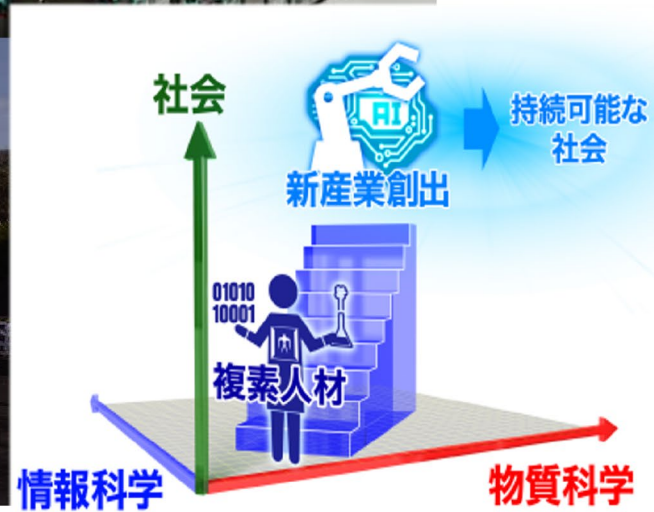


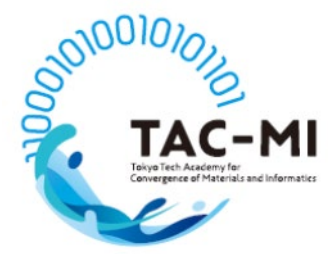


Tokyo Tech



Creating sustainable societies through [Material × Information] multi-talented human resource development

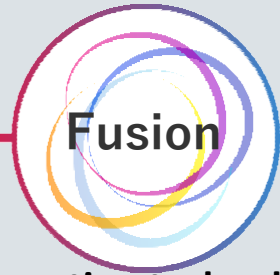
Tokyo Tech Academy for Convergence of Materials and Informatics (TAC-MI)



