University-wide Graduate Education Program

Science, Technology and Innovation Governance (STIG) Education Program

東京大学
THE UNIVERSITY OF TOKYO

Director   Graduate School of Public Policy

Prof. Hideaki Shiroyama

2020 Autumn Guidance

An overview of STIG

Educational and research project on technology governance

University-wide graduate education program
•12-credit certification program

SciREX
サイレックス事業
科学技術イノベーション政策における
「政策のための科学」

GraSPP
THE UNIVERSITY OF TOKYO
東京大学公共政策大学院
Graduate School of Public Policy

Graduate School for Law and Politics

Graduate School of Economics
Faculty of Economics
The University of Tokyo

東京大学大学院 医学系研究科・医学部
Graduate School of Medicine and Faculty of Medicine, The University of Tokyo

東京大学大学院 情報学環・学際情報学府
The University of Tokyo III / GSII

SCHOOL OF ENGINEERING
THE UNIVERSITY OF TOKYO

東京大学大学院
工学系研究科

東京大学 大学院総合文化研究科・教養学部
The University of Tokyo, Komaba
Graduate School of Arts and Sciences, College of Arts and Sciences

Government offices &
Research instituties

PARI
東京大学政策ビジョン研究センター
Policy Alternatives Research Institute

CAST
東京大学 先端科学技術研究センター
Research Center for Advanced Science and Technology

Collaborate
with other
universities

KYOTO UNIVERSITY
FOUNDED 1897

大阪大学
OSAKA UNIVERSITY

九州大学
KYUSHU UNIVERSITY

HITOTSUBASHI
UNIVERSITY

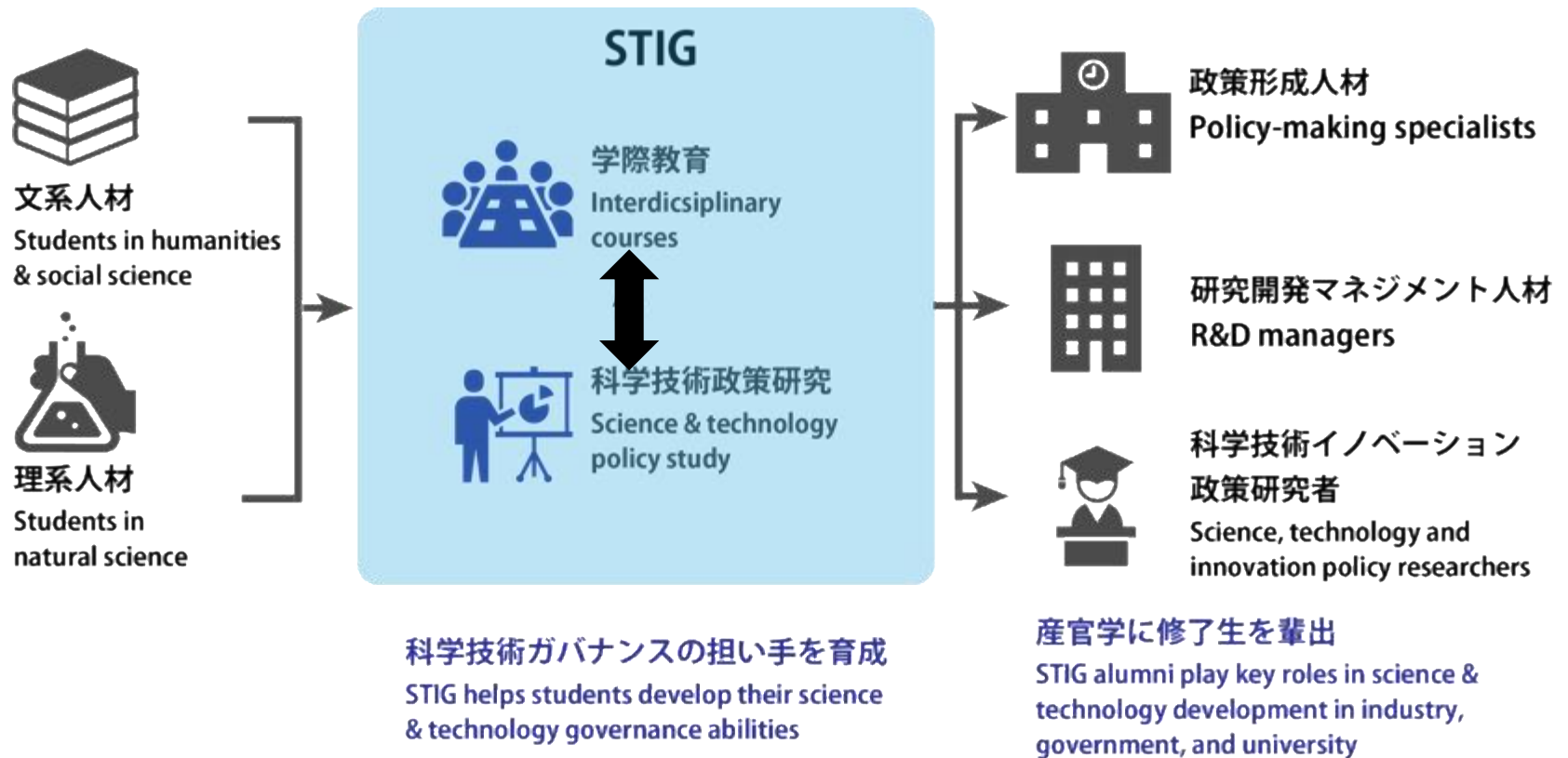GRIPS 政策研究大学院大学
NATIONAL GRADUATE INSTITUTE
FOR POLICY STUDIES

