Application Guide for International Graduate Program(A)

commencing in Fall 2024

Tokyo Institute of Technology (Tokyo Tech) will be integrated with Tokyo Medical and Dental University (TMDU) as of fall 2024. The tentative name for the new university is "Institute of Science Tokyo".
Please note that if the integration day comes before your new enrollment in the fall of 2024, you will be among the new university's first students. However, if the integration day comes after your new enrollment at Tokyo Tech or TMDU, you will belong to the university at which you enrolled.
Up to the day before integration, all students currently studying at and newly enrolling at Tokyo Tech or TMDU will belong to the university at which they enrolled. As of the integration day, they will become students of the new university.

September, 2023

Tokyo Institute of Technology

Contents

Application schedule

Enrollment Date: **Fall, 2024**
Number of Students Admitted: Several students for each department
Degree program offered: **Master's Program** and **Integrated Doctoral Education Program**

Application Period	September 11, 2023 – December 6, 2023
Deadline of the consent mail/letter submission	November 29, 2023 at 23:59 (JST)
Deadline of application	December 6, 2023 at 23:59 (JST)
Result notification	March 4, 2024 at 15:00 (JST)

1. General Prospectus

Tokyo Institute of Technology ("Tokyo Tech") launched its International Graduate Program in October 2007 as an opportunity for qualified international students, who may have little or no Japanese language ability, to enroll in Tokyo Tech's Master's or Doctoral Programs and pursue an advanced degree in Japan.

The International Graduate Program (A) offers a choice of five English-language based curricular programs related to the 14 departments of Tokyo Tech and enables students to obtain a master's or doctoral degree. There are two types of programs: Integrated Doctoral Education Program and Master's Program. Some curricular programs are set up as an Integrated Doctoral Education Program, designed to combine the Master's Program and Doctoral Program so that graduate students can obtain both degrees within three to five years.

There is no Japanese language requirement for this program as lectures and seminars are held in English. However, students are given opportunities to attend Japanese language classes on a regular basis in order to better adapt to daily life in Japan.

A limited number of students with outstanding academic records are eligible to apply for a scholarship from Japan's Ministry of Education, Culture, Sports, Science and Technology ("MEXT") with a recommendation from Tokyo Tech.

2. Programs

This recruitment prospectus relates to Master's and Integrated Doctoral Education Programs scheduled to begin in **Fall 2024.**

1) Integrated Doctoral Education Program

This is a combined Master's and Doctoral Program, and is considered to be one continuous course of study, which cannot be divided into two separate programs. In the Master's segment, students who demonstrate outstanding academic performance may be able to reduce their period of study. Similarly, in the Doctoral segment, students who demonstrate outstanding academic and research performance during the program may be able to reduce their period of study. Such students may be able to complete the entire Master's and Doctoral Program in the minimum period of three years.

Conventionally, in a Japanese postgraduate program, students studying for a master's degree must take 30 credits or more within a two-year period and for a doctoral degree must take 24 credits or more within an additional three years of study follows a master's program. The Integrated Doctoral Education Program requires students to enroll in the Tokyo Tech Master's Program, regardless of whether or not they have already earned a master's degree. A maximum of 15 previously earned credits from a graduate school may be transferred to Tokyo Tech upon approval.

2) Master's Program

Students enrolled in the Master's Program are expected to successfully complete their supervised studies within two years. To attain a master's degree, students need to earn the designated number of credits outlined by their department in a predetermined program of study, complete and receive approval of their research thesis, and pass a comprehensive final examination. Students who demonstrate outstanding academic performance during the program may be able to reduce their period of study.