物質・情報卓越教育院

# Doctoral Program for World-leading Innovative & Smart Education in Tokyo Tech

**Materials and devices**

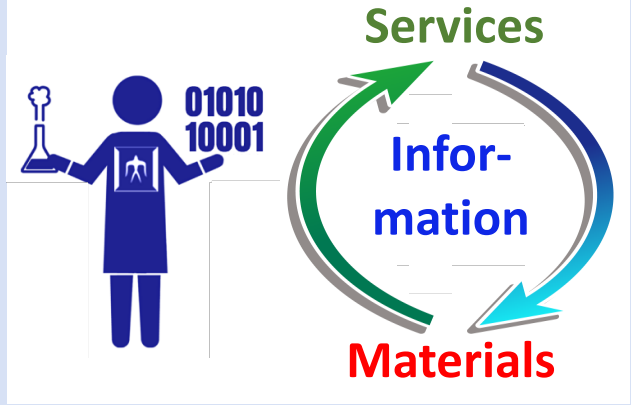


**Information technologies**

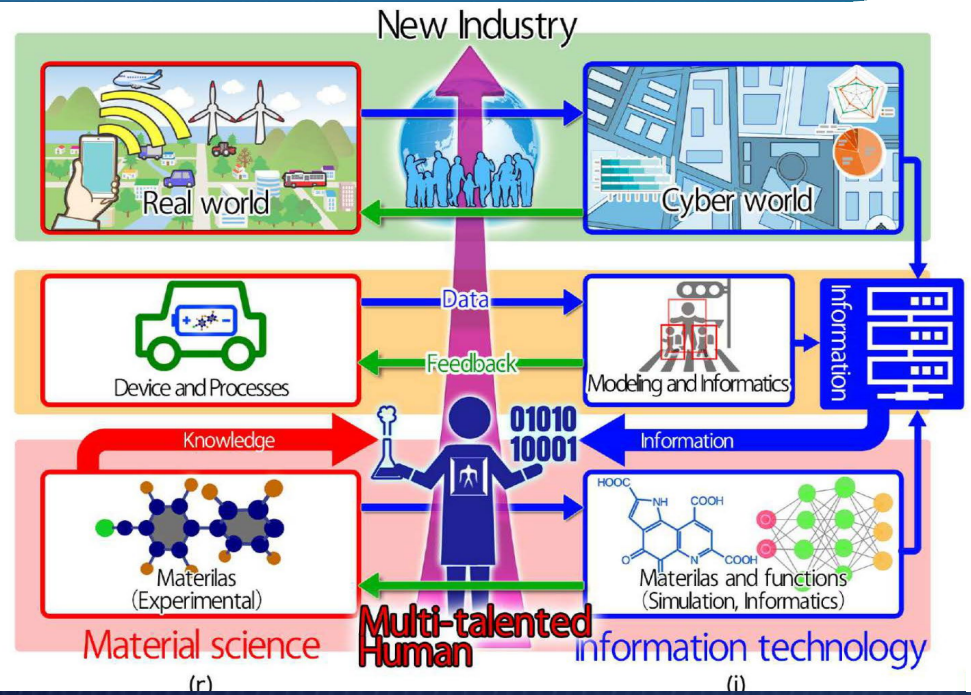
Fusion between material science and information technologies based on Tokyo Tech's own research centers, such as Center for Element Strategy and TSUBAME super computer

**Tokyo Tech Academy for Convergence of Materials and Informatics (TAC-MI) Start!**

## Multi-talented Individuals



Creating new industries by connecting "materials", which is Japan's strengths, to "services" by utilizing information science & technologies.



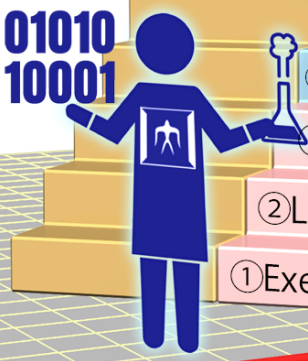
Produce leaders who create new industries as advanced professionals in materials science and informatics

# Creating Sustainable Societies through [Material × Information] Multitalented Individuals Development



**Program in TAC-MI**

- Global leadership
- Practical ability
- Broad perspective
- Creativity



**Information science**

**Material science**

# Cultivate Creativity

**Common fundamental course**  
M1~M2

**Basic Materials Informatics (1C) 3Q**

**Students for Materials and Information**  
**Materials Simulation (2C) 3Q**  
**Materials Informatics (2C) 4Q**



Exercise class using TSUBAME

If you have taken Materials Simulation and Materials Informatics, the course will be counted as a "Major Courses" in some courses. (Refer to the study guide for details)

**Materials-Informatics Interdisciplinary Research Skills**  
M1~M2

**Short term research**

**Laboratory for Material**

**Laboratory for Information**

To a laboratory different from your specialty **Laboratory rotation**

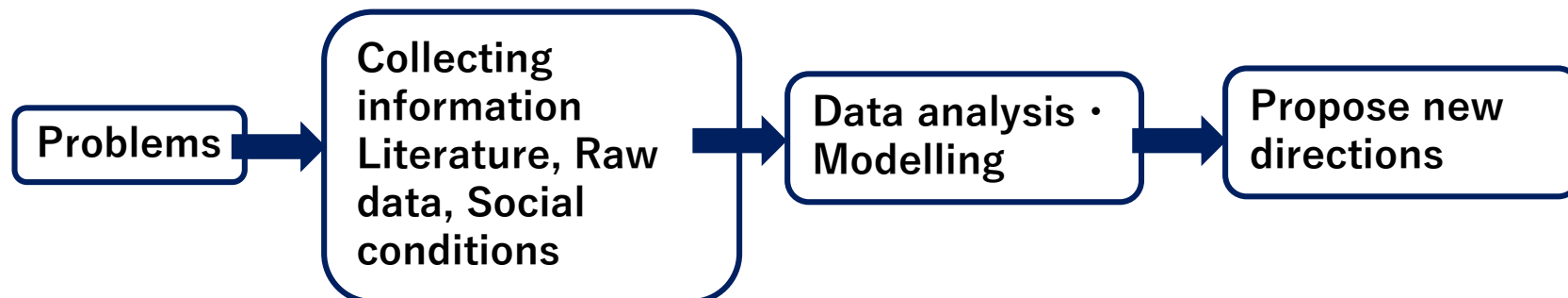
\*including NIMS at Tsukuba as an Information lab.