Inter-dicsiplinary research network

STIG
SCIENCE, TECHNOLOGY,
AND INNOVATION GOVERNANCE

Our goal

STIG Graduate Education Program

Study science and technology policy

- Various courses are prepared to study STI policy design and research
- Provide opportunities for taking courses of different departments within the Univ of Tokyo

Interdisciplinary collaboration

- Core Curriculum: Interdisciplinary group exercise in policy study
- Summer camp: 3 days intensive WG, collaborating with other universities and government offices*
- Seminars, inviting guest lectures from government officers or academia

- Explore the opportunities!!!

*This year, we will provide "1 day ONLINE summer seminar" due to the COVID-19.

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Structres of Education Program

Required class

Group exercise in STI policy study
Learning methodologies to integrate diversified disciplines and knowledge

Required electives

(a): Policy Processes and Institutions

(b): Evidence Development Methodologies

Electives

Applied courses
Business courses and intensive S&T policy study
Field-specific research courses
Focusing on specific issues; energy environment, healthcare, IT, resilience

Credit requirments

Required class: Case study	2 credits
Required electives: Basic courses (a)	2 credits or more
Required electives: Basic courses (b)	2 credits or more
Electives: Basic (a), (b), Applied courses, Field-specific research courses	6 credits or more
Total	**At least 12** credits

Note: the credits to be counted are specified in syllabus. We have 21 English courses. Only Group exercise in STI policy study (Required class) is conducted in Japanese with simultaneous English translation.

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Course Listings (*refer to syllabus)

Required class

・事例研究・科学技術イノベーション政策研究
Case Study (Science, Technology and Innovation Policy)

Required electives

Basic Course (a): Policy Processes and Institutions

・政策過程論
・交渉と合意
・科学技術・産業政策論
・Science, Technology and Public Policy
・Policy Process and Negotiation
・事例研究・企業の技術戦略と国際公共政策

Basic Course (b): Evidence Development Methodologies

・イノベーションの経済学
・Quantitative Methods for Management and Policy Analysis
・Economic Analysis of Innovation
・政策分析
・公共政策の経済評価
・Data Science for Practical Economic Research
・Economic Analysis of Public Sector
・Political Economics
・事例研究・テクノロジーアセスメント

