



# Global Leader Program for Social Design and Management

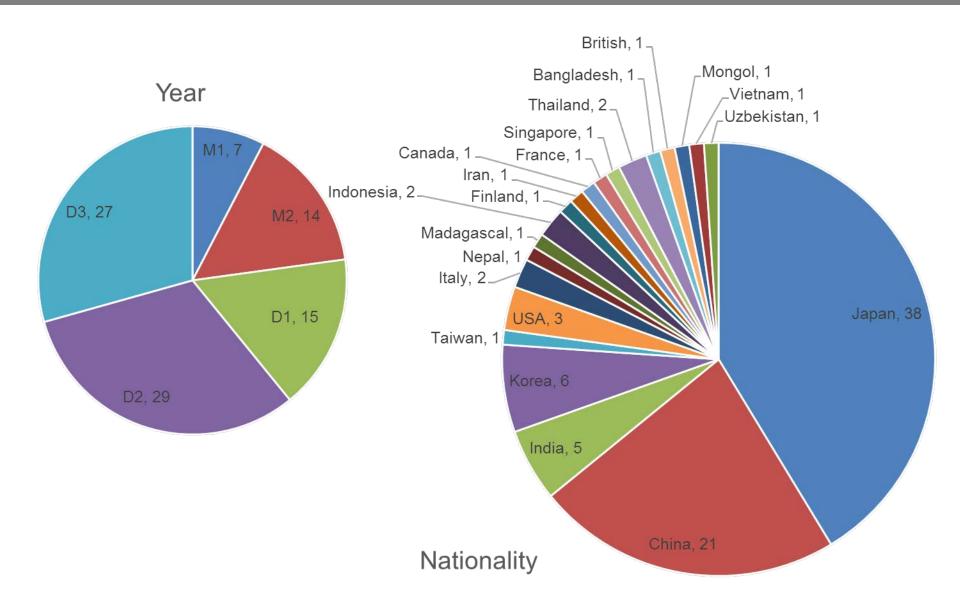
Program Guidance

Oct 02, 2018



## 92 GSDM Students as of today



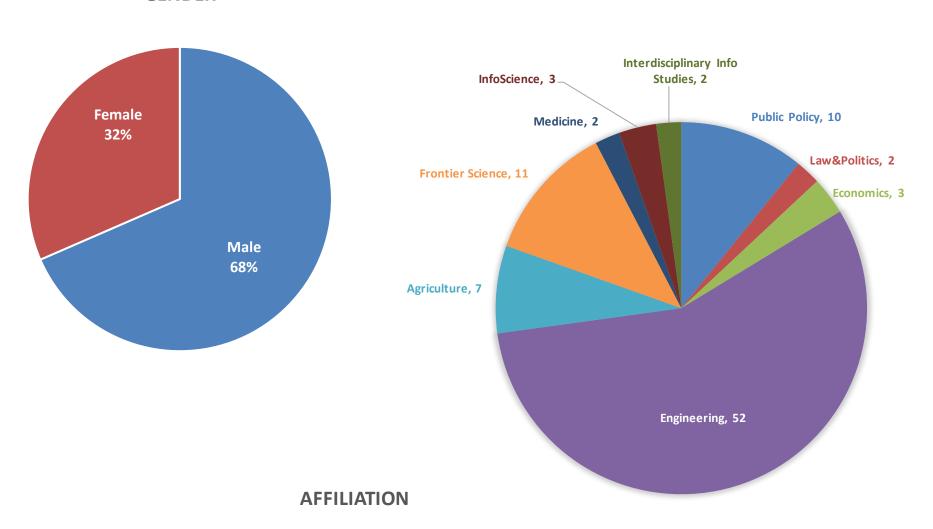




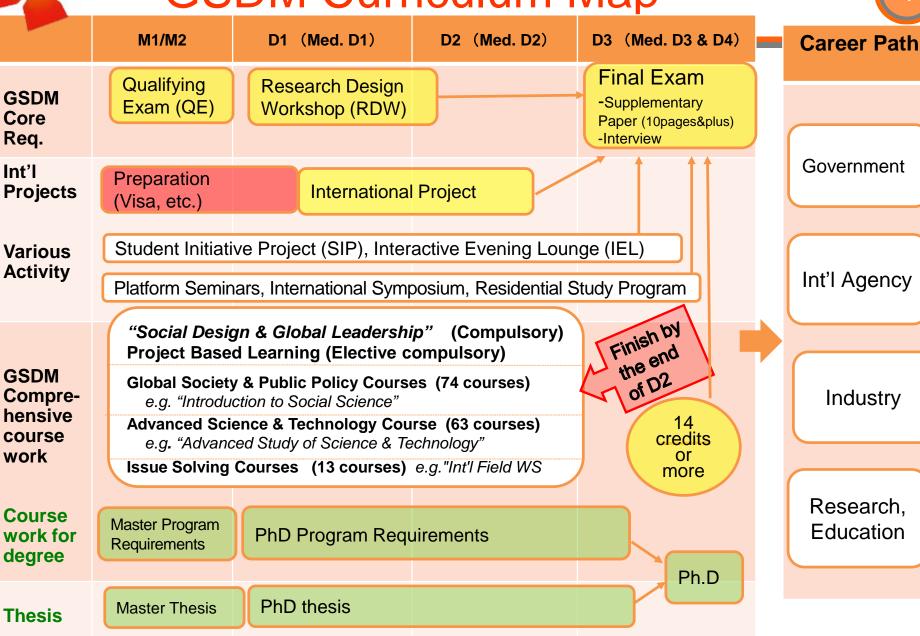
## 92 GSDM Students as of today



#### **GENDER**



## **GSDM Curriculum Map**





## Comprehensive Coursework

Comprehensive coursework is designed to help students build a sound knowledge base that bridges multiple areas of expertise. The coursework consists of one compulsory course and courses from the following three core areas.

- Compulsory course 'Social Design and Global Leadership'
- Global society and public policy courses (74 courses)
- > Advanced science and technology courses (63)
- ➤ Issue solving courses (13)

## Program Completion Requirement



- (1) Comprehensive coursework
- a) Pass <u>required course</u>: 'Social Design and Global Leadership' 2credits
- b) Pass <u>compulsory electives</u>: either 'Engineering Competency I [IS-1]' or 'Case Study (Project Based Learning) [IS-7]' 2credits
  - \*The required course and compulsory electives must be taken within two years after starting the program.
- c) Take required credits from 3 Core Courses

4credits from Advanced Science Technologies Courses

4credits from Global Society & Public Policy Courses

2credits from Issue Solving Courses

- \*Out of 10 credits, 6 must be taken from English taught courses.
- \*All the required course and credits must be taken by the end of your D2 completion timing.
- \*Total number of credits you need to earn from a), b), c) above will be 14.
- (2) Pass Qualifying Examination (Master students only)
- (3) Pass Research Design Workshop
- (4) Pass International Project