List of Departments and Programs

Applicants are required to specify their intended program from the list below:

International Graduate Program in Science for Innovative and Quantum-expert Leaders (PSIL)

School	School of Science
Offered degree programs	・Integrated Doctoral Education Program
Related departments	・Department of Mathematics ・Department of Physics ・Department of Chemistry ・ Department of Earth and Planetary Science
Inquiry	psil_inquiry@sci.titech.ac.jp

Interdisciplinary Program on Cyber-Physical System for Smart Society (CPSSS)

School	School of Engineering
Offered degree programs	・Integrated Doctoral Education Program
Related Departments	・Department of Mechanical Engineering ・Department of Systems and Control Engineering ・Department of Electrical and Electronic Engineering ・Department of Information and Communications Engineering ・Department of Industrial Engineering and Economics
Inquiry	cpsss_inquiry@e.titech.ac.jp

Advanced Human Resource Education Program for Emerging Materials Innovations to Solve Social Issues (eMAT-SOC) ※as of October 20, 2023.

School	**School of Materials and Chemical Technology**
Offered degree programs	・Integrated Doctoral Education Program
Related Departments	・Department of Materials Science and Engineering ・Department of Chemical Science and Engineering
Inquiry	matsumoto.h.ac@m.titech.ac.jp (Prof. Hidetoshi Matsumoto, Dept. of Materials Science and Engineering) tago.t.aa@m.titech.ac.jp (Prof. Teruoki TAGO, Dept. of Chemical Science and Engineering)

Graduate Program to Foster BioDX Leaders for Global Bio-Industry

School	**School of Life Science and Technology**
Offered degree programs	・Integrated Doctoral Education Program
Related Departments	・Department of Life Science and Technology
Inquiry	bio.igp@bio.titech.ac.jp

Postgraduate Program for Environmental Designers Contributing to Resilient Cities

School	**School of Environment and Society**
Offered degree programs	・Integrated Doctoral Education Program ・Master's Program
Related Departments	・Department of Civil and Environmental Engineering ・Department of Architecture and Building Engineering
Inquiry	edrc-inquiry@cv.titech.ac.jp (Profs. Akihiro TAKAHASHI, Shinjiro Kanae, Dept. of Civil and Environmental Engineering) IGP@arch.titech.ac.jp (Associate Profs. Ryo MURATA, Profs. Naoko SAIO, Shuji TAMURA, Shin-ichi OKUYAMA, Dept. of Architecture and Building Engineering)

3. Eligibility

Applicants must satisfy one of the conditions provided below.
Please note that applicants **may NOT** (i) apply to a different Tokyo Tech program before receiving admission results or (ii) submit multiple applications to different master's programs for the same enrollment period. Applications in either of the above two cases will be rejected or revoked.

Applicants for scholarships must meet another set of conditions; see "7. Scholarship" for details.

Master's Program / Integrated Doctoral Education Program

(1) Persons who have successfully completed 16 years of education outside Japan or who are expected to do so by the day before the enrollment date.

(2) Persons who have graduated from a university or college in Japan or who are expected to do so by the day before the enrollment date.

(3) Persons who have successfully completed 3 years or more of education at a university or college outside Japan and obtained a degree equivalent to a bachelor's degree or who are expected to do so by the day before the enrollment date.

(4) Persons who have successfully completed 15 years of education and are individually assessed and recognized by the relevant School at Tokyo Tech as having an outstanding academic record

(5) Persons whose countries do not require 16 years of education prior to completing an undergraduate-level education but who satisfy both conditions noted below and are individually assessed and recognized by the relevant School at Tokyo Tech as having academic ability equivalent to or higher than that of graduates of a Japanese university

a. Persons who have spent at least one year as a research student or research fellow at a university or research institution in or outside Japan after successfully completing undergraduate-level education

b. Persons who are at least 22 years old by the day before the enrollment date.

Note: The admission of applicants expecting to obtain a bachelor degree from a university or college will be revoked should the applicant fail to do so by the day before the enrollment date.

Individual Assessment of Admission Eligibility

Applicants who fall under eligibility conditions (3), (4) or (5) must contact the Admissions Division before proceeding with the online application, and ask if they need to go through the Individual Assessment of Admission Eligibility or submit the relevant documents.

Applicants who submit an application for Individual Assessment of Admission Eligibility will be informed of the result around **mid-January 2024**.

Applicants with Japanese nationality

Japanese citizens who satisfy the above conditions and have a visa* that enables them to stay for a long period in the country where they currently live, may apply for this program. Applicants who are Japanese citizens should consult the Admissions Division prior to application.

