## Summary of 2019 UEC Sakura Science Program (China)

14 August 2019

Office for International Strategy, the University of Electro-Communications (UEC)

## (1) Theme of the Program

"Study of Advanced Science and Technology toward the Future Super Smart Society"

The program was severely selected by JST (Japan Science and Technology Agency) out of many programs applied by universities over Japan and formally contracted between JST and UEC at the end of July 2019.

## (2) Category of the Program

Course A (Science and Technology Experience Course)

## (3) Purpose of the Program

To make selected students of China and Japan explore the future science and technology with the exchange of the students through study tours of the advanced science and technologies in UEC and relevant institutions in Japan, especially, learn the fundamental idea and practice of science and technology covering IoT, AI, Robotics toward the future super smart society, so that the better understanding of both countries will be promoted by the youth and their preferable human relations and leadership will be developed in the globalizing environment of the society.

## (4) Term of Visit and Flight Schedule

<Term of Visit> from Nov. 24 (Sun.) to 30 (Sat.), 2019

<Air Ticket> All the required air tickets are reserved by UEC and delivered to the invited students and supervisors by email attachment in time.

#### <Flight Schedule>

The departure date and time from the nearest international airport are:

Date of departure from the nearest IA : Nov. 24 (Sun.), 2019, in the morning as listed in the table.

Date of arrival at Haneda IA via Beijing Capital IA: Nov. 24 (Sun.), 2019, in the evening, at 21:30 Date of departure from Haneda IA : Nov. 30 (Sat.), 2019, in the morning, at 08:30

Date of arrival at each IA via Beijing Capital IA : Nov. 30 (Sat.), 2019, in the afternoon, as listed in the table

IA	Departure from each IA on Nov. 24	Return time at each IA on Nov.30
Shanghai Hongqiao IA	12:50 CA1520/T	15:35 CA1517/T
Hefei Xinqiao IA	11:20 CA1256/T	15:25 CA1843/T
Chengdu Shuangliu IA	12:00 CA1406/T	17:00 CA4108/T
Nanjing Lukou IA	13:55 CA1848/T	16:15 CA1561/T
Wuhan Tianhe IA	12:45 CA8203/T	18:10 CA8208/T
Hangchou IA	12:15 CA1596/T	16:50 CA1716/T

## (5) Member Universities and students/supervisors to be invited

The member universities are selected from the universities with excellent academic activities covering both global human resource development and research activities of advanced science and technology, especially in the field related to the future super smart society to be developed with IoT, AI, Robotics and relevant science and technologies covering natural energy devices and applications, nano-technology, bio-technology, holding the MoU based contract with UEC, and geographically located in the same region along Changjiang River.

The number of students and supervisors accompanying the students are as follows.

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Member University	B3 or the final year	M1 year	Supervisor
University of Science and Technology of China (USTC)	1	1	1
(The representative member university managing the program)			
University of Electronic Science and Technology of China (UESTC)	1	1	1
Wuhan University of Science and Technology (WUST)	1	1	
Nanjing University (NU)	1	1	
Shanghai Jiao Tong University (SJTU)	1	1	1
Zhejiang University of Technology (ZUT)	1	1	
TOTAL	6	6	3

#### (6) Candidate Selection

Candidates for the program are nominated by each member university at first, and finalized through the mutual opinion exchange between each member university and UEC through documentation including their academic transcript, proficiency certificate of English and their brief CV, and if required through international interview by Skype connection (if available) on Internet.

The submission Due Date of the following required documents to UEC in pdf by e-mail attachment is as follows: Submission Due Date = September 5 (Thu.), 2019

#### The required documents are:

- [1] Brief CV :name, facial photo in jpeg (less than about 200kB), gender, date of birth, e-mail a/c, grade, dept., major, research advisor (if available), the reason why he/she was interested in the program.
  - [2] Academic transcript covering the former one year
  - [3] TOEIC or TOEFL scores (if available)
  - [4] Excel table as attached should be filled out and returned to UEC.
  - [5] Copy of the passport including the facial photo page.

## (7) Visa issuance process

The above mentioned Excel table and passport photo page are indispensable for visa issuance of each candidate. The information of the Excel table to each final candidate will be sent to the nearest Japan Embassy or Consulate General in China via JST and successively Ministry of Foreign Affairs of Japan (MOFA) through their authorization processes. According to JST, it will take nine weeks to complete all the processes. Then, each candidate can apply for visa issuance at the nearest either Japan Embassy or Consulate General which was specified by JST, and have his/her visa issued without charge and trouble there. See it at: <a href="https://ssp.jst.go.jp/shiryo\_h29/sasyo/yoryo.pdf">https://ssp.jst.go.jp/shiryo\_h29/sasyo/yoryo.pdf</a>

## (8) Program in details

Some destination might be revised due to unexpected inconveniences of institutions to be visited. It will be finalized by the end of October.

