

Pursuing Doctoral Studies

Benefits

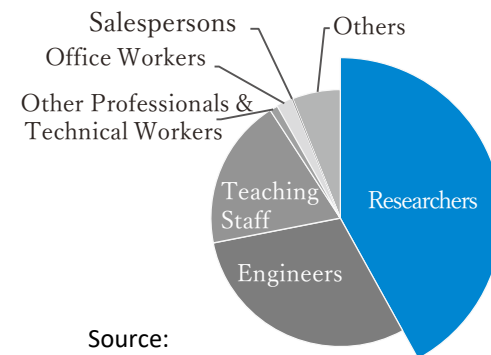
- Developing your **logical thinking, critical thinking, and problem-solving skills**, and enabling you to understand **the process of creating new value**
- Training your creativity, while providing the **enjoyment of research** and a **broad perspective** on technology in relation to society
- Helping you gain self-confidence to **work independently** regardless of field, a **wider range of career path options**, and greater chances of finding satisfying and rewarding jobs and success.

Changes in the perception of doctoral degrees

With the goal of **taking advantage of scientific and technological progress**, and **developing capabilities for creating new industries**, the **expectations** for individuals with doctoral degrees are growing. Their advanced sci-tech knowledge, as well as **problem-finding and -solving skills** are sought after by society.

After completing doctoral programs, a **wide range of career paths** can be considered – doctoral graduates work as scientists at higher education or research institutions, active players in companies, entrepreneurs, bureaucrats, politicians, etc. In particular, they are becoming more active in R&D companies.

First occupations for science and engineering doctoral graduates



Source:
MEXT-NISTP "Japanese Science and
Technology Indicators 2020"

Three Takuetsu Programs

Financial support for doctoral students

At Tokyo Tech, almost all doctoral students receive financial support from public or private entities. The TAC-MI, WISE-SSS, and ISE academies engaging in Takuetsu programs offer students opportunities for financial support.

Takuetsu programs and academies

As part of efforts to foster outstanding doctoral graduates, Tokyo Tech has established the aforementioned three academies that function **across academic disciplines at the Institute**, and enable **seamless transition between master's and doctoral degree programs**. With the objective of developing students' abilities and skills required to **create new value and solve social problems**, these academies offer unique programs. They aim to promote **interdisciplinary research**, and encourage **personnel exchanges** among various organizations such as industrial entities, national institutions, and overseas institutions, while placing value on laboratory work and activities.

Takuetsu programs are waiting to welcome you!

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



Tokyo Tech Academy for Super
Smart Society (WISE-SSS)



Tokyo Tech Academy of
Energy and Informatics (ISE)



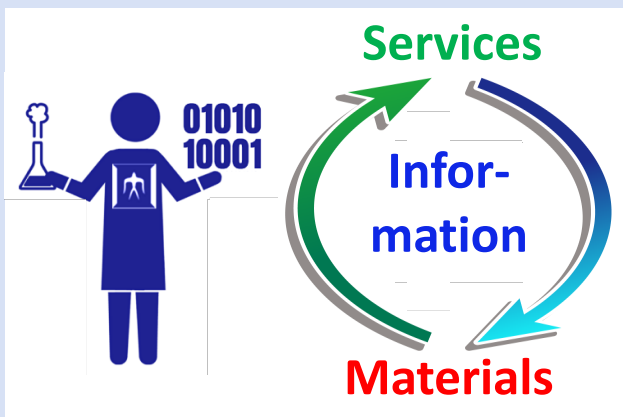
Materials and devices

Fusion

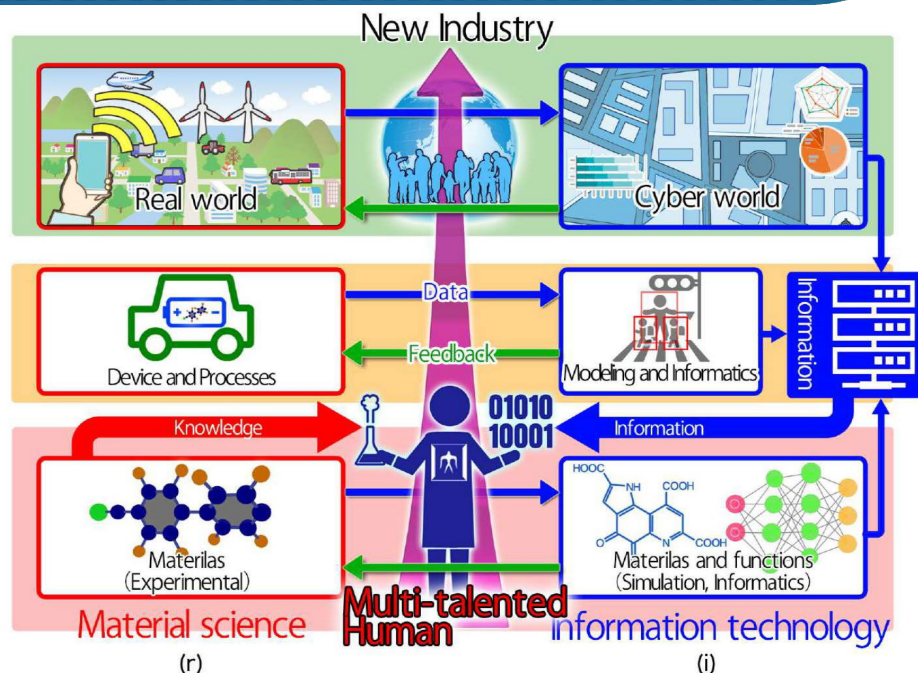
Information technologies

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!



