading to increasingly fierce competition for human resources including from foreign countries. SORIMACHI Vietnam Co., Ltd., which carries out not only off-shore development in Japan but also develops and sells IT products and services inside Vietnam, signed a memorandum with the Ho Chi Minh City University of Technology and planned educational courses and an internship program for students. Courses provided guidance on mobile app development techniques, Japanese corporate culture, and introductory Japanese language study. In the internship program, students had an opportunity to join a system development project. After the program, three students were employed by the company. SORIMACHI Vietnam Co., Ltd. highly recommended the program for allowing it to acquire new employees, introduce human resources to other Japanese IT companies, and establish a good relationship with the university.

- SORIMACHI Vietnam Co., Ltd. and 2 companies signed a memorandum with the Ho Chi Minh City University of Technology regarding securing human resources.
- SORIMACHI Vietnam Co., Ltd. employed 3 students and introduced 2 to other Japanese IT companies.
- Many participants responded in the post-program questionnaire that their motivation to find employment at SORIMACHI Vietnam Co., Ltd. or Japanese companies increased.

Participating students	<ul> <li>10 from the Department of Information Technology (Third and fourth grade students)</li> <li>8 selected students worked as interns at SORIMACHI Vietnam Co., Ltd.</li> </ul>		
Curriculum	<ul> <li>Courses (Lectures, exercises, etc.)</li> <li>Basic AI, big data, machine learning skills</li> <li>Mobile app development (Android &amp; iOS)</li> <li>Beginner's Japanese (greetings and so on)</li> <li>Introduction of work environment and corporate culture of Japanese companies</li> </ul>	90-mins. lecture x 3 times a week for 4 months (Online)	
	Internship • Work in a system development project	2 months of work experience (Face-to-face)	
Lecturers	<ul> <li>Employees of the company served as instructors</li> <li>The company in Vietnam accepted the interns</li> </ul>		



Comment by Dr. Le Van Thang, Vice President of the Ho Chi Minh City University of Technology

I am grateful that AOTS and SORIMACHI Vietnam Co., Ltd. provided very practical courses for the students of the Ho Chi Minh City University of Technology. By acquiring a lot of useful knowledge and practical experience, the students were able to improve their basic skills necessary for their future job hunting. I hope both AOTS and SORIMACHI Vietnam Co., Ltd. will continue to pass on knowledge about Japan and expand the opportunity for students to find employment at Japanese companies.







### Example of Industry-Academia collaborative program implementation

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	AOTS

Applicant company (business field)	Target university	Implementat ion style	Lecture description	
Japanese company overseas (Sales, installation, and maintenance of industrial machines)	Engineering department	Course (lectures, exercises, etc.) + Internship (in Japan)	With the purpose of securing human resources for launching a local service maintenance base, the applicant company provided engineering students with online lectures on cutting techniques and manufacturing site digitization techniques using a virtual machine. The second year included some face-to-face lectures where students were taught how to use a digital machine tool processing program (CAD/CAM). The internship program in Japan provided practical guidance using an actual machine tool. The company will, while checking students' ability level, hire those who are competent as service maintenance engineers who can handle the most advanced machine tools.	
Japanese company (Operations including maintenance and management of a solar power plant)	Electrical engineering department	Course + Internship (in Japan)	Due to power plant expansion plans in Japan and aging of qualified electrical safety engineers, it is become difficult to get a hold of licensed electrical engineers who can maintain and manage power plants. To secure competent qualified electrical engineers, the applicant company held lectures for local electrical engineering students to teach the electric theory necessary for power plant maintenance and management, provide knowledge on electric power engineering and similar field and teach Japanese. During the internship program carried out in Japan, participants received guidance on more practical and specialized maintenance and management at the training center is the company head office. After the program, participants will take the Japanese electrical engineer license exam, and the company plans to hire in Japan a few of those who pass the exam and become qualified.	
Japanese company (Information and communications, and consulting)	Department s including information engineering department	Course	The applicant company needed AI-based significant work automation and efficiency improvement due to business expansion but was unable to do so due to engineer shortages. The company, aiming to get a hold of AI engineers to work on in-house system development, held face-to-face lectures targeting local information engineering students to teach them programming languages, machine learning, and programming practice for AI engineering service systems. By teaching competent students AI engineering while they were still students, the company developed human resources who would meet the needs of its company in Japan, which as a result hired them.	
Japanese company (Designing and manufacturing of FA systems)	Department s including machine engineering department	Course + Internship (locally and also in Japan)	The applicant company has a serious issue of securing individuals with high level skills due to the aging society and human resource shortages in the manufacturing industry. The company signed a memorandum with a local university, which produces competent human resources expected to play active roles in the future, to establish mutual cooperation in the fields of design technology and Japanese language education in order to provide lectures on 3D simulation technology in the metaverse for machine designing and design testing. After completing the lectures, participants will join the internship programs at a local subsidiary as well as the Japanese head office for simulator operation practice for designing tasks. While assessing participants' ability level after completing the program the company plans to hire industry-ready human resources at the company in Japan or at a local subsidiary.	

