

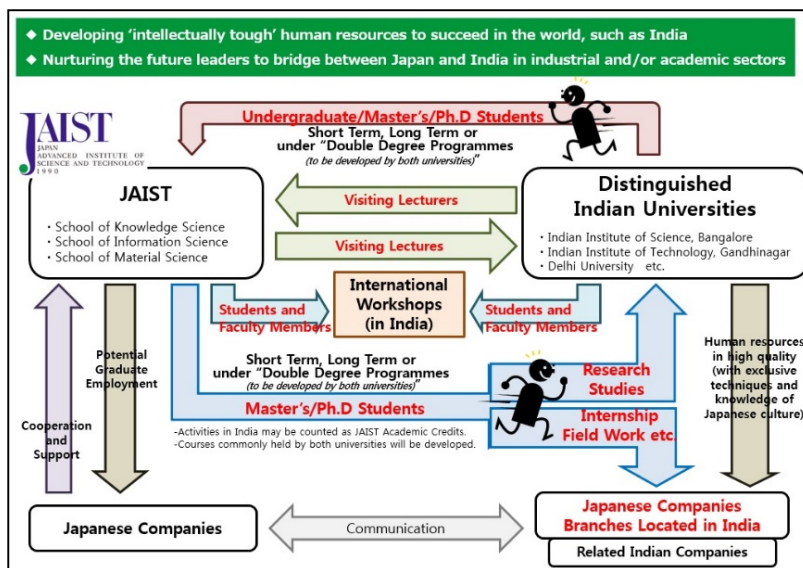
# 1. Outline

**【Name of project】**(Adopted year: FY2014, Country (India))  
 JAIST-India Cooperative Programme for Frontier Scientists/Engineers with Global Sense

**【Summary of Project】**

This programme is aiming at developing “intellectually tough” human resources by providing collaborative education with partner institutions in India including student exchanges from a short-term basis to a long-term basis, and internship opportunities in cooperation with Japanese companies that have local branches in India. To achieve this goal, JAIST encourages students to participate in short-term international workshops/seminars hosted by JAIST and partner institutions, and makes it a foothold for students to study in India for longer time later. We attempt to motivate students and have them think about local issues to study effectively through the staged dispatch from a medium-term period to a long-term period. For collaborative education with mutual faculties’ and students’ exchanges, a cross-cutting course is set up and a compulsory course for participating students which requires a group work using knowledge science method will be newly set up. For reciprocal Double Degree Programmes, a new collaborative course will be set up in cooperation with partner institutions. In addition, JAIST offers internship opportunities at companies to develop scientists/engineers with global sense who assess accurate needs in region and find issues and resolve them.

(Outline Figure and so on)



**【Summary of Exchange program】**

① International Workshops/Seminars: The purpose of these workshops/seminars is to improve students’ proficiencies in self-assertion in English by presentations and discussions and motivate students to study in India for a medium or long-term period. ② Collaborative Education and Research Co-Supervision: Students attend the host institutions in the period between 1 month and 6 months, and are supervised by the professors. Japanese students take a compulsory course and are encouraged to do internships at Japanese companies’ branch offices in India. ③ Double Degree Programme: While conducting ① and ②, we work on arranging a reciprocal Double Degree Programmes. A new collaborative course will be set up in cooperation with partner institutions, the collaboration with industrial sectors shall be strengthened, and participating students obtain internship opportunities at companies.

**【Global Human Resource on the project】**

This programme is aiming at developing “intellectually tough” human resources who can anticipate and respond to changes in industrial structure and society, and nurturing the future leaders to bridge between Japan and India in industrial and/or academic sectors by offering collaborative education with partner institutions and internship opportunities at Japanese companies’ branch offices in India.

**【Feature on the project】**

We attempt to motivate students and have them think about local issues to study effectively through the staged dispatch from a short-term period to a long-term period. JAIST develops scientists/engineers with global sense who assess accurate needs in region by offering students an education program which includes onsite study, and internship opportunities.

**【Exchange number】**

	2014	2015	2016	2017	2018
Outbound	8	18	22	22	24
Inbound	18	20	24	24	26

## 2. FY2014 Progress

【Japan Advanced Institute of Science and Technology】

【Name of project】(Adopted year: FY2014, Country (India))

JAIST-India Cooperative Programme for Frontier Scientists/Engineers with Global Sense

### ■ Exchange Programs



〈 Visiting a company in Bengaluru 〉

○JAIST held international workshops and seminars both in Japan and India, and promoted student exchanges. The one held in Bengaluru, India included visiting to Japanese companies' branch offices and opportunities to hear situation of industry in Bengaluru from staff working there.

