



**WINGS CFS**

World-leading Innovative Graduate Study Program  
Co-designing Future Society



**東京大学**  
THE UNIVERSITY OF TOKYO

# **未来社会協創 国際卓越大学院**

**World-leading Innovative Graduate Study Program  
Co-designing Future Society**

**工学系研究科による講義**

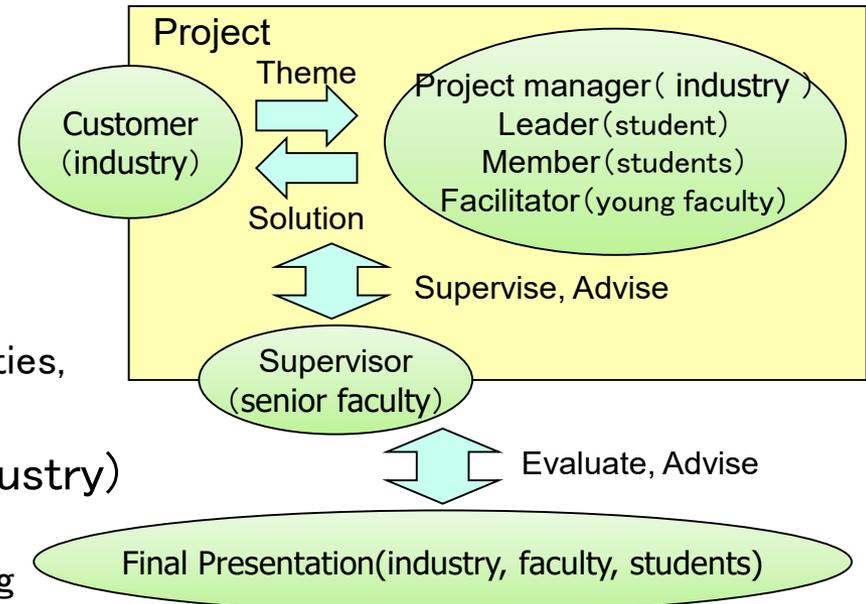
**Lectures from School of Engineering**

Application Guidance

April 2, 2021

# Engineering Competency I -Project Based Learning-

- Ability to succeed in industry/government/academia
  - Problem setting/solving through coordination/integration.
  - Needs-oriented approach.
- Challenges/subjects from industry
  - Group work with different fields, lab., nationalities, and young staffs (5 – 6 members).
- Comments from participants (students/industry)
  - Good training for teamwork/communication.
  - Active students, fresh idea, new idea by mixing industry and academia.



2018

▲ PBL implementation framework

No	Company	Title
1	East Japan Railway Company	More efficient cleaning of rail cars
2	Ebara Corporation	Human life enhancement by environmental control related to bio-engineering
3	Toshiba Corporation	How the carbon free society should be formulated
4	Shimizu Corporation	How to protect citizens from meteorological disasters
5	Ricoh Company Ltd.	Next Generation Glass Device
6	Hitachi, Ltd.	Proposal of the resolution of societal challenges by combining data in different fields and the creation of new service business



Final presentation

# Engineering Competency II

## -Research Internship-

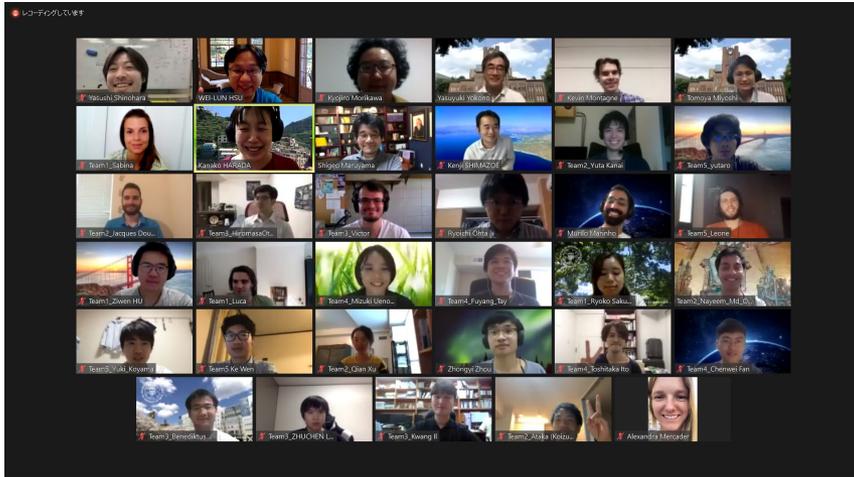


- Basically 2, 3 month or much longer, to make a solution for theme provided from company
- Agreement between university and company, regarding intellectual property and confidentiality
- Very good chance to widen your research perspective and to know about company job style