**Self-Designed Thesis** D2~

Students are encouraged to set up self-finding topics in between Material and Information, such as different ones from the doctoral research of your Major.

## Tokyo Tech original Practice School in Materials Informatics

A team including the Institute faculties and students stays at a company for 6 weeks. We provide technical consulting utilizing material & information science on important issues of companies.

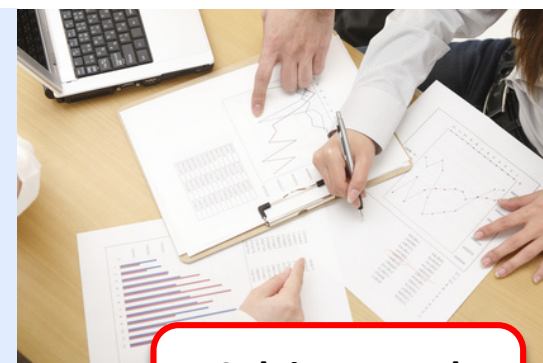


### Practice School in Materials Informatics I

- Do modelling of target systems
- Held as an intensive course (in the Tokyo Tech)

### Practice School in Materials Informatics II

- Solve the problems at the assigned company by teams
- Propose new directions at the final report



Solving actual problems

# Cultivate Broad Perspective and Global Leadership



Tokyo Tech

## Intelligent Services: a Social Perspective

(Until 2019,  
"Business Model Training Camp")

D1 & D2



Develop Broad Perspective and Leadership

- Propose services for future society by the Teams  
Material / Information Field Students & Overseas Students  
Hybrid Team (Doctoral Research / Knowledge → Connect to Society) → Award prizes