### Final Exam

(Supplementary paper of 10 pages & Interview)



## Social Design and Global Leadership [Compulsory Course]



#### Goal

- Acquire skills to identify social issues and design solutions, primarily in the form of problem definition, while taking an active role as a global leader
- Development of the students' ability to perform group work
- Acquisition and development of leadership capabilities

### Learning Process

- One lecture, followed by group work
- Intensive discussions about cases

### Case study on:

International space collaboration, Energy security
 International public health, International economic management

### Learning Outcomes

- Problem definition skills
- Refined presentation skills
- Proficient communication skills





## Social Design and Global Leadership [Compulsory Course]



#### Schedule of AY2018

Apr. 21 13:00-17:00	I	Introduction	Prof. Shiroyama
	П	Basic concepts and methods for social design and management and Medical Innovation	Prof. Suzuki
Apr. 22 13:30-17:00		Energy Security	Prof. Tanaka
Apr. 30 9:00-17:00	I	International space collaboration	Prof. Nakasuka
	П	International economic management	Prof. Kawai
May. 12 13:30-17:00	I	International public health	Prof. Shibuya
	П	Group formation for final presentation	
Jul. 7 9:00-13:30		Presentation by groups and comments	

## Project Based Learning on the Medical, Environmental and IT Innovation and the Role of Public Policy [Elective Compulsory]

- Elective compulsory from AY2016
- Students are encouraged to identify problems in the society, and to experience specific project, design/planning, launch, operation, execution, and evaluation to refine problem solving abilities.
- Students should develop the ability to formulate and evaluate options for problem-solving

