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

Spring Information Session
Tuesday, 2 April 2024
16:30 – (about 1-1.5h)

Seminar Room E, 12F, Int'l Academic Research Bldg. Hongo
& Online by Zoom (https://forms.gle/h8DyGtofC6QvxgzWA)

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

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

SCHOOL OF ENGINEERING
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

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

東京大学未来ビジョン研究センター
Institute for Future Initiatives

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

大阪大学
OSAKA UNIVERSITY

九州大学
KYUSHU UNIVERSITY

HITOTSUBASHI
UNIVERSITY

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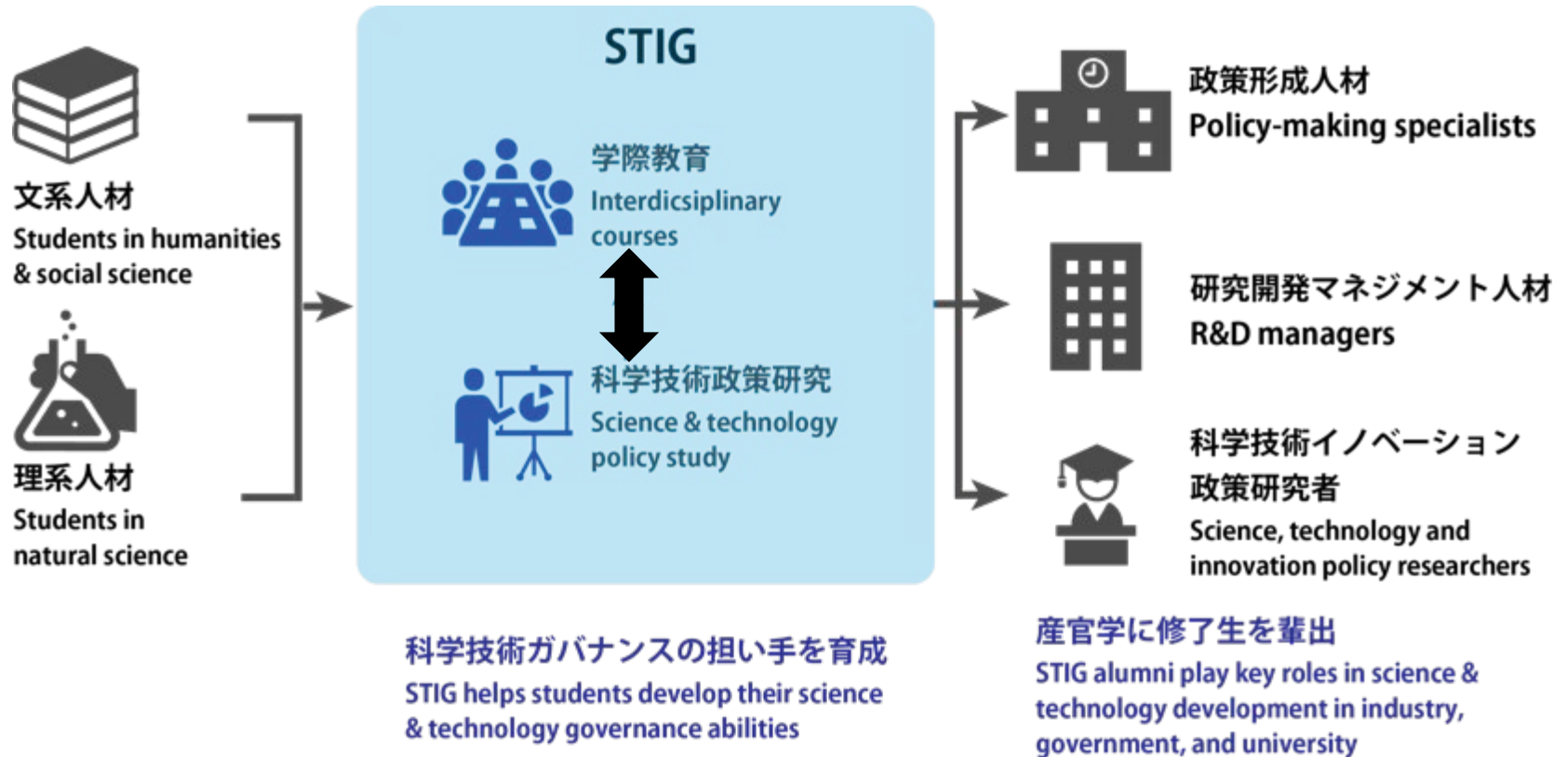NATIONAL GRADUATE INSTITUTE
FOR POLICY STUDIES