*Permanent residence, student visa, work visa, etc. (Working holiday visas, tourist visas, short-term stay visas, etc., are not valid for the purpose of applying for this program.)

Note: The admission of applicants expecting to graduate from a university or college or obtain a master's or professional master's degree will be revoked should the applicant fail to do so **by the day before the enrollment date.**

4. Application Process

Prior to application, applicants are required to contact their intended academic supervisor at Tokyo Tech directly via email and provide a self-introductory statement and a letter of intent for their period of study at Tokyo Tech, and obtain the consent of the desired faculty member to serve in this capacity. Applications will not be considered without the consent of a Tokyo Tech faculty member who will act as the applicant's academic supervisor.

Before proceeding with the online application process, applicants must obtain a consent email or letter from a Tokyo Tech faculty member, and send a copy of it to the Admissions Division by **November 29 at 23:59 (JST)**. After verifying the document, the Admissions Division will provide applicants with a URL for the online application system and a required password.

Note: Faculty members are affiliated with schools and assigned to teach a graduate major. Students must select **a graduate major** from the faculty list. Please ask your intended academic supervisor which graduate major you should select. Requirements for the completion of a degree are stipulated for each graduate major.

Find your Academic Supervisor

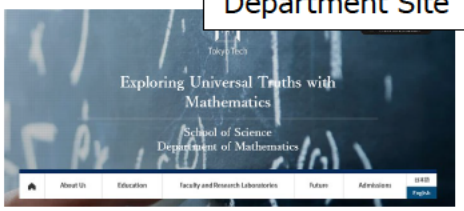
Please refer the chart below for the procedure to find your academic supervisor and relevant contact information. Some academic supervisors may require the submission of additional documents before the stated deadline.

STEP 1

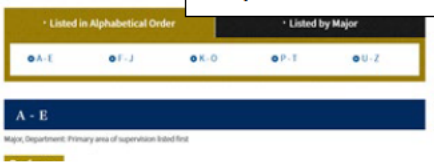
Access your intended department website and confirm the potential academic supervisor's major and research fields.

Department List

Department Site

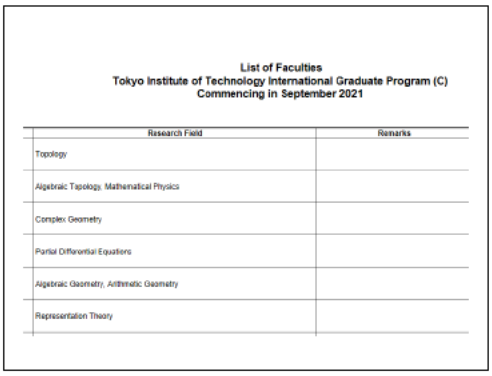


Faculty List on Department Site



STEP 2

Check the Application Guide to confirm that the researcher is on the faculty list for your intended IGP.



List of Faculties
Tokyo Institute of Technology International Graduate Program (C)
Commencing in September 2021

Research Field	Remarks
Topology	
Algebraic Topology, Mathematical Physics	
Complex Geometry	
Partial Differential Equations	
Algebraic Geometry, Arithmetic Geometry	
Representation Theory	

STEP 3

Use Tokyo Tech's research database, "Star Search" to find faculty member contact and other information.

How to Apply

Before Application

1

Gather information on Tokyo Tech websites

Find degree programs and research fields of interest, and search for possible academic supervisors. Make sure to look at the IGP application schedule.

2

Check eligibility for each program

If you need to go through the Individual Assessment of Admission Eligibility*, or are unsure about your eligibility, please contact the Admissions Division at ryugakusei@jim.titech.ac.jp.

3

Contact an intended academic supervisor

Obtain a consent email/letter from your intended academic supervisor to be accepted to their lab. Submit your CV, transcripts, etc. as requested.

4

Email a copy of the consent email/letter to the Admissions Division

Send a copy of the consent email/letter to ryugakusei@jim.titech.ac.jp, so that it arrives no later than the deadline stated below. You will receive a **URL** and **password** required to access the online application system **in about a week**.