#### Schedule of AY2018 (A1&A2)

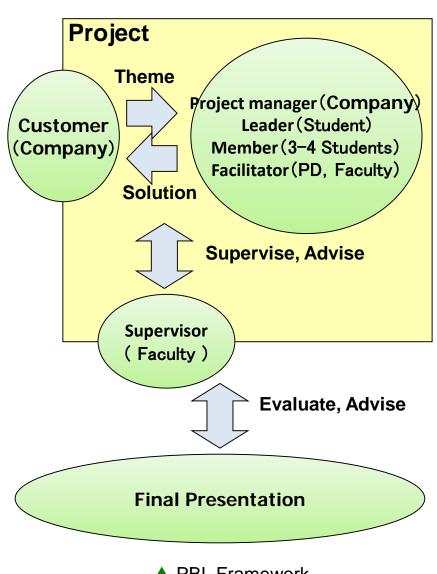
Oct. 21	Introduction
	Case 1. Health Care
	Case 2. Pharmaceutical R&D
Nov. 3	Case 3. Education and Human Resource
	Case 4. Information Security
	Case 5. Social Innovation and NPO
	Grouping discussion
Dec. 23	Follow up
Jan. 27	Group Presentation, Evaluation and Feedback



## Engineering Competency I (Project Based Learning) [Elective Compulsory]



- Business solution
  - Real-life problems from company
  - not only idea but product and/or verification
  - 4 month group work
- Team
  - Students from different lab, department, and nationality
  - Company member
- Students learn
  - How to communicate with professionals of another field
  - Project management
  - How to correlate (their) top-level R&D with concrete, feasible, realistic solutions





## Engineering Competency I (Project Based Learning) [Elective Compulsory]



You have to attend the following sessions and also arrange meetings by yourselves.

October 5: Guidance, Team member selection

October 18: 1st presentation (6 min + Q&A)

December 6: mid-term presentation (6 min + Q&A)

■February 1: final Presentation (12 min + Q&A)



▲ Final Presentation

 Call for 2019 class will be announced on the GSDM website (http://gsdm.u - tokyo.ac.jp/) in September, 2019



## Introduction to Social Science [Global Society & Public Policy Course]



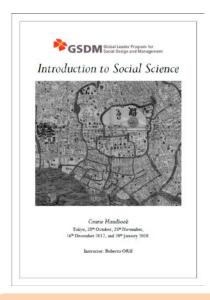
An overview of epistemological and methodological concepts, issues and techniques concerning the production of scientifically relevant knowledge in social sciences

#### Keywords

- Social Science Methodology, Social Science Epistemology, Research Methods
- Lectures (AY2018 : Oct.27, Nov.24, Dec.22, Jan.12)
  - 1: Introduction to the Course
  - 2: Science, Epistemology and Methodology
  - 3: Methodology of Social Sciences
  - 4: Social Science Research and Its Stages
  - 5: Quantitative Methods: Presentation of the Methods
  - 6: Quantitative Methods: Cost-Benefit Analysis
  - 7: Qualitative Methods: Overview of the Qualitative Methods
  - 8: Qualitative Methods: Case Study
  - 9: Climate Change: Technological and Social Perspectives
  - 10: Case Study
  - 11: Ethics of Social Science Research
  - 12: Objectivity and Emancipation in Social Science
  - 13: Wrap-up Lecture

#### Outputs

- Research design presentations through working groups
- Deeper understanding on social science methodological possibilities and their limitations



Research designs proposed upon group discussion after each lecture



## Advanced Study of Science & Technology

### [Advanced Science & Technology Course]

13

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Oct. 6	1. Comparative Health System	(Prof. Kobayashi Y)			
	2. Three-dimensional fusion image for simulation of Neurosurgery	(Prof. Nakatomi H)			
	3. Technology transfer and boundary of organization	(Prof. Kano S)			
	4. Technology maps for industry analysis	(Prof. Kano S)			
Oct. 13	1. Robot Assisted Surgical System (1)	(Prof. Mitsuishi M)			
	2. Robot Assisted Surgical System (2)	(Prof. Mitsuishi M)			
	3. Technology management strategy of Japanese high-tech companies	(Prof. Motohashi K)			
	4. Carbon nanotubes and nanotechnology	(Prof. Maruyama S)			
Oct. 20	1. System safety: resilience	(Prof. Furuta K)			
	2. Paris agreement and green growth	(Prof. Matsuhashi R)			
	3. Advanced science in preventing non-communicable diseases (NCDs)	(Prof. Lee JS)			
	4. Advanced science in preventing non-communicable diseases (NCDs)	(Prof. Lee JS)			
	Final exam	(Prof. Kobayashi Y)			
TBA	Site Visit to University Hospital	(Prof. Nakatomi H)			

In AY 2017, 27 students completed this course.