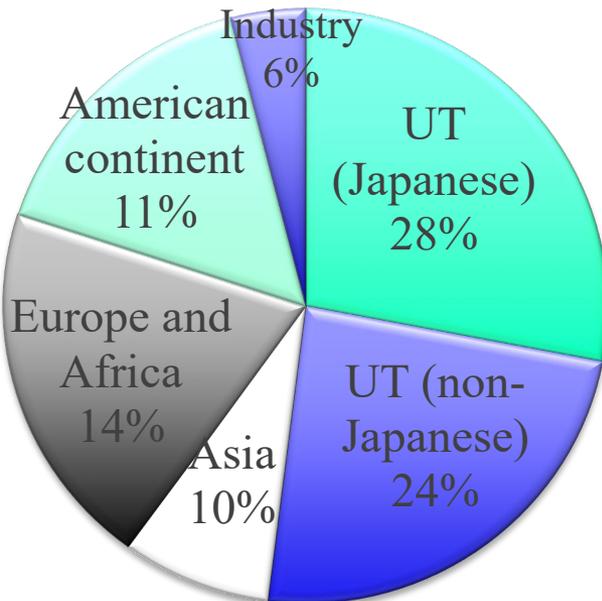


Also possible  
Joint Research at University

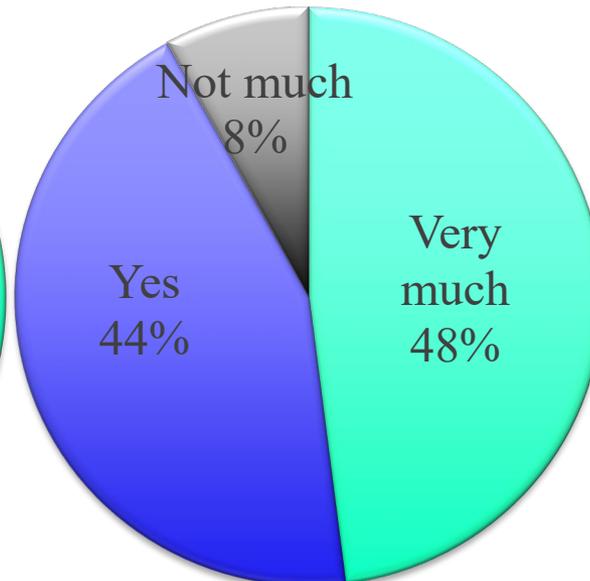
# 2020 Summer Camp



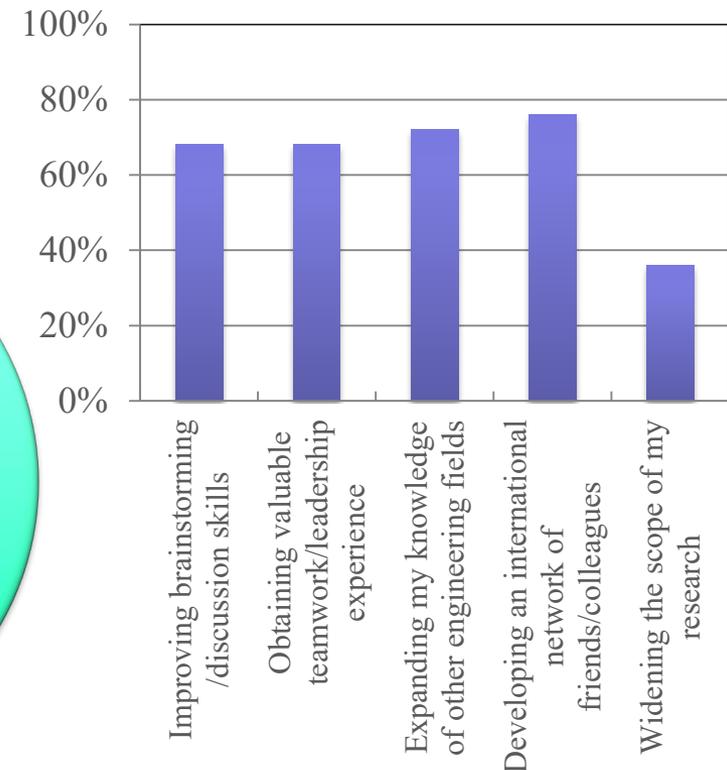
- UTokyo and world-leading universities Ph.D students discuss and exchange ideas to propose an international research project with your team members to develop an innovative device related to COVID-19
- 25 Participants from 10 universities of 9 countries & one company