#### Structure of industry-Academia Collaborative Programs and its Costs



- Industry-Academia collaborative programs are conducted through combination of courses and internships.
- Lectures are instructed by "local lecturers", "foreign lecturers", or a combination of both.
- Instruction also may be provided through online learning that does not require attendance at universities etc.
- Internships may be conducted "locally", "in Japan", "in other third countries", or in a combination of these.
- Materials and equipment necessary for course instruction that are lacking at the university etc. may be rented or procured by using "Expense for Devices and Equipment" (maximum limits apply in some cases).

		Total Expenses for Industry-Academia Collaborative Programs				
Course		Course Implementation	ion Expense for Devices and Equipment	Outsourcing Expenses		
(Compulsory)		Costs		Honorarium for Cooperation to the school establishing the course		
Internship		Internship		Administrative Travel Expenses for Preparation and Implementation of Program		
(Optional)	Implementation Costs		Expenses for Support on Introduction and Implementation of On-line Guidance			



#### **Expenses for the Implementation of Course**

Remuneration for Program Advisor/ Technical Guidance Fee for Lecturer/ Expenses for Creating Teaching Materials/ Travel Expenses for Lecturers, Interpretation Fee/ Rental Expenses of Educational Facilities and Equipment/ Expenses for Devices and Equipment (as deemed necessary)/ Expenses of Devices and Equipment necessary for On-line Guidance including their Environmental Setting(\*)/ Other Expenses for Educational Activities Conducted by Lecturers/ Travel Expenses for International Students in Japan

#### **Expenses for the Implementation of Internships**

Travel Expenses for Intern/ Interpretation fee/ Expenses of Creating Digitalized Materials for Online Internship(\*)/ Expenses of Devices and Equipment necessary for On-line Internship including their Environmental Setting(\*)/ Other Expenses for Internship Implementation

#### I Expenses for Support on Introduction and Implementation of On-line Guidance(\*)

Honorarium for Cooperation to the school establishing the course

- Administrative Travel Expenses for Preparation and Implementation of Program
- Outsourcing Expenses

(\*) Only if deemed necessary to provide online guidance.



- \* Technical Guidance Fee for lecturers: JPY17,500/day per person
- \* Actual costs of Lecturer's transportation, international travel insurance, PCR test, Visa application
- \* Lecturer's daily allowance and staying allowance paid in fixed amounts pursuant to AOTS rules

(Ex.: daily allowance of JPY5,000, staying allowance of JPY15,100/honorarium grade 1-3/in the case of an ASEAN developing country such as Thailand, Indonesia, or Vietnam)

- \* Expenses for Creating Teaching Materials (according to AOTS rules)
- \* Interpretation fee, Rental expenses of educational facilities and equipment,
- \* Other Expenses for Educational Activities Conducted by Lecturers

(Ex.: Protective devices for students, Consumables for practice, etc.)