#### Students' evaluation:

- It was a very good opportunity to know about other fields, such as medical nano-device and surgeon assist system.
- It was amazing to see how many researchers from different background and disciplines can bring in such a variety of new and innovative perspective.



## Site Visit to the Utokyo Hospital, 2017





## Case Study (International Field Workshop)

## International Field Workshop (IFW)



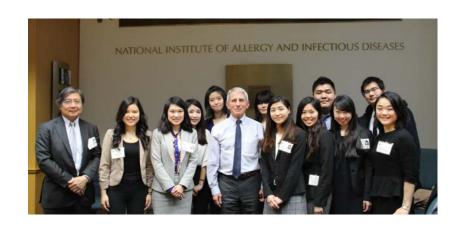
- Be actively involved from the planning stage and lead discussion with professionals.
- Test your own expertise face to face with professionals.
- Connect yourself with professional networks to develop your future career.



# Case Study (International Field Workshop [Issue Solving Course]

#### Please come to Information Session

18:45-20:00 on Wed, Oct 10th Seminar Room B, 4th floor International Academic Research Building



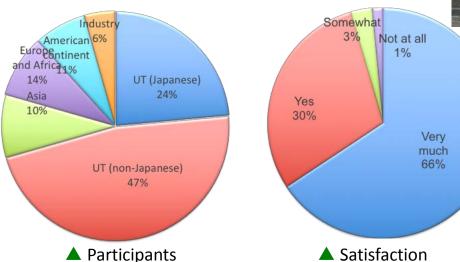
Those who want to register for this course should submit a proposal as instructed in the information material and have to pass selection process.



## Engineering Competency III (Summer Camp)



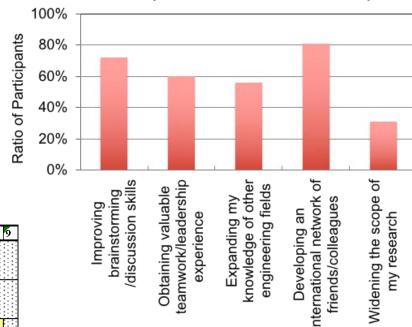
- UTokyo and world-leading universities
  Ph.D students discuss and exchange ideas
- 68 Participants from 18 universities of 13 countries & 3 companies



7 am 12 1 pm 2 July Self-Opening/ UTokyo Reg. Travel to Camp introductio Dinner Lectures lab tour July Break Technical Team Excursion Dinner 28 fast Session July Break Dinner Team Meeting **Team Meeting** 29 July Break Final Return to Tokyo 30 fast Presentation & Closing



2018 Venue: UTokyo and LAFORET Shuzenji



▲ Which areas beneficial

■ Schedule of Summer Camp



## Engineering Competency III (Summer Camp)



## Team meetings and presentation

Task is to **propose an innovative device for the Japanese society** related to <Energy, Environment, Healthcare, Information Technology, Infrastructure>

and propose an international research project to demonstrate the proof of concept or to accelerate the innovation process.







## Engineering Competency III (Summer Camp)

2018 Summer Camp:
 Friday, July 27 to Monday, July 30, 2018
 The University of Tokyo & Laforet Shuzenji Hotel,
 Shizuoka prefecture

 Call will be announced on the GSDM website (http://gsdm.u - tokyo.ac.jp/)



## Interactive Evening Lounge (IEL)



- IEL has been established for a variety of purposes, primarily in order to enhance
  - Socialization
  - Information exchange concerning relevant matters from technical and research questions
  - Practical lessons from practitioners' career experiences
- It is thus a valuable platform for students to develop a sense of belonging and community within the GSDM framework, because students belong to different departments/schools scattered across different UTokyo campuses.
- It is an opportunity open to all members of GSDM, both students and faculty members, to gather in a relaxed, and informal atmosphere.