▲ Participants



▲ Satisfaction



▲ Which areas beneficial

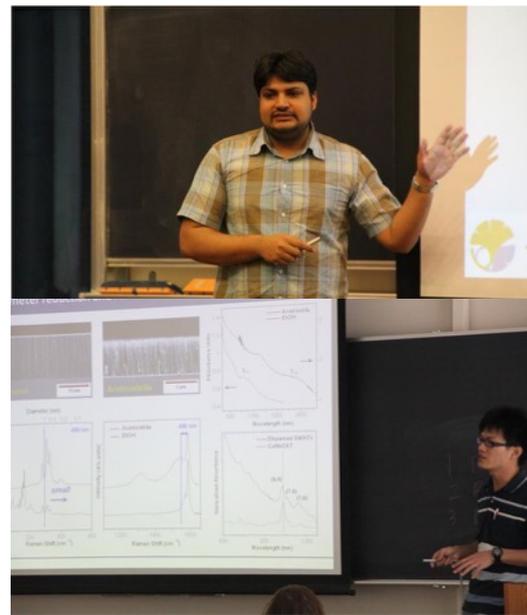


# Engineering Literacy III

## - Advanced Academic Presentation -

Time	6/2 (Thu)	6/9 (Thu)	11/10 (Thu)	11/17 (Thu)	1/12 (Thu)
14:45-14:50	<b>Orientation</b>	<b>Session 3</b> <i>Student 3</i> <i>Presentation</i>	<b>Session 5</b> <i>Student 5</i> <i>Presentation</i>	<b>Session 7</b> <i>Student 7</i> <i>Presentation</i>	<b>Session 9</b> <i>Student 9</i> <i>Presentation</i>
14:50-15:35	<b>Session 1</b> <i>Student 1</i> <i>Presentation</i>	<i>Presentation</i>	<i>Presentation</i>	<i>Presentation</i>	<i>Presentation</i>
	- Presentation - Q & A - Discussion - Feedback				
15:35-16:25	<b>Session 2</b> <i>Student 2</i> <i>Presentation</i>	<b>Session 4</b> <i>Student 4</i> <i>Presentation</i>	<b>Session 6</b> <i>Student 6</i> <i>Presentation</i>	<b>Session 8</b> <i>Student 8</i> <i>Presentation</i>	<b>Session 10</b> <i>Student 10</i> <i>Presentation</i>
	- Presentation - Q & A - Discussion - Feedback				

Involving presentation in international conferences



# International Workshop

**GMSI CIAIS GSDM**

## 2017 International Workshop in BRAZIL

-Global Business and Industry-University Collaborations-  
**March 20-27, 2017**



**EMBRAER**  
 One of the largest aerospace companies in the world. Market leaders in commercial jets with up to 120 seats



**PETROBRAS**  
 Company operating on an integrated basis and specializing in the oil, natural gas, and energy industry



**DENSO**  
 One of the largest global automotive suppliers in the world. Market leaders in commercial jets with up to 120 seats

**NASA**  
 National Institute for Space Research  
 Fostering science and technology in earth and space context and be able to offer products and regular services in benefit of the country

Universidade de São Paulo (USP)  
 Mechanical Sciences and Engineering,  
 Laboratory of Environmental and Thermal Engineering (LETE),  
 Comfort Engineering Center (CEC)

To be eligible to attend you must:

- Have a deep interest to BRAZIL
- Able to discuss on WS topics
- Have an approval from your supervisor
- Able to follow visiting countries immigration laws (visa and etc.)