Electives: Applied courses

・知的財産経営
・科学技術コミュニケーション論
・Global Business Strategy and Policy
・事例研究・政策環境・事業環境検討手法としてのシナリオプランニング：理論と実践
・Case Study(Business environment, stakeholders and issues; a learning experience in collaboration with Japanese industry)

・International Intellectual Property Management
・Advanced Study of Science & Technology
・事例研究・科学技術と政治・行政Ⅱ
・Case Study (GraSPP Policy Challenge: Global Innovative Public Policy Solutions)
・Innovation and Entrepreneurship
・Advanced Technology Management
・知識社会マネジメント
・市民社会組織・政策論

Electives: Field-specific research courses

・先端エネルギー技術経営と政策
・Space Development and Public Policy
・地域交通政策研究
・国際交通政策
・航空技術・政策・産業特論
・海洋科学技術政策論
・観光政策概論
・観光地域政策
・事例研究・デジタル時代の行政と社会
・Special Lecture in Global Health Policy I, II
・Overview of Energy System
・Advanced Lecture on Resilience Engineering
・Case Study(Institutions and Methods of Health Technology Assessment in Healthcare Policy)
・医療イノベーション政策
・Case Study(Project Based Learning on the Technological Innovation and the Social Solutions)
・事例研究・人工知能と社会
・Social Design and Global Leadership

6

SciREX Summer Camp*

- SciREX organized collaborative program
- Provide students (around 10 from Univ. Tokyo) to join
- Group discussions and collaborations with faculties and students from GRIPs, Hitotsubashi, Kyoto, Kyushu, and Osaka, and with government officers from MEXT
- Past topics are...
  - STI and Reconstruction from Tohoku Earthquake (2016; Matsushima, Tohoku)
  - Issues for the future Japan (2017; Roppongi)
  - Science & Technology Policies in 2030 (2018; Roppongi)
  - STI Policy to Challenge (2019; Roppongi)

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SciREX Summer Camp*

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PoP(Policy Platform) seminar

63rd STIG PoP seminar/WS
16 March 2018

Shih-Ming Kao, Assistant Professor, National Sun Yat-sen University, Institute of Marine Affairs, "Co-existence of offshore wind energy and local fisheries in Japan and Taiwan"

80th STIG PoP seminar
8 August 2019

Sotaro Shibayama, Senior Lecturer, Sten K. Johnson Centre for Entrepreneurship, Lund University "University System Design to support Scientific Research: A Study on the Dynamics of Innovative Knowledge Production"

Departments of STIG enrolled students

所属研究科
（194人）

68
72
6
7
5
15
5
4
2
4
4
1
1

■ 工学系研究科
Graduate School of Engineering
■ 公共政策大学院
Graduate School of Public Policy
■ 医学系研究科
Graduate School of Medicine
■ 農学生命科学研究科
Graduate School of Agricultural and Life Sciences
■ 総合文化研究科
Graduate School of Arts and Sciences, College of Arts and Sciences
■ 新領域創成科学研究科
Graduate School of Frontier Sciences
■ 情報学環・学際情報学府
Graduate School of Interdisciplinary Information Studies
■ 教育学研究科
Graduate School of Education
■ 理学系研究科
Graduate School of Science
■ 経済学研究科
Graduate School of Economics
■ 薬学系研究科
Graduate School of Pharmaceutical Science
■ 法学政治学研究科
Graduate Schools for Law and Politics
■ 情報理工学系研究科
Graduate School of Information Science and Technology