## Types of IEL



- Report by students returning from International Projects
- Presentation of Student Initiative Project (SIP)
- ❖ Book Club
- Carrier pass by GSDM graduates
- Presentation by external lecturers, etc.



In 2017, a total of twenty-one IELs has been held and 229 students and faculty members attended





Date	Title
25 May	Book Club
29 May	Career drawing with GSDM graduates and Talk battle with Prof. Shiroyama
23 June	The path toward a life in Washington, DC as a young professional
29 June	International project, a path way for a global leader_part 1
5 July	Book Club
12 July	Choosing the topic of the next GSDM International Symposium
26 Oct	International project, a path way for a global leader_part 2
30 Oct	Book Club
9 Nov	Career path to the United Nations
15 Nov	Sense of good carrier choices-Global corporations need your interdisciplinary talents
22 Nov	Global Health Governance: Research Priority for Neglected Tropical Diseases





Date	Title		
24 Nov	Innovation to achieve Sustainable Development Goals: personal reflections from two decades (UTokyo4SDGs)		
27 Nov	Book Club		
6 Dec	Economic growth and its impact on environment and society (UTokyo4SDGs)		
14 Dec	Book Club		
10 Jan	Experience the future – 2030 SDGs Game (UTokyo4SDGs)		
25 Jan	Book Club		
5 Feb	Cutting edge technology enterprises – Journey from research to entrepreneurship (UTokyo4SDGs)		
28 Feb	Space innovation & Disaster management (SIP No.3&4 final report)		
1 Mar	From the lab to the market: alternative career pathways for researchers in the 4th industrial revolution		
8 Mar	Book Club		



**Book Club** 



Career drawing with GSDM graduates / Talk battle with Prof. Shiroyama



Innovation to achieve
Sustainable Development Goals



International project, a path

way for a global leader



International project, a path way for a global leader



Choosing the topic of the next GSDM International Symposium

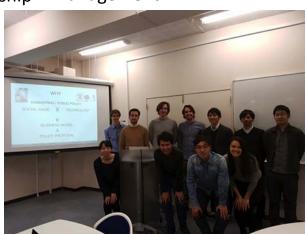






Cutting Edge Technology Enterprises – Journey from Research to Entrepreneurship





Economic growth and its impact on environment and society



From the lab to the market

Sense of good carrier choices



Experience the Future







### **IEL** Attendance



- ❖ IEL is a very important curriculum of GSDM program
- Attendance of IEL will be considered in QE, RDW and Final Exam

#### The information of IEL will be announced at Facebook and Slack



Please contact us if you have any ideas / questions! gsdm-iel@pp.u- t okyo.ac.jp



## Student Initiative Project (SIP)



- 1. Students coordinate a project consisting of several students with <u>interdisciplinary</u> and <u>multinational</u> backgrounds.
- 2. Each project aims to <u>solve some global/social issues</u> and to produce deliverables that practically address the issues in the form of a <u>policy report</u>, a <u>business plan</u>, and so forth.
- 3. Students are responsible for planning and execution of the project.
- 4. In executing SIP, each student is expected to go beyond his/her own disciplinary expertise.
- 5. Some <u>milestone events</u> are arranged to facilitate the progress and to provide <u>feedback from practitioners</u>.
- 6. Each SIP lasts from a half to one year.

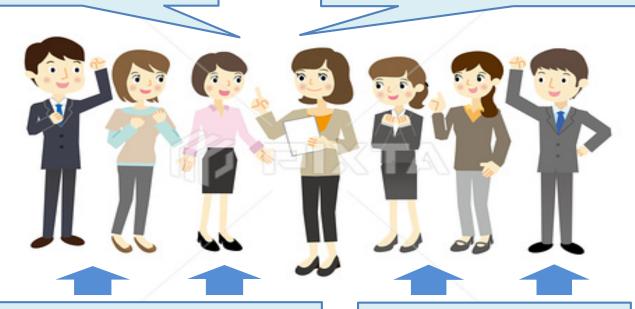


### **A Team Formation**



Leader(s): One or a few will give an idea/proposal

Members: who agree with the idea will become members and cooperate



External practitioners

Feedback/support



Faculty members

Advice/admin support









★ Students are strongly recommended to participate in SIP during GSDM years.