○JAIST accepted undergraduate students of Indian Institute of Technology Gandhinagar (IITGN) as Visiting Students. They stayed at each supervisor's lab. for a certain period of time and experienced graduate school research as well as deepened understandings the differences of customs between Japan and India.

### Student-Mobility

#### ○ Outbound

- 11 Japanese students participated in workshop held at Indian Institute of Science (IISc) in February, 2015 and had a poster session with IISc students. Prior to the workshop, participated students visited 4 companies' branches in India.

#### ○ Inbound

- 6 students in Master's course by Double Degree Programme with Delhi University
- 8 students from 3 partner institutions to a seminar held in January and a symposium held in March, 2015 at JAIST. They exchanged opinions and had poster sessions with JAIST students.
- 6 undergraduate students from IITGN as Visiting Students

	2014	
	Plan	Results
Outbound	8	11
Inbound	18	20

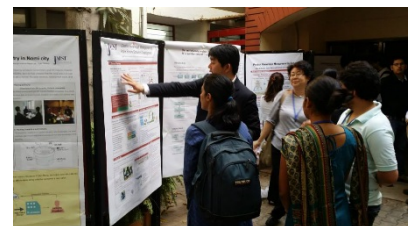
### ■ Forming the University Network with Quality Assurance

#### ○ Designing exchange programmes in consideration of difference of academic calendar

JAIST faculty members visited partner institutions and checked curriculums, academic calendars and study environments for a long-term student dispatch.

#### ○ Setting up a cross-cutting course which is a recommended one to take for students who participate in this programme

A course, "Introduction to Science and Technology in Global Perspective", is open to students from fiscal year 2015 to foster students' abilities to find issues and resolve them in the global society and to obtain rudimental knowledge necessary for a long-term stay in India. The course is consisted of classroom lecture and participation of international workshops hosted by JAIST and one of partner institutions, and the result of study and experience can be counted as an academic credit.



〈 Poster session at IISc 〉

### ■ Promotion of Student-Mobility Environment

#### ○ Center for Global Educational Collaboration

Center for Global Educational Collaboration was decided to be established in April, 2015 with staff who are specialized in academic exchanges. The center provides comprehensive support for study abroad and accepting students from overseas institutions.

#### ○ Safety Seminar for Travel to India

Safety Seminar for Travel to India was held and open to all students. The seminar topics included safety and hygiene in India and differences in culture and custom, etc. The lecture was archived for students those who had not attended the seminar to see on website.

### ■ Internationalization of the university

#### Information disclosure and Publication of outcome

##### ○ Pamphlet and Website for Information Disclosure

We started to send out information of the programme using pamphlet and website.

##### ○ Evaluation Committee whose members include outside intellectuals

An evaluation committee whose core members are outside intellectuals was established to assess needs in region in cooperation with industrial sectors.

### ■ Notices

We sent our students to India and accepted overseas students more than we planned and that fact is now a foothold of continuous student exchanges for following years. We have been discussing on educational collaboration with partner institutions and trying to correspond well to mutual interdisciplinary education policy, thus we strengthened collaboration framework of reciprocal student exchanges for 3 to 6 months from fiscal year 2015.

# 3. FY2015 Progress

[Japan Advanced Institute of Science and Technology]

【Name of project】(Adopted year: FY2014, Country (India))

JAIST-India Cooperative Programme for Frontier Scientists/Engineers with Global Sence

## ■ Exchange Programs



〈Workshop in India〉

○JAIST conducted short-term mutual student exchanges aimed to participate in international workshops, and accepted undergraduate students from partner institutions as special visiting student continuously from FY2014. In addition, JAIST started mutual student exchanges from 1 to 3 months as collaborative education and research co-supervision programme.

○Results of participating international workshop or seminar was approved as an academic credit by integrating classroom lecture for Japanese students. The opportunity to participate in internship programme at a Japanese company's branch in India was provided for Japanese students who stayed in India under collaborative education and research co-supervision programme.

○A program coordinator (Indian nationality) was allocated at center for global educational collaboration to coordinate with partners in India smoothly and enhance support for student exchange.

## Student-Mobility

### ○ Outbound

•JAIST held 3 international workshops in partner institutions in India. 16 Japanese students participated in the workshops (4 days to 12days). Participated students conducted the activities such as group works, poster presentation, and company visit.

•2 Japanese students stayed in partner institutions in India for 3 months as collaborative education and research co-supervision program. Students conducted research as a member of laboratory and did an internship at a company for 2 weeks .