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

◆ Specially offered degree programs for TAC-MI students

To help students develop the four attributes required to become **multitalented individuals**, the academy has designed 12 educational modules:

(1) Creativity

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

(2) Broad perspective

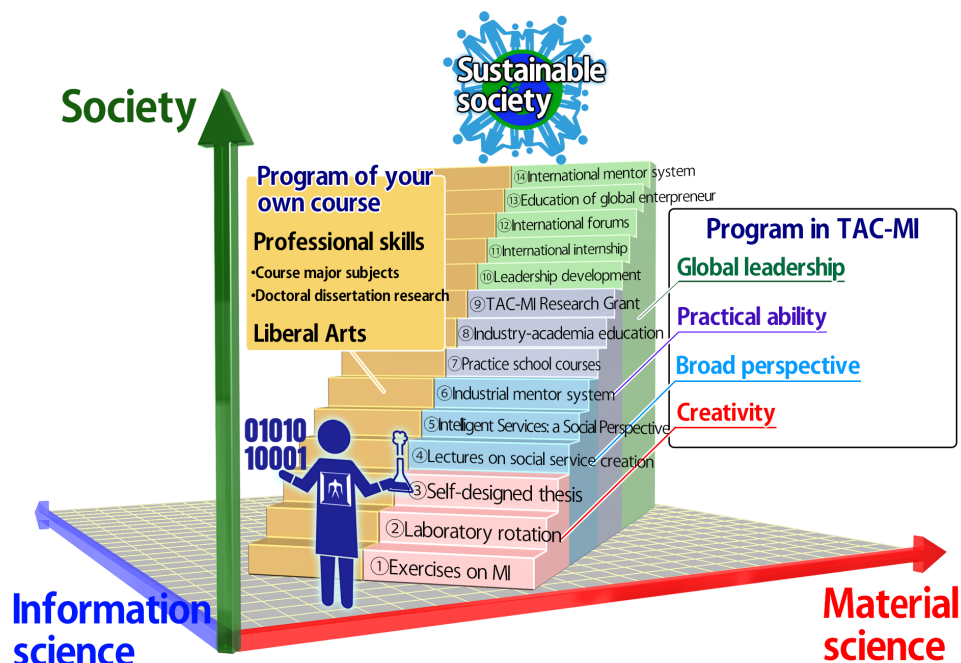
- Lectures on social service creation
- Intelligent Services: A Social Perspective
- Industrial mentor system

(3) Practical ability

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

(4) Global leadership

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



We also offer the **TAC-MI Scholarship** and **RA** that helps TAC-MI students to be financially independent and allows them to concentrate on their studies.

Student Recruitment Briefing will be held online. Please participate in the briefing session !

Schedule **October 20th, 2021** To be live-streamed using Zoom

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

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

<https://www.tac-mi.titech.ac.jp/en/event/ay2022spring-briefing/>



A next-generation education and research platform has been established!

Students have opportunities to form interdisciplinary research teams with consortium partners and participate in the team with financial support.

SSS matching workshop

But, how?



Match the needs of the Consortium partners with the seeds of the research and human resources of students through mutual presentations and discussions

15 matchings have been formed on average in the past 3 workshops

Next chance is coming soon!

Nov 17 (Wed) ... Seeds from students

Dec 8 (Wed) ... Needs from industry

All of you are eligible for attending.

Register now on the web!



東京工業大学
Tokyo Institute of Technology

AIP
革新知能統合研究センター
Advanced Intelligence Integrated Research Center

NTTアーバンソリューションズ

KODEN
株式会社光電製作所

DENSO

NTT

making seiki

農林水産省

JAMSTEC
地球環境総合研究機構
Japan Agency for Marine Earth Science and Technology

QST
国立研究開発法人
量子科学技術研究開発機構

LG
Japan Lab Inc.