At least <u>once as a leader</u>
At least <u>once as a member</u>

**★** Participation to SIP will be considered when QE/RDW and Final Exam!



### **Milestones**



SIP groups have several opportunities to obtain advice from GSDM faculty members and external practitioners.





## Schedule for AY2018\_Spring



- Fourth season of SIP will start in April
  - April 13: Tentative Proposal deadline
  - <u>April 17: Member Recruitment Meeting</u>
  - April 27: submission of Revised Proposal
  - May 7~11: Proposal Review Meeting
  - May 14~18: Final Proposal
  - Mid-May: Examination at the Steering Committee
    - **→**launch project



## SIPs in AY 2018\_Spring







1. AgriDronevation: Agricultural Drone Innovation





3. Visualizing Japanese National Budget







4. Future Cities: Horizon scanning in urban planning



5. Space Development in ASEAN: History and Way Forward



6. Breaking the "Echo Chamber" of social media



7. GLEG (Global Leaders X Ethics X Games): Development & propagation of a new learning method for ethical capacity building

8. Food Waste in Japan



## SIPs in AY 2018\_Autumn



#### Two projects are in preparing



9. Fashion Al: A tech-driven business model





10. Encouraging science in Japan





## Schedule for AY2018\_Autumn



- August : Preparation process starts
  - 18 Sep.: Tentative proposal deadline
  - 2 Oct. (Today): Member Recruitment Meeting ★20:30~21:00
  - 19 Oct.: Submission of revised/progressed proposal
  - 23 Oct.: Proposal/Interim review meeting
  - 31 Oct.: Final Proposal
  - 8 Nov.: Approval at the Steering Committee
    - → Notify whether launch your project



## SIP Faculty Members



- ❖ SIP is a very important curriculum of GSDM program.
- ❖ Participation in SIP will be considered in QE, RDW and Final Exam.

## Please contact us if you have any questions <a href="mailto:gsdm-sip@pp.u-tokyo.ac.jp">gsdm-sip@pp.u-tokyo.ac.jp</a>

Dr Kevin Montagne, project lecturer, Graduate School of Engineering Dr Jung Su Lee, project associate professor, Graduate School of Medicine



## International Project



Bridge between the acquired knowledge/expertise and the real world. You will gain practical experiences in solving issues.

- One of the requirements to complete the program
- International joint research or international internship
- Could be done in Japan
- GSDM students who have passed QE are eligible. Those who start the program at D1 don't need to take QE before starting the international project.
- 1.5 to 6 months with the financial support of up to 750,000yen.
- Submit the application materials <u>at least two months prior</u> to the start of the project.



It <u>takes time</u> to prepare for the International Project. Get started at least 6months in advance.



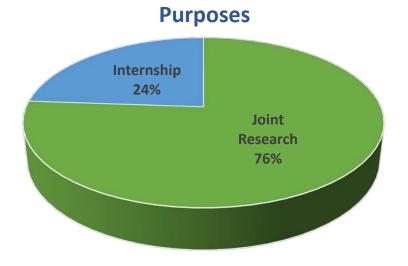
<sup>\*</sup>Check the GSDM WEB site or contact GSDM office for details.



# Facts about the International Project



- ◆ 54 students, including the ones who completed GSDM, have finished the International Project so far.
- ◆ More students have chosen to do joint research rather than internship.
- ◆ A wide-ranging destinations have been chosen while the USA is the most popular.



#### **Status of International Project**

(As of October 1, 2018)

Completed	63
Ongoing	4
Total	67

Destinations	Number
USA	25
Japan	9
Germany	7
Switzerland	7
France	5
England	3
Italy	2
Netherland	1
Australia	1
Canada	1
Taiwan	1
Philippines	1
Malaysia	1
Luxembourg	1
Uganda	1
Indonesia, Camodia, Myanmar (3 project sites)	1
	67



# Qualifying Examination



### Who has to take it?

All master candidate students

### When?

One year after the enrollment to GSDM (students who enrolled in M1) At the end of M2 (students who enrolled in M2)