### ○ Inbound

•JAIST held 2 international workshops in JAIST by collaborating with partner institutions in India. 8 students from partner institutions participated in the workshops (4 days to 11 days). Participated students exchanged opinions and had poster session with JAIST students.

•JAIST accepted 7 graduate students as collaborative education and research co-supervision program and 7 undergraduate students as special visiting students. Students conducted research as a member of laboratory in JAIST and some of the students gave research presentation.

	2015	
	Plan	Results
Outbound	18	18
Inbound	20	22



〈 Visiting a company in Bengalure 〉

## ■ Forming the University Network with Quality Assurance

### ○ Credit Approval from Results of Study in India

•JAIST opened a course “Introduction to Science and Technology in Global Perspective” which is consisted of classroom lecture and participation of international workshops. This course enables the result of study and experience of participating international workshops to be counted as an academic credit.

•In order to build double degree program between IITGN, JAIST started to consider specific programme contents such as plan for students recruit, comparison of syllabus, class hours, number of credits, and research term and period at both institutions.

## ■ Promotion of Student-Mobility Environment

### ○ Center for Global Educational Collaboration

Center for Global Educational Collaboration was established in April, 2015, and a program coordinator and staff who are specialized in academic exchange were allocated. The center coordinates with partner institutions and Japanese companies' branches in India, and provides comprehensive support for study abroad and accepting students from overseas institutions.

### ○ Safety Seminar for Travel to India

Seminars which were aimed to improve discussion ability in English and safety seminar were held for those who hope to study in India. Student debriefing session was also held for all students, faculty, and staff. This session was aimed to motivate students for studying abroad and was a part of safety seminar before going abroad.

## ■ Internationalization of the university

### Information disclosure and Publication of outcome

#### ○ Pamphlet and Website for Information Disclosure

JAIST sent out the latest information and activity records of the programme using website and spread the outcome of this programme to inside and outside of Japan. JAIST distributed pamphlet of this programme to those who wish to enter JAIST or companies and provided information on this programme.

## ■ Notices

•Based on the policy regarding internationalization of JAIST, Headquarters for International Collaboration was established on April, 2016. The contents of this programme were included as an annual plan of the headquarters and frameworks for steady operation were built.

# 4. FY2016 Progress

【Japan Advanced Institute of Science and Technology】

【Name of project】(Adopted year: FY2014, Country (India))

JAIST-India Cooperative Programme for Frontier Scientists/Engineers with Global Sence

## ■ Exchange Programs



〈 Workshop in India 〉

○JAIST conducted short-term mutual student exchanges aimed to participate in international workshops, accepted undergraduate students from partner institutions as the visiting students, and carried out mutual student exchanges for 1 to 3 months under the collaborative education and research co-supervision program.

○For Japanese students participated in an international workshop/seminar, the result of their participation was approved as academic credit by combining with classroom lectures. For Japanese students conducted their research under the collaborative education and research co-supervision program, an internship opportunity was provided at a Japanese company's branch in India.

○A coordinator with Indian nationality and staffs in the Center for Global Educational Collaboration attempted to enrich those exchange programs in some ways such as exploring new internship companies.

## Student-Mobility

### ○ Outbound

•JAIST held 2 international seminars at the partner institutions in India. 19 Japanese students participated in the seminars for 4 to 15 days. They conducted activities such as group works with local students, poster presentation, and company visit.

•3 Japanese students stayed in the partner institutions for 2 to 3 months under the collaborative education and research co-supervision program. They conducted their research as a member of a laboratory and did an internship at a Japanese company's branch in India for 2 weeks.

### ○ Inbound

•JAIST held international workshop and symposium at JAIST in collaboration with the partner institutions. 9 students from those counterparties participated in the workshop/symposium for 2 to 9 days. They exchanged opinions with JAIST students and gave presentation on a poster session.

•JAIST accepted 10 graduate students under the collaborative education and research co-supervision program and 8 undergraduate students as the visiting students from the partner institutions for 1 to 3 months. They conducted their research as a member of a laboratory at JAIST and some of the students gave research presentations.

	2016	
	Plan	Results
Outbound	22	22
Inbound	24	27



〈 Company visit in Bangalore 〉

## ■ Forming the University Network with Quality Assurance

### ○ Credit Approval from Results of Study in India/at JAIST

•JAIST regarded participation in an international workshop/seminar as a part of a course "Introduction to Science and Technology in Global Perspective" and approved results obtained from participating in the workshops/seminars as academic credit.

•For Indian students who conducted research under the collaborative education and research co-supervision program, JAIST introduced a new course from FY 2016 offering academic credit where the students put their knowledge learned at home institution to conduct their research and training at JAIST. JAIST gave credit to students in this course on completion of study at JAIST.