Inter-disciplinary 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 University of Tokyo

Interdisciplinary collaboration

- Core Curriculum: Interdisciplinary group exercise in policy study
- Summer camp: 3 days intensive group working, collaborating with other universities and government offices
- Seminars, inviting guest lectures from government officers or academia (Policy Platform (PoP) Seminar)

- Explore the opportunities!!!

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Structure of the Education Program

Required course

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 requirements

Required course: 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 28 English courses as of April 2024. Classes of the required course is conducted in Japanese with simultaneous English interpretation.

Course Listings (Refer to the syllabus)

Required course

・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
・Case Study (Social Design and Management)
・Science and Technology in International Relations etc

Basic Course (b): Evidence Development Methodologies

・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
・Evidence-based Science & Technology Policy Design etc

Electives: Applied courses

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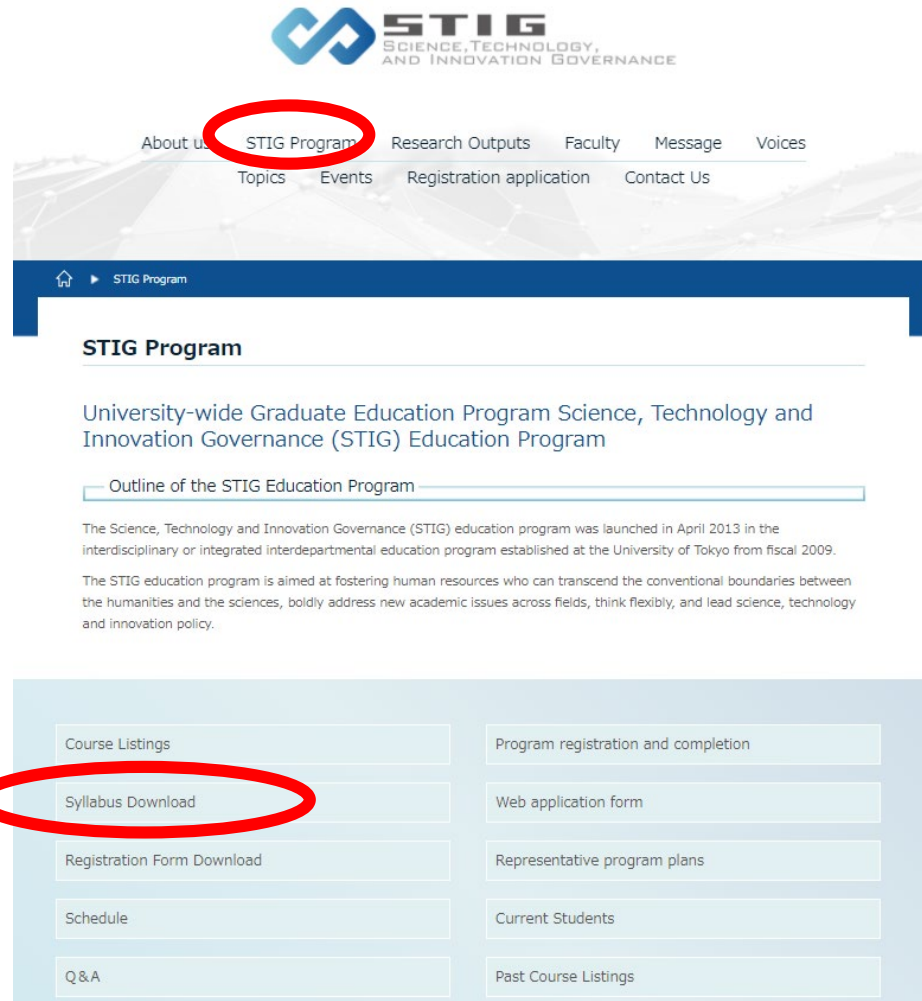
・International Intellectual Property Management
・Advanced Study of Science & Technology
・事例研究・科学技術と政治・行政Ⅰ
・Case Study (GraSPP Policy Challenge: Global Innovative Public Policy Solutions)
・Innovation and Entrepreneurship
・Advanced Technology Management
・知識社会マネジメント
・市民社会組織・政策論 etc