### Purpose

To verify the intension of going to the doctoral thesis and the preparation to become the kind of human resource expected by GSDM



## What will be evaluated in QE?



### Report

- 1. Research Plan
- 2. How to identify the links between your research and social issues, possibly leading to a practical solution with a view to your future Supplementary Paper
- 3. Review of the participation in GSDM program
- Comprehensive Coursework
  - 2 credits from each course (total 6 credits).
  - 'Social Design and Global Leadership' can be substituted for 2 credits of Issue Solving Courses
- Group work
- Individual presentation (2 minutes)



# Research Design Workshop



### Who has to take it?

All doctor candidate students

### When?

One year after the enrollment to GSDM (students who enrolled in D1) At the end of D1 (students who enrolled in M1& M2)

### Purpose

To verify the prospects of completing the doctoral thesis and the preparation to become the kind of human resource expected by GSDM



## What will be evaluated in RDW?



## Report

- 1. Extended abstract of doctoral dissertation research
- 2. How to identify the links between your research and social issues, possibly leading to a practical solution, with a view to your future Supplementary Paper.
- 3. Review of the participation in GSDM program

## Presentation (7 min + 13 min of Q&A)

Your doctoral research project and its progress

How your research can contribute to the solution of social problems

What kind of ability you have acquired through the GSDM program

<sup>\*</sup> This does not exclusively refer to the exposition and description of a concept, but the project/presentation must contain concrete ideas for its implementation in the real world, including financial and legal aspects, social and political consequences.



# What to do to prepare for QE and RDW?

- You must take various Comprehensive Coursework courses.
  - However, just taking courses to satisfy the completion requirements will not be enough.
- You should actively participate in GSDM Platform Seminars, GSDM Interactive Evening Lounge (IEL), Students Initiative Projects (SIP) and other events.
- You should strive to have continuous discussions on your own initiative with various parties such as students, teachers, people from industry and governments.
- You need to consider the relation between your research and outstanding social issues.
- Attend the dedicated pre-QE and pre-RDW meetings.





Home > Curriculum > Secondary Advisor Program

#### Curriculum

JAPANESE

#### Secondary Advisor Program

The secondary advisor program was introduced with the aim of developing doctorate holders with a wide range of specializations. This program provides GSDM program students with opportunities to receive advice from secondary advisors in addition to their main supervisor.

#### Eligibility

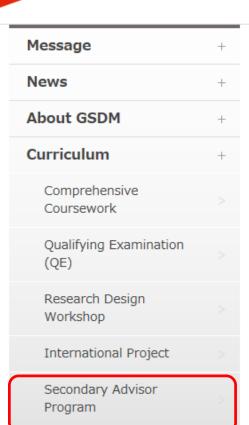
• All GSDM program students enrolled in the doctoral program are eligible to receive advice from secondary advisors in addition to their main supervisor.

#### Credits

 No credits are awarded for participation in the program. Students are required to submit reports on their meetings with their secondary advisors.

#### Content

Students receive advice concerning the preparation of Supplementary Paper. This
paper should propose solutions to a social problem (assessing practical applications
for technology, developing public policy, or dealing with ethical issues) by building on
the content of the Vision section of the Research Design Workshop document. The
content to be discussed at meetings with secondary advisors will be determined by
agreement between program students and their secondary advisors. Examples of the
advisory relationship include the following:





## The advisory relationship



Examples of the advisory relationship include the following:

1. Students visit their secondary advisors at regular intervals and receive advice on their supplementary paper.

- 2. Students participate in workshops organized by their secondary advisor, making presentations and engaging in class discussions.
- 3. Students receive career advice from their secondary advisors based on the advisor's experience, etc.