•In order to build interactive double degree program between Indian Institute of Technology Gandhinagar (IITGN), JAIST discussed with IITGN specific program contents such as a student recruit strategy, comparison of syllabus contents and number of credits, and study term in both side. IITGN and JAIST agreed to aim to start student exchange under the double degree program from FY 2018.

## ■ Promotion of Student-Mobility Environment

### ○ Center for Global Educational Collaboration

The Center for Global Educational Collaboration coordinated with the partner institutions and Japanese companies' branches in India and engaged in providing comprehensive support for the students in the exchange programs.

### ○ Preliminary Training for Studying in India and Safety Seminar

A preliminary training workshop to improve discussion skills in English and a safety seminar by an invited lecturer were held for students who hope to study in India. A debriefing session by Japanese students back from India was also held towards all the students, faculty members and staffs at JAIST. This session played a role as part of the safety seminar and aimed to cultivate next candidates.

## ■ Internationalization of the university

### Information disclosure and Publication of outcome

#### ○ Pamphlet and Website for Information Disclosure

JAIST sent out the latest information and activity records of the programs through the website of this project and made efforts to spread the outcome of this project towards inside and outside of Japan. In order to integrate and provide various information regarding overseas study programs of JAIST, JAIST created a website of the Center for Global Educational Collaboration.

## ■ Notices

•In order to proceed the project steadily, JAIST included this project to the annual plan of Headquarters for International Collaboration where makes strategies regarding the internationalization of the university. As well as managing progress of the project, JAIST improved project contents such as delivering multiple information to students in an integrated way.

# 5. FY2017 Progress

【Japan Advanced Institute of Science and Technology】

【Name of project】(Adopted year: FY2014, Country (India))

JAIST-India Cooperative Programme for Frontier Scientists/Engineers with Global Sense

## ■ Exchange Programs



〈 Seminar in India 〉

○JAIST conducted short-term mutual student exchanges aimed to participate in international seminars, accepted undergraduate students from partner institutions as the visiting students, and carried out mutual student exchanges for 2 to 3 months under the collaborative education and research co-supervision program.  
○For Japanese students participated in an international seminar, the result of their participation was approved as academic credit by combining with classroom lectures. For Japanese students conducted their research under the collaborative education and research co-supervision program, an internship opportunity was provided at a Japanese company's branch in India.  
○The Memorandum of Agreement (MoA) on Double Master's Degree Program has been concluded between JAIST and Indian Institute of Technology Gandhinagar (IITGN).

## Student-Mobility

### ○ Outbound

- JAIST held 2 international seminars at the partner institutions in India. 15 Japanese students participated in the seminars for 4 to 14 days. They conducted activities such as group works with local students, poster presentation, and company visit.
- 5 Japanese students stayed in the partner institutions for 2 to 3 months under the collaborative education and research co-supervision program. They conducted their research as a member of a laboratory and did an internship at a Japanese company's branch in India for 2 weeks.

### ○ Inbound

- JAIST held an international symposium at JAIST in collaboration with one of the partner institutions. 6 students from the counterparty participated in the symposium for 2 days. They exchanged opinions with JAIST students and gave presentation on a poster session.
- JAIST accepted 12 graduate students under the collaborative education and research co-supervision program and 6 undergraduate students as the visiting students from the partner institutions for 2 to 3 months. They conducted their research as a member of a laboratory at JAIST and some of the students gave research presentations.

	2017	
	Plan	Results
Outbound	22	20
Inbound	24	24



〈 Company visit in Bangalore 〉

## ■ Forming the University Network with Quality Assurance

### ○ Credit Approval from Results of Study in India/at JAIST, Start of Student Recruitment for the Double Degree Program

- JAIST regarded participation in an international seminar/symposium as a part of the course of "Introduction to Science and Technology in Global Perspective" and approved results obtained from participating in the seminar/symposium as academic credit.
- For Indian students in the collaborative education and research co-supervision program, JAIST regarded their research activities at JAIST as the course of "Seminar on Science and Technology after Off-Campus Study" and gave them academic credit on the completion of the program.
- As to the double degree program between JAIST and IITGN, the faculty members in charge of the program prepared a list of the credit transfer as well as starting student recruitment.

## ■ Promotion of Student-Mobility Environment

### ○ Center for Global Educational Collaboration

The Center for Global Educational Collaboration coordinated with the partner institutions and Japanese companies' branches in India and engaged in providing comprehensive support for the students in the exchange programs.