KOMATSU

JR
JR東海

Panasonic

Rakuten Mobile

川崎市
KAWASAKI CITY

産総研

aiwell

Kawasaki
Powering your potential

JTEKT

TOSHIBA

環境・省エネに貢献する
日立産機システム

三菱地所

RICOH

大田区
地域力・信頼都市 大田区

NICT
情報通信研究機構

azbil

Kubota

SHO-BOND CORPORATION

NSK

FUJITSU
shaping tomorrow with you

YASKAWA

ECOZZERIA

農研機構

Anritsu
Advancing beyond

AGC

KDDI

SoftBank

NEC

HRI
Honda Research Institute JP

YOKOGAWA



<https://youtu.be/MEQggL1gnkw>



- Opportunities for education and advanced research using multiple research & education fields that bring together the best of cutting-edge science and technology
- Unique educational programs in cooperation with industry
- Substantial financial support

**Register now
on the web!**

Join us at the Briefing Session for Student Recruiting!
17:15-18:00 on Oct 20th, 2021(English)





Features



- ✓ Integrated Master's and Doctoral program
- ✓ Financial support up to 2.53 million yen/year
- ✓ Open for all courses



Tokyo Tech Academy of
Energy and Informatics

Tokyo Tech Academy of Energy and Informatics

Multi-scope • Energy WISE Professionals

Briefing Session on Recruiting Students for 21AY Fall & 23AY Spring Enrollment

DATE : October 5, 2021 (Tue.)

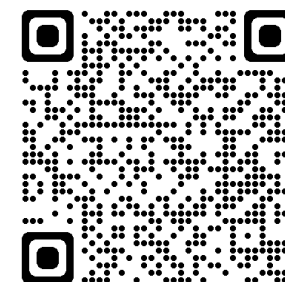
JPN 17:00-18:00

ENG 18:15-19:15

Venue : Online by Zoom

HP: <https://www.infosyenergy.titech.ac.jp/Academy/>

Register
here→



Feel free to attend the session!!

Outline of Tokyo Tech Academy of Energy and Informatics



Tokyo Tech Academy of Energy and Informatics



Tokyo Tech

Expectations

Create, design and lead the future society
Multi-Scope · Energy WISE Professionals

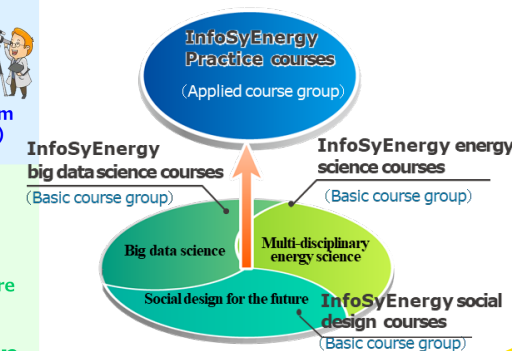
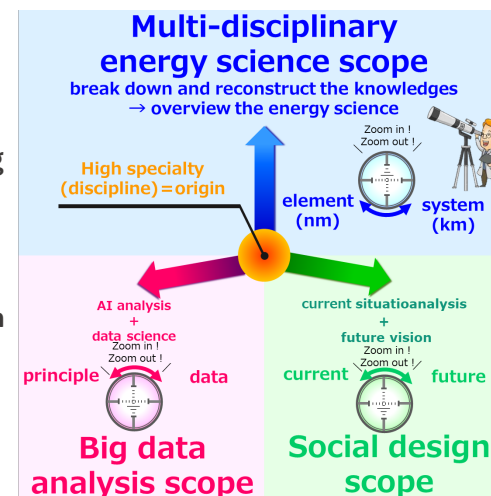
“Professionals” with “Multi-disciplinary energy science scope” applied by
= “Big Data Science” (AI analysis+Data science) who can design a new sustainable energy

Our Efforts

- Hitotsubashi University's cooperation by providing knowledges of social science, educational skills and professional skills
- Utilization of energy big-data in smart energy system developed and demonstrated at Tokyo
- Collaboration with consortium members of 25 companies, 6 public institutes and 15 world's leading universities
- Cultivating abilities of flexibly handling on the site and finding problems by providing internship and co-research programs with domestic/overseas companies and universities
- Constructing a global human network centered on doctoral students by participating in various events such as cutting-edge research workshops and exchange events with consortium member companies and overseas universities
- The business and international mentorship system will help students develop multifaceted viewpoints

Our Curriculum

Cultivate “3 scopes” by “4 course groups” collaborating with “InfoSyEnergy Research and Education Consortium”

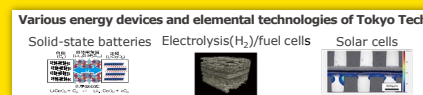


Promote the integrative researches of “system” and “devices”

Companies 25
Public institutions 6
World's top universities 15

Tokyo Tech

- Over 70 Professors/Assoc. Professors participating from across all of Tokyo Tech's schools
- Organized into nine areas, teams design and conduct collaborative research
- “Multi-scope” energy education through academia-industry cooperation
- Strategic student-industry matching, and a recurrent education system



The Aim of InfoSyEnergy

“Synergistic effects from integrated promotion of “energy device development” and “system development”
Campus system technology developed and demonstrated at Tokyo Tech