To apply, send one-page abstract of your research topic and your scanned passport to:  
[office@gmsi.t.u-tokyo.ac.jp](mailto:office@gmsi.t.u-tokyo.ac.jp)  
 by **Wed., Jan. 18, 2017**  
 \*Travel and accommodation expenses will be covered

**CIAIS**

## 2017 INTERNATIONAL WORKSHOP ON "MATERIALS FOR FUTURE"

**Australia, 2017 August 21st-27th, 2017**



**Call for Participants**

No. 1 University of Melbourne, advance research in polymer and material engineering

**MCN**  
 ANFF  
 WOTIMA

**AGENDA**

- Expand your research network
- Focus on advance Materials
- Foster the innovation
- Discussion with students & professionals

The Melbourne Centre for Nanofabrication is a leader in micro/nanofabrication innovation and technologies



**RMIT UNIVERSITY**  
 RMIT is a global university of technology and design and Australia's largest tertiary institution

**Selection Criteria (Max 8 students):**

1. Only for doctoral students
2. Related research topic with Material Development
3. Approval from supervisor
4. Able to discuss on various topics

To apply, send one-page abstract of your research to:  
[office@gmsi.t.u-tokyo.ac.jp](mailto:office@gmsi.t.u-tokyo.ac.jp) by **13th June, 2017**  
 \*Travel and accommodation expenses will be covered



NM-AIST Workshop



Takeshi Japanese School



Group Meeting at UAC



Best Proposal Award

**GSDM Call for participants GMSI**

## 2018 International Workshop on Global Research Challenges in Africa Compared to Japan

**2/16- 2/25, 2018**

Abomey - Calavi University in Benin Republic  
 Science and Engineering challenges in global area

Nelson Mandela African Institute of Science and Technology (NM-AIST) in Arusha (Tanzania)

**Activities:**

- Visit of Tanzanite Mines of Merelani
- Experience rural life or daily life in family and more...

**Selection Criteria (Max 8 students):**

- Have a deep interest in African countries
- Able to conduct discussions based on your own research in English
- Have the approval of your supervisor
- Will comply with the laws of the visiting countries (vaccination, visa etc.)

To apply, please send the required documents to:  
[office@gmsi.t.u-tokyo.ac.jp](mailto:office@gmsi.t.u-tokyo.ac.jp)  
 Application deadline: 12:00, Dec 1\*, 2017  
 \*Travel and accommodation expenses will be covered.

**GMSI CIAIS GSDM**

## 2018 International Workshop on EU Research Institutes

**February 28 - March 7, 2018**

The Institute of Photonic Science visits to e.g. Alba synchrotron facility, Barcelona Super Computer facility, other research centre and/or local company



**ICFO**  
 Institut de Ciències Fotòniques



**TUM** Building Realization and Robotics Prof. Thomas Bock laboratory at Technical University of Munich

**Selection Criteria (Max 8 students):**

- Have a deep interest in EU Research Institutes
- Able to conduct discussions based on your own research in English
- Have the approval of your supervisor
- Will comply with the laws of the visiting countries (visa etc.)

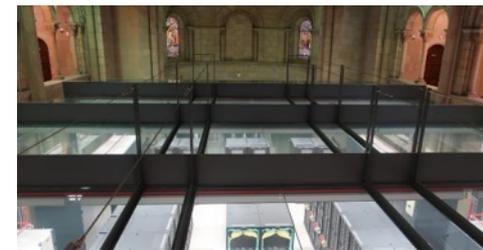
To apply, please send the required documents to:  
[office@gmsi.t.u-tokyo.ac.jp](mailto:office@gmsi.t.u-tokyo.ac.jp)  
 Application deadline: 12:00, December 15, 2017  
 \*Travel and accommodation expenses will be covered.



ICFO Workshop



ALBA Synchrotron Facility



Barcelona Supercomputing Center



TUM Prof. Bock Lab.