### ○ Preliminary Training for Studying in India and Safety Seminar

A preliminary training workshop to improve discussion skills in English and a safety seminar by an invited lecturer were held for students who hope to study in India. A research exchange meeting with students from partner institutions was also held at JAIST. The meeting was aimed to provide an opportunity for students of JAIST and the partner institutions to interact each other. It helped JAIST students to prepare for studying in India.

## ■ Internationalization of the university, Information disclosure and Publication of outcome

### ○ Information Disclosure through Website and Publications

JAIST sent out the latest information and activity records of the programs through the website of this project and made efforts to spread the outcome of this project towards inside and outside of Japan. As the start of the double degree program, JAIST released information on the outline of the program and admission by the JAIST website, distributed the leaflet at open campus, and published an article for press release and a portal site on the web.

## ■ Notices

- In the double degree program with IITGN, JAIST will dispatch the first student to IITGN from FY 2018.

# 6. FY2018 Progress 【Japan Advanced Institute of Science and Technology】

【Name of project】(Adopted year: FY2014, Country (India))

JAIST-India Cooperative Programme for Frontier Scientists/Engineers with Global Sense

## ■ Exchange Programs



〈 Seminar in India 〉

○JAIST conducted short-term mutual student exchanges aimed to participate in international seminars, accepted undergraduate students from partner institutions as the visiting students, and carried out mutual student exchanges for 2 to 3 months under the collaborative education and research co-supervision program.

○For Japanese students participated in an international seminar, the result of their participation was approved as academic credit by combining with classroom lectures.

○The Double Master's Degree Program with Indian Institute of Technology Gandhinagar (IITGN) started and JAIST dispatched the first batch of student to IITGN. This program provided the student with an internship opportunity at a Japanese company's branch in India and the result of internship activity was approved as academic credit for degree completion.

## Student-Mobility

### ○ Outbound

•JAIST held 2 international seminars at the partner institutions in India. 16 Japanese students participated in the seminars for 4 to 13 days. They conducted activities such as group works with local students, poster presentation and company visit.

•6 Japanese students stayed in the partner institutions for 2 to 4 months under the collaborative education and research co-supervision program. They conducted their research as a member of a laboratory on-site.

•1 Japanese student enrolled in IITGN and started studying at IITGN under the double degree program.

### ○ Inbound

•JAIST held an international symposium at JAIST in collaboration with the partner institutions. 6 students from the counterparties participated in the symposium for 2 days. They exchanged opinions with JAIST students and gave presentations on a poster session.

•JAIST accepted 14 graduate students under the collaborative education and research co-supervision program and 6 undergraduate students as the visiting students from the partner institutions for 2 to 3 months. They conducted their research as a member of a laboratory at JAIST and some of the students gave research presentations.

## ■ Forming the University Network with Quality Assurance

### ○ Credit Approval from Results of Study in India/at JAIST, Start of the Double Degree Program

•JAIST regarded participation in an international seminar/symposium as a part of the course of "Introduction to Science and Technology in Global Perspective" and approved results obtained from participating in the seminar/symposium as academic credit. For Indian students in the collaborative education and research co-supervision program, JAIST regarded their research activities at JAIST as the course of "Seminar on Science and Technology after Off-Campus Study" and gave them academic credit on the completion of the program.

•JAIST set up a laboratory operated jointly with IITGN in order to maintain close relationship with IITGN and implement research supervision smoothly under the double degree program. JAIST also offered a collaborative course conducted by faculty members of JAIST and IITGN jointly and it is regarded as a mandatory course for students participating in the program.



〈 Research Exchange Meeting 〉

## ■ Promotion of Student-Mobility Environment

### ○ Center for Global Educational Collaboration

The Center for Global Educational Collaboration provided students participating in the exchange programs with comprehensive support such as the arrangement of air tickets and accommodation, assistance for obtaining a visa and giving safety guidance.

### ○ Preliminary Training for Studying in India and Safety Seminar

A preliminary training workshop to improve discussion skills in English and a safety seminar by an invited lecturer were held for students who hope to study in India. A research exchange meeting with students from partner institutions was also held at JAIST. The meeting was aimed to provide an opportunity for Japanese and the partner institutions' students to interact each other. It helped Japanese students to prepare for studying in India.

## ■ Internationalization of the university, Information disclosure and Publication of outcome

JAIST sent out the latest information and activity records of the programs through the website of this project and made efforts to spread the outcomes towards inside and outside of Japan. JAIST also sent out information on the recruitment of students for the double degree program on the web and distributed program leaflets at Graduate School Information Sessions and Open campus.

## ■ Notices

2 students in the first batch at IITGN under the double degree program will enroll in JAIST in July 2019.