#### \* Expenses for Devices and Equipment :

When procuring through purchase or production, the unit price of the acquisition (including consumption tax, value- added tax, etc.) must be less than JPY500,000. User license charges and other costs with limited usable periods are treated as leasing or rental costs, with no maximum limit on their amounts.

- \* Actual costs of Intern's airfare, international travel insurance costs
- \* Actual costs of intern's accommodations (maximum limit applies) (No remuneration may be paid to interns.)

#### Base Amounts of Main Costs Eligible for Subsidies for Industry-Academia Collaborative Programs



Instructor category	the university where the prog with a company etc. with no	ition or position authorized by gram is conducted (if affiliated particular position authorized by gram is conducted: Instructor)	Professor	Associate professor		Instructor, Assistant	
Technical Guidance Fee for lecturers	Per day of course instruction		17,500 yen/ person /day				
Expenses for Creating	Writing the text ※2		4,000 yen/Sheet	3,500 yen/sheet	3,000 y	en/sheet	
Teaching Materials※1	Writing narration for recordings for teaching materials for learning outside of class hours		2,000 yen/Sheet	1,800 yen/sheet	1,500 y	1,500 yen/sheet	
	lanan	Daily allowance ※3	2,724 yen/day	2,514 yen/day	i14 yen/day		
	Japan	Accommodation expenses(Region B) ※3	12,362 yen/night	11,314 yen/night			
	Overseas: Region B ASEAN countries other	Daily allowance ※3	5,000 yen/day				
Travel Expenses for Lecturers	than Singapore, etc.	Accommodation expenses ※3	15,100 yen/night				
	Overseas: Region C Mongolia, South Asia,	Daily allowance ※3	4,500 yen/day				
	Central and South America, Africa, etc.	Accommodation expenses ※3	13,500 yen/night				
	Airfare		Actual costActual cost(discounted business class)(discounted economy class)				
Remuneration for Program Advisor※4	Maximum total amount per Industry-Academia collaborative program		Actual cost up to: 200,000 yen/program				

X1 Japanese, Chinese and Korean: 400 words/piece; Other than those: 200 words/piece

※2 PPT: 3 slides/piece

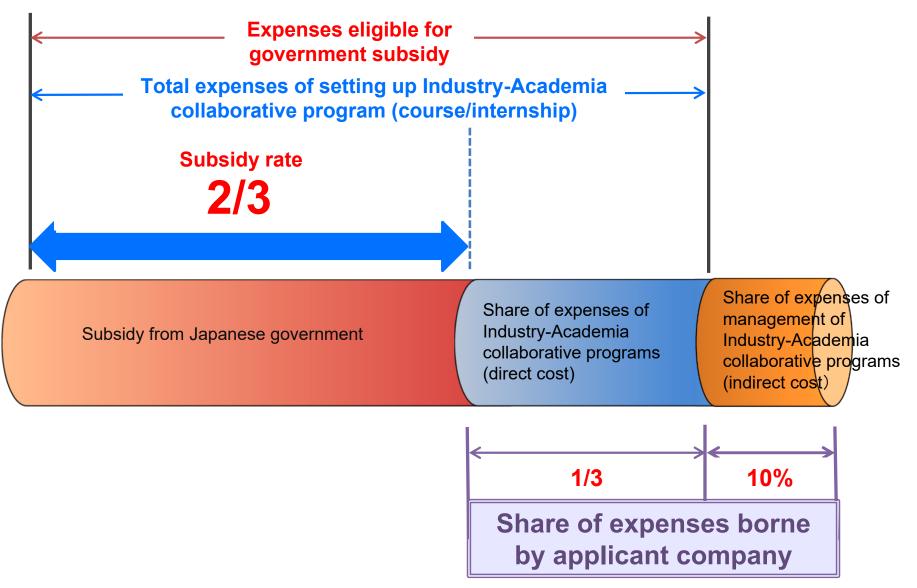
3 The base amount will decrease gradually with the continuous period of stay (31-60 days: 90%; 61 days or longer: 80%)

X4 Available only for payment to an instructor other than an employee of the applying corporation

#### Expenses(1)

#### (Subsidy rate from Japanese government subsidy/Corporate cost burden)





♦ In addition to above cost, we ask for your cooperation in covering the costs of running the organization (operating contribution).