（2019年12月現在）as of December, 2019

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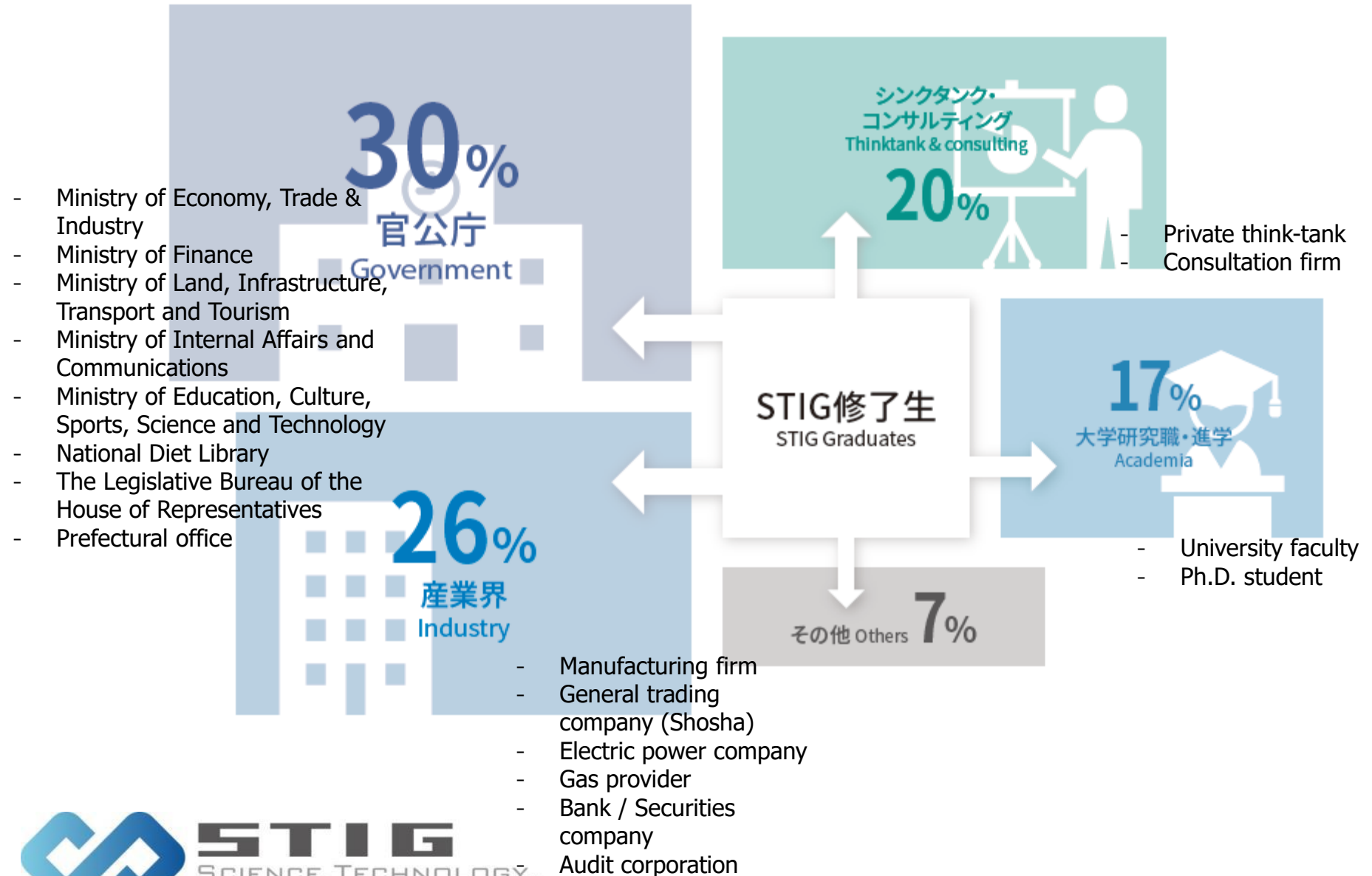
Graduates from STIG Education Program

90 graduates received certifications in between FY 2013 and 2019

Career Paths of STIG Graduates

- Ministry of Economy, Trade & Industry
- Ministry of Finance
- Ministry of Land, Infrastructure, Transport and Tourism
- Ministry of Internal Affairs and Communications
- Ministry of Education, Culture, Sports, Science and Technology
- National Diet Library
- The Legislative Bureau of the House of Representatives
- Prefectural office