Date	Destination and details	Note
Nov 24, Sun.	-Departure from the nearest	UEC Professor(s) will pick them up at the airport and guide them to their hotel
	international airport	where the short orientation will be organized to cover the confirmation of the
	-Arrival at Tokyo International	final program and participants, insurance certificate and risk management for
	Airport (Haneda)	their safe domestic travel in Japan, and the information that every participant will
	-Orientation at hotel in Chofu	be registered as a member of JST's Sakura Science Club.
Nov. 25, Mon.	UEC	(1) Courtesy call to UEC President and introduction of UEC
		(2) Introduction of Chinese students and Professors in UEC
		(3) Studying in UEC (JUSST system for students of universities with MoU,
		enrolment with Government scholarship, short term international students)
		(4) Lecture and Laboratory Tour for Day 1
		@1. Summary of Government's long year plan Society5.0, Super Smart Society
		based on the plan and relevant R&D activities in UEC
		@2. Laboratory tour
		► i-Powered Energy System Research Center and IoT issues toward the super
		smart society
		► Deep learning of smart energy system
		► Energy harvester and sensor network
		► Next generation big data technologies
		► Global electro-magnetic wave observation on the earth and ionic sphere
		► Computational intelligence for IoT in the big data era
		(5) Lecture-1 of Japanese language and conversation
Nov. 26, Tue.	UEC	(6) Lecture and Laboratory Tour for Day 2
		@3. Laboratory tour
		► Substitution technologies and myoelectric prosthetics hands and AI based
		adaptive learning with functional magnetic resonance imaging
		► Artificial Intelligence eXploration Research Center and current topics
		► Robots capable of supporting, co-operation and entertaining people in the real

		world
		(7) Tour to UEC Communication Museum
		(8) Lecture-2 of Japanese language and conversation
		(9) General session summarizing the study in UEC
Nov. 27 Wed.	Japan Aerospace Exploration	-Move from UEC to JAXA in Tsukuba
	Agency (JAXA) in Tsukuba	-Overview of R&D in JAXA and visit to Tsukuba Space Center
		-Study of deep learning application to satellite sensors, big data by satellite
		-Move from JAXA to AIST
	National Institute of Advanced	-Visit to AIST
	Industrial Science and	-Visit to AI Research Center
	Technology (AIST)	-Visit to Robot Innovation Research Center
		-Visit to Information Technology Research Institute
		-Return to the hotel
Nov. 28, Thu.	National Institute of	-Visit to National Institute of Information and Communications Technology
	Information and	(NICT) under Ministry of Internal Affairs and Communications of Japan (MIC)
	Communications Technology	-Study of vulnerable IoT devices
	(NICT under MIC)	-Move from NICT to Riken CBS
	Riken Center for Brain Science	-Visit to Riken CBS
	(CBS)	-Study of brain science covering large and complex big data driven research
		-Visit to Biomedical Neural Dynamics Collaboration Laboratory
		- Return to the hotel
Nov. 29, Fri.	National Museum of Emerging	- Visit to Miraikan
	Science and Innovation	- Study of application of AI and robotics for the future world
	(Miraikan)	- Move to Asakusa
	Asakusa Area	-Visit to Sensoji Temple
		- Study of Japanese culture
		- Walk through Akihabara electric appliance town
		- Return to the hotel
		- Review of the program and JST's Certificate giving ceremony
		- Questionnaire and Effect Surveillance of the program
Nov. 30, Sat.	Return to China	- Move to Haneda early in the morning
		- Return to China

## (9) Requirements of invited students and supervisor

According to the rule of Sakura Science Plan (<a href="http://ssp.jst.go.jp/EN/form/index.html#M2">http://ssp.jst.go.jp/EN/form/index.html#M2</a>), all the invited students and supervisors must satisfy the following conditions:

- <Nationality> China, holding the passport issued by Chinese authority.
- < Affiliation > Student and supervisor of each member university
- <Age > All the invited students and supervisors should be equal to or less than 40 years old.
- <Experience of visit to Japan>

In principle, the invitation by Sakura Science Plan must hold the first stay of every invitee in Japan, except cases of less ten days stay for tourism.

## (10)Coverage of Travel Expense

- (a) All the e-tickets to join the program will be arranged and delivered to each participant by UEC before departure.
- (b) When the Excel table of a participant is submitted to UEC in time for the due date of submission, the participant can easily have the visa issued at Embassy of Japan or Consulate General specified by JST without charge. If it is not in time, the participant must apply for his/her visa directly at Embassy of Japan or Consulate General with charge as well as general applicants.
- (c) All the domestic transport fares to join the program during the stay in Japan are paid by JST.
- (d) The food expense during the stay in Japan is paid by JST within the restriction of UEC rule.
- (e) The Insurance certificate for both health management and facilities damage compensation is prepared and given to each invited participant by JST on arrival in Japan.

# (11)Contact

Please do not hesitate to ask any question to anyone of:

Item	Normally	Otherwise	
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Messenger	Kenzo Takahashi	Hiroki Furukawa	

# (12) References to be preliminarily reviewed by each candidate:

The following pages will be useful for the preliminary study of specified topics by candidates.

UEC	http://www.uec.ac.jp/eng/
UEC Labs	http://www.uec.ac.jp/eng/research/researchcenters/ils.html
JAXA	https://global.jaxa.jp/
AIST	https://www.aist.go.jp/
NICT	https://www.nict.go.jp/en/index.html
Riken CBS	https://cbs.riken.jp/en/
Miraikan	https://www.miraikan.jst.go.jp/en/
Asakusa	https://www.japan-guide.com/e/e3004.html
	https://en.wikipedia.org/wiki/Asakusa

# (13) Information of Haneda Airport:

The arrival airport in Japan is Haneda IA, International Terminal <a href="http://www.haneda-airport.jp/inter/cn/">http://www.haneda-airport.jp/inter/cn/</a>