# Global Field Exercise (Urban Eng.)

( 3717-016~019, Environmental Field Exercise1E-4E )

## Schedule Sep. 2021

### China (Wenzhou) Unit

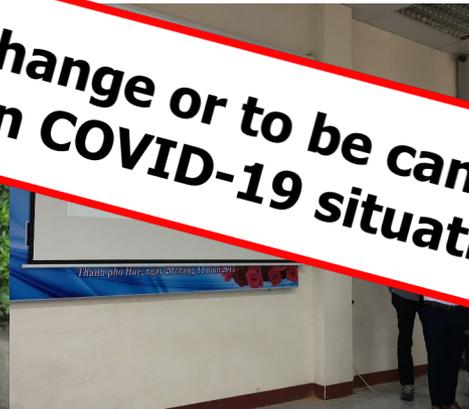
- 1<sup>st</sup> day: Departure and Orientation Session
- 2<sup>nd</sup> day: Lecture and Group discussion
- 3<sup>rd</sup> day: Field survey
- 4<sup>th</sup> day: Lecture and Group discussion
- 5<sup>th</sup> day: Intermediate Presentation
- 6<sup>th</sup> day: Field survey
- 7<sup>th</sup> day: Group discussion
- 8<sup>th</sup> day: Group discussion
- 9<sup>th</sup> day: Field survey
- 10<sup>th</sup> Day: Final Presentation
- 11<sup>th</sup> Day: Return to Japan

## Schedule Feb.~Mar. 2022

### Vietnam Unit

- 1<sup>st</sup> day: Departure
- 2<sup>nd</sup> day: Lecture and Group Discussion
- 3<sup>rd</sup> day: Field survey
- 4<sup>th</sup> day: Field survey
- 5<sup>th</sup> day: Field survey
- 6<sup>th</sup> day: Group discussion
- 7<sup>th</sup> day: Preparation for presentation
- 8<sup>th</sup> day: Final Presentation
- 9<sup>th</sup> day: Return to Japan

**Subject to change or to be canceled depending on COVID-19 situation.**



Practice for Interdisciplinary Discussion

# Urban Redesign Studio

( 3713-086/3714-136/3716-152 )



2020

## Pre-Disaster improvement of Tokyo Lowland 2050

- Designing for Pre-reconstruction in preparation for a Metropolitan earthquake



**Cf. 2019 : Designing Nanyo (南予地域)**

**— Pre-Disaster improvement and Regeneration of peninsula and city centre**

- Interdisciplinary Special Lecturer and Esquisse (Researcher, Architect, Urban planner, Interiadesigner, Administrative official etc.)
- Field work and Presentation @ Ehime(愛媛) prefecture

# Practice for Future Society Co-Creation

# Internship in Civil Engineering

( 3713-109 )



Institutions: University,  
Research institutions, Public  
institutions and Private firm etc.

Country: UK, USA, France,  
Germany, Italy, Czech Republic,  
Iran, Vietnam, China, Cambodia  
etc.



**ADB(Asian Development Bank)**  
**Internship Program**



**École nationale des ponts et  
chaussées**  
**Double-degree Programme  
for Master Course students**



# <http://cfs.t.u-tokyo.ac.jp>



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THE UNIVERSITY OF TOKYO



## NEWS & EVENTS

2019/04/01

2019年度春の募集要綱を掲載しました。 [詳細はこちら](#)

スケジュール（予定）は以下の通りです

2019年4月4日(木) 17:00-18:00 CFS説明会(ガイダンス)：場所 工学部2号館2階221講義室

2019年4月12日（金）応募申請書の提出締切

2019年4月17日（水）面接実施

2019年4月24日（水）合格発表予定

Application Materials for WINGS CFS 2019 Spring. Please click [here](#) for the details.

The schedule (planned) is as follows.

April 4, 2019 17: 00-18: 00 (Thursday) - CFS Briefing Session (Guidance): Place Faculty of Engineering No. 2 Building 2nd floor 221, Lecture Room

April 12, 2019 - Deadline for submission of application form on

April 17, 2019 (Wednesday) - Interview

April 24, 2019 (Wednesday) - Announcement of admitted applicants list