30% 官公庁 Government

シンクタンク・コンサルティング
Thinktank & consulting
20%

- Private think-tank
- Consultation firm

STIG修了生
STIG Graduates

17% 大学研究職・進学 Academia

- University faculty
- Ph.D. student

26% 産業界 Industry

- Manufacturing firm
- General trading company (Shosha)
- Electric power company
- Gas provider
- Bank / Securities company
- Audit corporation

その他 Others **7%**

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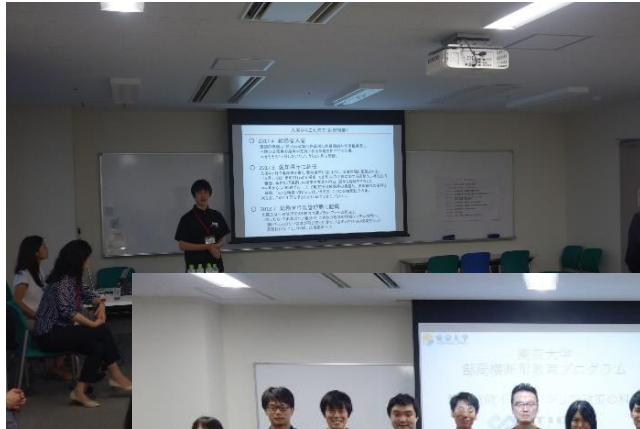
12

Networking with STIG Alumni

Exchanging views with STIG Alumni, STIG faculties and STIG students.
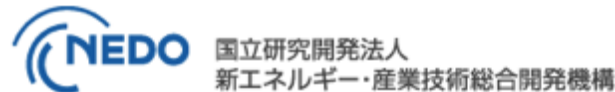◆Date　6th July (sat) 17:00-19:00
◆Place: IAR 1222E, the University of Tokyo

5 Alumni shared their experience.
25 participants.

Your benefits of joining STIG education program

Various agencies are in charge of STI policies in Japan

Your benefits of joining STIG education program

For those who seek a government job

- – Learn fundamentals of policy design
  - • Especially, methodologies of evidenced based policy design
- – For the students with natural science backgrounds: Provide opportunities to cultivate a mindset of the social science through group work exercises and teaching by our educational staff, who have social science based expertise
- – For the students with social science backgrounds: Provide opportunities to create social network with STI policy practitioners & researchers

Your benefits of joining STIG education program

For those who seek an opportunity in the industry

- learn the importance of social acceptance, the relationship between science technology and society, when introducing technology into society

- Learn a design process of evidence-based R&D strategy

- Develop a policy proposal skill
  - Industry associations and individual firms actively lobby to the public sector through their government relations sections
  - An innovative business needs adequate lobbing

FAQ (1)

Q.Are there any requirements for registration? Also, are there examinations, interviews or other selection procedures?

A. No. The course can be taken by any University of Tokyo graduate student. There are no particular requirements and fees. Also, there are no examinations or interviews when registering.

Q.I am interested in the STIG education program, but is it possible to take just certain courses?

A. Students are welcome to take individual courses, without planning to complete the program.

FAQ (2)

Q. If I register for the STIG education program from now, can the credits I earned during the previous year (my first year of graduate school) be used to satisfy the STIG completion requirements?

A. **Partly yes. Please consult with the STIG education program administrative staff** regarding the credits you want to count from the previous year.

Q. How can I register to STIG program?

A. **You can register today**. Or submit the STIG Registration Form to the STIG Education Program Office. Please access the official site: https://stig.pp.u-tokyo.ac.jp/en/

FAQ (3)

Q. If I register for the STIG education and meet the required credit, would I get certificate automatically?

A. **No. You need to apply for certification on UTAS. Reminding email will be sent but please do not forget to submit application.**

Registration Form

https://stig.pp.u-tokyo.ac.jp/en/

Join us for "2020 Autumn Guidance & 1st class of STIG Required class":

17:50- on Wednesday, October 7

(Check the venue/zoom url on ITC-LMS !!!)

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