## International Forum

D1 & D2

Improve international communication skills

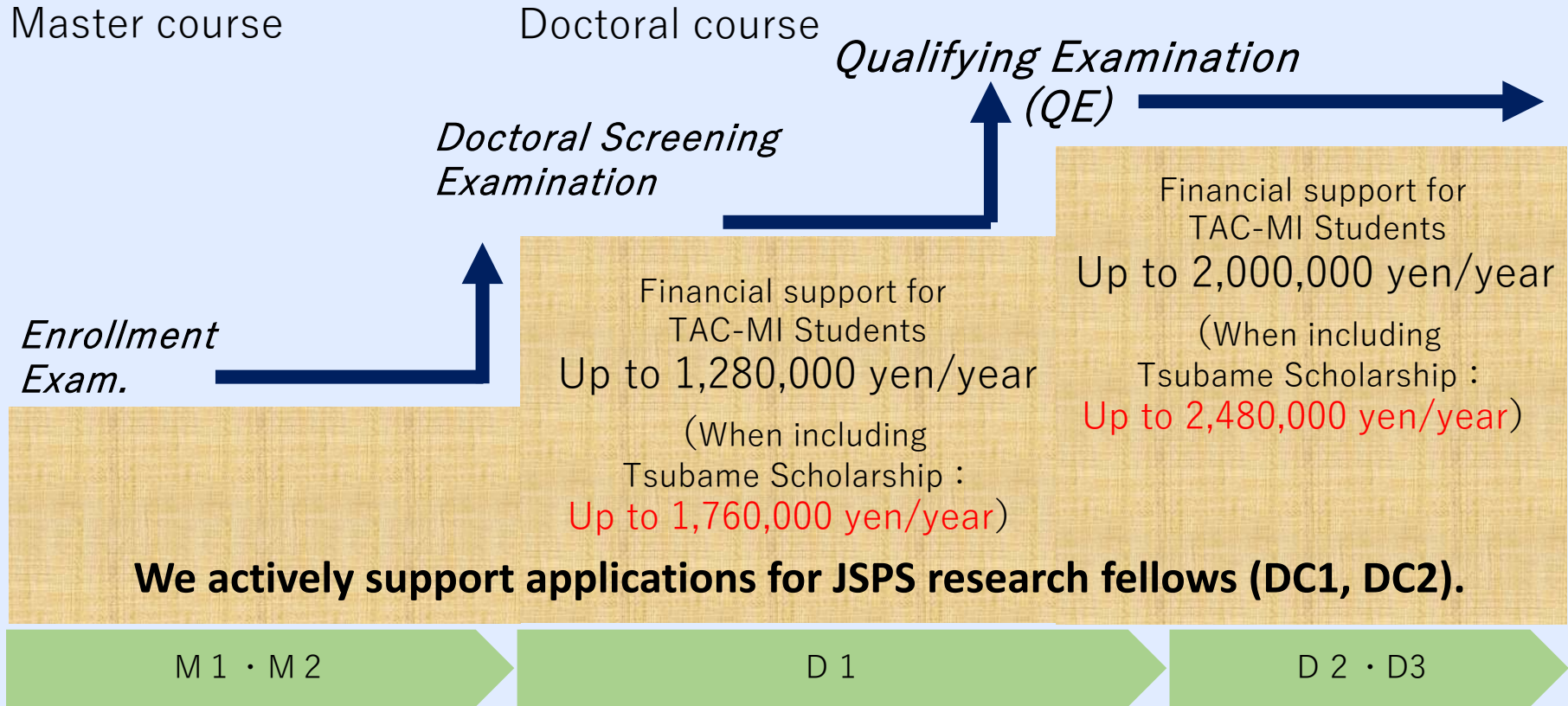


- D1 students give presentations. → Award prizes
- Face-to-face meeting with overseas advisors



# Financial support for TAC-MI students

## Financial support and 3 Examinations for quality assurance in TAC-MI



- There is a possibility that your supervisor will pay you 200,000 yen/year as a RA. The above amounts include the Scholarship and the RA support.
- You can apply Tokyo Tech Tsubame Scholarship for Doctoral Students additionally.
- JSPS DC1, DC2 and MEXT Scholarship foreign students can obtain RA fees.

# AY2021 Fall Semester Student Recruitment Briefing

If you are interested in TAC-MI program, please participate in the briefing session.



**Schedule** **Monday, May 17, 2021**

- ① 17:15~18:00 Explanation in Japanese
- ② 18:15~19:00 Explanation in English

**To be live-streamed using Zoom**

If you wish to participate in it, please register from **TAC-MI website** <https://www.tac-mi.titech.ac.jp/en/> or from the questionnaire form of **the Web Services for Students and Faculty**.



# Join TAC-MI !

Director  
Takeo YAMAGUCHI  
Institute of Innovative  
Research



**Please feel free to  
contact these professors!**



Taro HITOSUGI  
Associate Director  
Chair, Committee of  
Public Relations and  
Collaboration with  
Industry  
School of Materials and  
Chemical Technology



Kei GOTO  
Chair,  
Committee of  
Education  
School of  
Science



Susumu SAITO  
Chair, Committee of  
Admission and  
Examination  
School of Science



Masakazu SEKIJIMA  
Chair, Committee of  
Planning and Events  
School of Computing

TAC-MI HP : <https://www.tac-mi.titech.ac.jp/en/>

Contact : TAC-MI Office (S6 Bldg., Rm 402) [tac-mi@jim.titech.ac.jp](mailto:tac-mi@jim.titech.ac.jp)