# Supplementary Paper

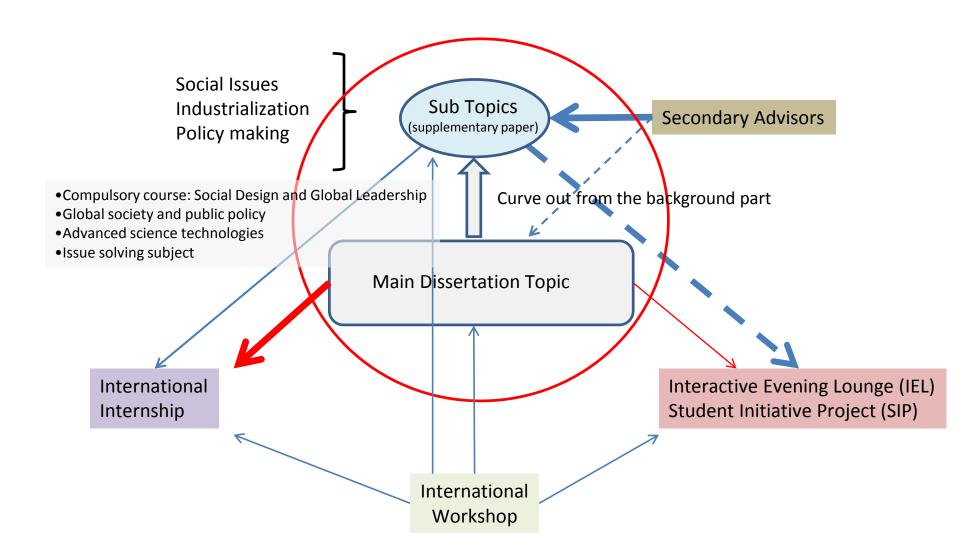


- The Supplementary Paper shall contain a discussion of the social implications of the problems;
  - that related to the main doctoral topic.
  - with <u>interdisciplinary analysis</u> for implementing solutions or with the <u>framework</u> for combining technological research and public policy research
  - by building on the content of the Vision section of the Research Design Workshop (RDW) document.
  - The minimum length of the Supplementary Paper is ten pages (4,000 words), and it must be written in English.



# Sub topics & GSDM activities







# How to select Secondary Advisors (SAs)

- < Selection >
- Possible main topic and sub-topics
- The profile of SAs you need, first (do not write names only)
- Look the teacher list of GSDM and select direct & indirect candidates
   → GSDM will propose two SAs to you
- < Relations >
- Before the meeting with SAs, prepare several alternatives for sub-topics
- Discuss at least One/Two times per year
- Keep the discussion records and submit contact memos to GSDM HQ
- < Topic change >
- In case the change of a main/sub topic, you need to inform GSDM
- You can change your SAs at any times



## **Mentors**



### Support Course Work GSDM and various GSDM activities













M1	Jihyun Na, Daniel del Barrio Alvarez
M2	Ponou Josiane, II Joen
D1	Lee Jung Su, Ponou Josiane
D2	Roberto Orsi, Kenji Shimazoe
D3, D4	Roberto Orsi, Montagne Kevin



# Mentors (career)





Based on their broad network on companies, governments, international organizations, advise on your carrier design.



# Important Information



# **Spring Retreat March 2019**

From 17 March to 18 March, 2019
At LecTore Hayama in Shonan Kokusai Village



## All GSDM students must join the Retreat!

- Spring Retreat provides opportunities to learn from each other and to deepen mutual understanding..
- The program will include dialogue with invited professionals, student-led activities, Leadership Award celebration and GSDM Commencement ceremonies, etc.
- Student proposals on the Spring Retreat program are welcomed!







# Very Important



- Inform GSDM office when you leave Japan for studying abroad, internship or any other reason.
- Carefully check emails from GSDM office and strictly observe the deadline of submission or reply.
- Read the Agreement in the enrollment document package carefully, especially where it mentions the application for DC1/DC2.
- Student Leadership Award: students compete for an annual prize awarded on the basis of their performance as leaders.
- GSDM office will share your email address with GSDM student committee.

### **About the GSDM Student Committee**

- The Committee is an informal student-led organization that connects students with professors and organizes exciting extracurricular activities (social gatherings, networking events, workshops, etc.)
- The Committee currently counts six students
   (Xie Hong, Yamamoto Haruhisa, Kaittisak Kumse, Scartozzi Cesare, Su Meng, Liu Xiaoxiao).

   Anyone is welcome to join!



### What we do:

- Meet with GSDM professors once every month to send students' voice to faculty.
- Organize extracurricular activities.
- Listen to students' voices.
- Answer students' questions.
- Help new students to make the most of GSDM!



Middle October, 2018. Picnic in Yoyogi Park.





Email: stu.com.gsdm@gmail.com

## -Slack

### where we share information and exchange ideas