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
・電力ネットワーク政策
・Governance of Space Activities etc

Download the Syllabus
https://stig.pp.u-tokyo.ac.jp/en/program.html

STI Core Contents
https://scirex-core.grips.ac.jp/en/

SciREX Core Contents   Top   Index   Font Size   [EN / JP]

What is the Core Contents of the Science of Science, Technology and Innovation Policy?

"The Science of Science, Technology and Innovation Policy" is an emerging discipline where policy and research interact and develop in order to make science, technology and innovation (STI) policy more evidence-based. The Core Contents on this website provides the knowledge that is fundamental to understanding the Science of STI Policy. It is intended for students who are new to the Science of STI Policy, as well as for policy makers and practitioners involved in STI policy.

The scope of the Science of STI Policy is diverse and involves a variety of disciplines, including economics, business administration, political science and sociology. At the same time, the Science of STI Policy aims to create knowledge that can be used in the practice of policy formation. The authors are researchers active in various academic fields, as well as policy makers and practitioners involved in STI policy. The content was discussed and developed by the Core Curriculum Editorial Committee comprised of members from related universities and institutions.

The Core Contents may change with time and social conditions, so its content will be periodically updated.

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SciREX Summer Camp

- SciREX periodically organizes collaborative programs
- Group discussions and collaborations with faculties and students from GRIPS, Hitotsubashi, Kyoto, Kyushu and Osaka, and with government officers from MEXT

Declining population society-2045 (2014; Awaji-island, Hyogo)
STI and industrialization (2015; Inuyama, Aichi)
STI and Reconstruction from Tohoku Earthquake (2016; Matsushima)
Making Scenario for 2030: Interdisciplinary Collaboration for Future Science, Technology and Innovation Policies (2017; Roppongi)
STI and Society towards 2030 (2018; Roppongi)
STI Policy to Challenge (2019; Roppongi)
One-day Summer School (2020; Webinar lecture style)
Innovation System in the Post-pandemic Era (2021; Online by Zoom)
Policy Making with Consideration of Diverse Values (2022; Roppongi)
Addressing Real-World Challenges: STI Policy for Navigating Through Uncertainties (2023; Roppongi)

SciREX Summer Camp

PoP (Policy Platform) seminar

63rd STIG PoP seminar/WS

"Co-existence of offshore wind energy and local fisheries in Japan and Taiwan"

Shih-Ming Kao, Assistant Professor, National Sun Yat-sen University, Institute of Marine Affairs

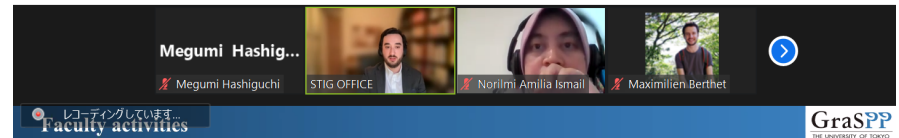**114th STIG PoP Seminar
Online by Zoom Webinar**

"ASEAN Space Programs: Policy Considerations"