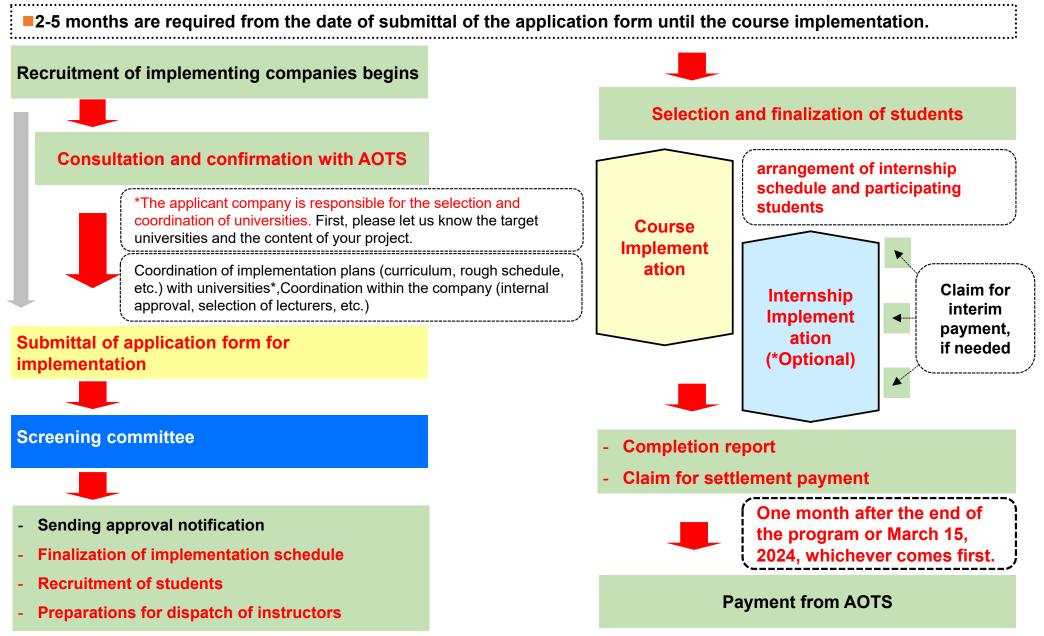
#### **Expenses(2)** (Example of calculating expenses)





## Flow of Use





\* In principle the applicant company is responsible for coordination of universities.

\* Items in red are implemented mainly by the applicant company (Japanese or local Japan-affiliated company).

\* Please plan courses in consideration of university exam periods, long vacations, etc.

## Application



#### Application Period

Applications are accepted at any time.

It takes about 3 weeks to notify the results of the screening.

\* The execution status of budget plans may call for premature termination of acceptance of proposals.

**Documents to be submitted** Please download from the following website.

https://www.aots.jp/hrd/technology-transfer/endowed-program/

- Application for Implementation of Industry-Academia Collaborative Programs (prescribed form)
- □ Attachments
  - I. Company Brochure
  - II. Company History
  - III. Certified Copy of Register
  - IV. Financial Statements for last 3 fiscal years
- □ Supplementary Document(To be submitted as required)
  - I. Document on export/service transaction

#### Method of Submission

Please send an electronic copy of the application form to indus-acad-collab-pg@aots.jp by e-mail, and send the original application form to the AOTS Endowed Program Group address on the next page.

## **Contact List for Inquiries**



The Association for Overseas Technical Cooperation and Sustainable Partnerships (AOTS)

Endowed Program Group, Corporate Liaison Department

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