# Tokyo Tech Academy for Convergence of Materials and Informatics (TAC-MI)

## AY2021 Fall Semester Student Recruitment Briefing

MEXT H30 WISE Program: Doctoral Program for  
World-leading Innovative & Smart Education  
"Creating sustainable societies through  
[Material×Information] multi-talented  
human resource development"



**We look forward to the participation of students who want to  
make a social impact utilizing materials and information.**

In order to foster outstanding individuals, the Institute established the Tokyo Tech Academy for Convergence of Materials and Informatics (TAC-MI) in April 2019 under the auspices of MEXT's WISE Program, and will begin recruiting students starting in Fall Semester 2021. While in their graduate studies, students pursuing a doctoral degree can take this additional program, which will enable them to connect information with materials by using information science and multifaceted thinking, as well as by taking a broad perspective. The program aims, in addition to the top-level research, to cultivate multi-talented human resources to become leaders in this "space in multi-axes" that is our continually advancing society.

### Schedule

**If you are interested in this program, please participate in the briefing session.**

## Monday, May 17, 2021

### To be live-streamed using Zoom

- ① 17:15~18:00 in Japanese
- ② 18:15~19:00 in English

※ Registration required.

[How to register]

If you wish to participate in the briefing session, please register from the TAC-MI website.



URL: <https://www.tac-mi.titech.ac.jp/en/event/ay2021fall-briefing/>

※ It is posted as a questionnaire on the Web Services for Students and Faculty. You can also register from there.

### Application Eligibility

Master's students of all Schools who Fall under the following are eligible to apply.

- (1) Those who are enrolled in a master's degree program at Tokyo Institute of Technology as of September 30, 2021 (The beginning date of Fall Semester).
- (2) Those who wish to go on to a doctoral degree program.

### Selection Schedule

June 2021 - July 2021, Enrollment Examination will be conducted.  
(Document screening and Interview)

### Economic Support for Students

We provide economic support (1,280,000 to 2,000,000 yen per year) for doctoral students.



Lectures and Exercises using the supercomputer TSUBAME

Contact  
information

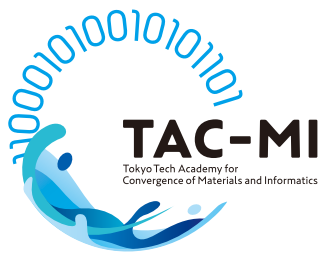
TAC-MI Office (S6 Bldg., Rm 402)

✉ [tac-mi@jim.titech.ac.jp](mailto:tac-mi@jim.titech.ac.jp)

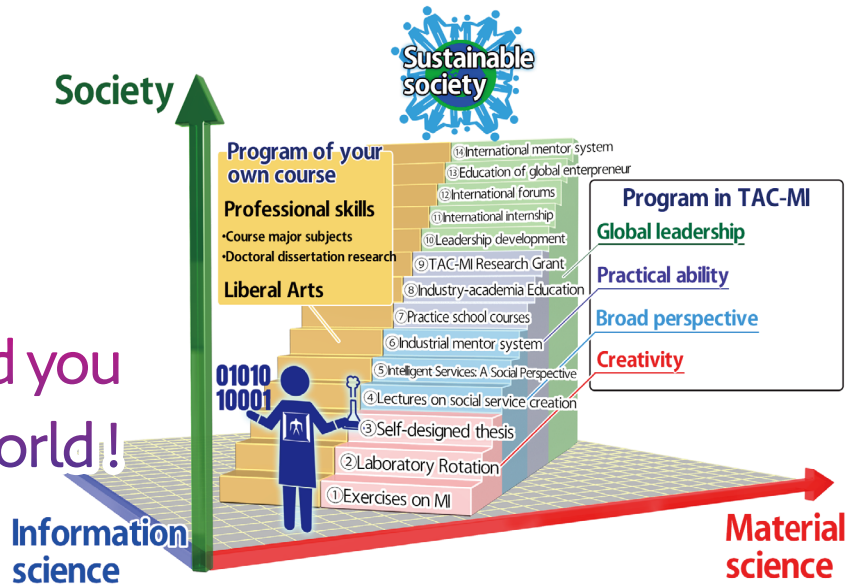
Please visit our website for details.