Rogel Mari Sese, Ateneo de Davao University, Norilmi Amilia Ismail, Universiti Sains Malaysia, David Ho Lit Xian, Singapore Space and Technology Limited
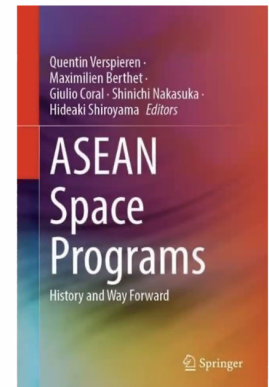
Departments of STIG enrolled students

教育学研究科 Graduate School of Education, 5

情報学環・学際情報学府 Graduate School of Interdisciplinary Information Studies, 6

法学政治学研究科 Graduate School for Law and Politics, 6

情報理工学系研究科 Graduate School of Information Science and Technology, 7

医学系研究科 Graduate School of Medicine, 7

総合文化研究科 Graduate School of Arts and Sciences, 8

理学系研究科 Graduate School of Science, 10

新領域創成科学研究科 Graduate School of Frontier Sciences, 11

農学生命科学研究科 Graduate School of Agricultural and Life Sciences, 12

経済学研究科 Graduate School of Economics, 4

薬学系研究科 Graduate School of Pharmaceutical Science, 2

公共政策大学院 Graduate School of Public Policy, 71

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工学系研究科 Graduate School of Engineering, 79

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As of February 2024

Humanities 46 % Sciences 54 %
Master 172 Doctoral 56

Graduates from STIG Education Program

166 graduates (M149:D17) received certification from AY2013 to AY2023

Career Paths of STIG Graduates

官公庁 Government — 26%

- 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
- Ministry of Foreign Affairs
- National Diet Library
- The Legislative Bureau of the House of Representati
- Prefectural office

シンクタンク・コンサルティング Thinktank & consulting — 18%

- Private think-tank
- Consultation firm

STIG修了生
STIG Alumni

産業界 Industry — 26%

- Manufacturing firm
- General trading company (Shosha)
- Electric power company
- Technology, IT, e-commerce
- Bank / Securities company
- Audit corporation

大学・研究職・進学 Academia, Research — 15%

- University
- Ph.D. student
- Researcher

その他 Others — 15%

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Networking with STIG Alumni

Exchange views between STIG alumni, current students, professors & staff

17-19h Sat 6 July 2019
SR-E, IAR, Hongo, UTokyo
Five alumni presented their work experiences related to STIG program and two ex-professors talked their current activities.

13-15h Sat 15 October 2022
SMBC, IAR, Hongo, UTokyo
Assigned alumni into three groups (government, industry/service, academia/research) mentored current students and established durable relationship.
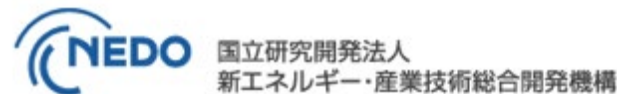
16-18:30h Sat. 21 October 2023
SR-E, IAR, Hongo, UTokyo
Alumni and current students enjoyed an open networking through their intergenerational exchanges, then attended three poster presentations by distinguished Ph.D. students

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Your benefits of joining STIG education program

Various agencies are in charge of STI policies in Japan

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Your benefits of joining STIG education program

For those who seek a government job

– Learn fundamentals of policy design

• Especially, methodologies of evidence-based policy design

– For students with natural science backgrounds: Provide opportunities to cultivate a social science mindset through group work exercises and teaching by our educational staff, who have social science-based expertise

– For students with social science backgrounds: Provide opportunities to network and connect 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 is no particular requirement nor fee. Also, there is no examination or interview when registering.

Q. I am interested in the STIG education program, but is it possible to take only 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 the 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 program and meet the credit requirements, would I automatically get the certificate?

A. **No. You need to apply for certification on UTAS. An email reminder will be sent to you, but please do not forget to submit your application.**

Registration Form

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

Contact STIG administrative staff for any question concerning STIG program
STIG@pp.u-tokyo.ac.jp