<https://www.tac-mi.titech.ac.jp/>





Excellent education and leading-edge research lead you to create the bran-new world!



The TAC-MI program is a seamless educational program provided throughout graduate learning. It aims to empower students to become multitasking individuals capable of promoting creative, interdisciplinary research in materials science and informatics. The program, in collaboration with partners from industry and partner organizations including the National Institute for Materials Science, will enable students to connect information and materials by utilizing information science and multifaceted thinking. Cutting-edge facilities such as the Materials Research Center for Element Strategy and the supercomputer TSUBAME, combined with the Institute's collective strength, will allow TAC-MI students to acquire the following four attributes necessary.

## Creativity

Materials and Informatics lectures with exercises  
Laboratory rotation  
Originality education with self-designed thesis

## Broad perspective

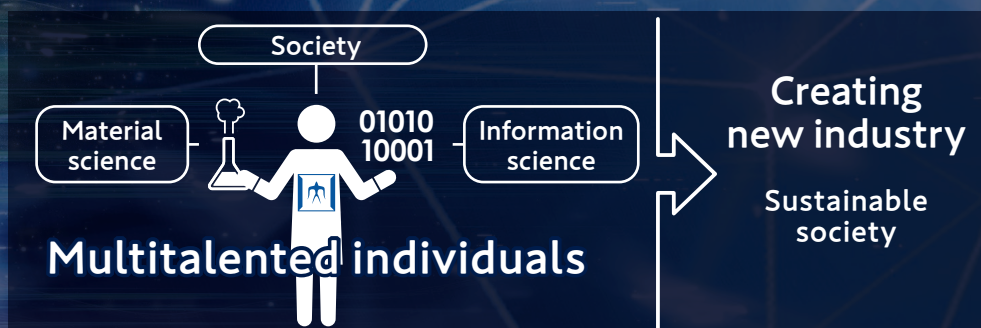
Lectures on social service creation  
Intelligent Services: A Social Perspective  
Industrial mentor system

## Practical ability

Practice School to solve companies issues.  
TAC-MI Research Grant to enhance the ability to find and solve problems

## Global leadership

Leadership development courses provided by ToTAL  
International internships  
International forums on materials and informatics  
International mentor system



## Multitasking individuals

We expect our students to take a leading role in the 'complex space' of a transdisciplinary framework as multitasking individuals that includes materials science, information science, and services to society, pursuing a path toward sustainability.

## Partner organization

National Research and Development Agency — 2

Overseas university — 7

Company — 26

(as of March 1, 2021)

National Institute for Materials Science / National Institute of Advanced Industrial Science and Technology / Leiden University / McGill University / Max Planck Institute / Imperial College London / Cornell University / Sorbonne University / Tsinghua University / TOYOTA MOTOR CORPORATION / Nissan Motor Co., Ltd. / Mazda Motor Corporation / Toshiba Corporation / JFE Steel Corporation / JX Nippon Mining & Metals Corporation / ASAHIKASEI CORPORATION / Mitsubishi Chemical Corporation / SUMITOMO CHEMICAL Co., Ltd. / TOSOH CORPORATION / MITSUBISHI GAS CHEMICAL COMPANY, INC. / Sumitomo Electric Industries, Ltd. / SHOWA DENKO K.K. / TDK Corporation / LG Japan Lab Inc. / Panasonic Corporation / FUJIFILM Corporation / AGC Inc. / ZEON CORPORATION / Showa Denko Materials Co., Ltd. / KANEKA CORPORATION / Toyo Seikan Group Holdings, Ltd. / NAGASE & CO., LTD. / Hamamatsu Photonics K.K. / ENEOS Corporation / JEOL Ltd.