Submission deadline: **November 29, 2023 at 23:59 (JST)**

5

Prepare application documents

1. ID photo
2. Consent email/letter from Tokyo Tech Faculty Member
3. Field of Study and Study Program (★)
4. Summary of thesis (free format)
5. English proficiency test score
6. A copy of your passport or residence card
7. Verification of application fee payment
8. Academic transcripts
9. Certificate of graduation
10. Certificate of degree
11. Evaluation sheet with recommendation letter (★)
12. Recommendation Letter* (from the Dean)

* Non-MEXT scholarship applicant is not required.

Application for individual assessment of admission eligibility (★)

Application for scholarship (★)

Application via online system

6

Complete the submission of application documents

Access the online application system with the URL and PW informed by the Admissions Division.

Online Application System

Fill out the online form and complete the submission of application documents no later than **December 6, 2023 at 23:59** (JST)

7

Application process is completed

The Admissions Division reviews application documents and confirms the receipt of the application to each applicant via email.

★：Designated formats can be downloaded from each IGP program page

Application Documents

■ Application Documents to be submitted by applicants

Prior to accessing the online application system, applicants must make sure that all of the following documents are prepared for online submission.

No.	Required Documents
1	**ID Photo** Photograph (JPEG) *4.0×3.0 cm, taken within the past six months. The file must be less than 2MB, 350 (height) X 290 (width) pixels, JPEG format with a resolution of more than 300 dpi. The photo should be in color with no background and must provide a clear, front view of the applicant's entire face.
2	**Consent of a Tokyo Tech Faculty Member** Electric or scanned data of consent mail or letter to verify that a Tokyo Tech faculty member has consented to act as academic supervisor during the intended period of study at Tokyo Tech. (This document must be emailed to the Admissions Division prior to accessing the online application system no later than **November 29, 2023, at 23:59 (JST)**. Applicant will then receive a URL and Password required to access the online application system in about a week.)
3	**Field of Study and Study Program** [Research Proposal] （★） ★Designated formats can be downloaded from each IGP program page
4	**Summary of Thesis or Research** For applicants of the Master's program and Integrated Doctoral Education Program: an outline of your study or research in your undergraduate course.

5	**English Proficiency Test Score Report or Approval email for exemption from English proficiency test score report submission (*1)** Electric or scanned data of English proficiency test score report of the following tests taken on or after **December 7, 2021**. **MEXT scholarship applicants** are required to submit electric or scanned data of English proficiency test score report of one of the following tests taken on or after **January 1, 2022**. Applicants **do not** to request ETS or the British Council to send their English proficiency score reports to Tokyo Tech. **TOEFL iBT (including TOEFL iBT (Special) Home Edition)** **TOEFL ITP Plus for China Solution (taken in Mainland of China)** **TOEFL Paper delivered Test** **TOEIC L&R** **IELTS Academic Module (including computer-delivered test)** The Institutional Program of TOEFL (TOEFL-ITP) and TOEIC (TOEIC-IP), TOEIC S&W, or other proficiency tests not specifically listed above **will not be accepted**. **(*1) Exemption from Submitting English Proficiency Test Scores** Applicants who wish to obtain exemption must first consult their prospective academic supervisor. The Admissions Division cannot provide any support if you send inquires/emails to the Division. If exemption is granted, applicants must submit electric or scanned data of the email notifying them that exemption was approved. Applicants who meet any of the following conditions may be exempted from submitting English proficiency test scores. (i) Native English speakers (ii) Individuals who have been awarded an undergraduate and/or graduate degree* from an institution where all instruction was in English (iii) Individuals who have been granted this exemption by a department chair at Tokyo Tech. (This is not applicable to MEXT scholarship applicants.) *Undergraduate and graduate degrees should be equivalent to the Japanese educational definitions of undergraduate, master's, and doctoral degrees.
6	**Applicant's Passport or Residence card** Electric or scanned data of the page(s) with the applicant's name, nationality, date of birth, and photo

	*Japanese applicant must also submit the page(s) of his/her passport that shows visas obtained in the country where he/she lives.
7	**Payment Verification of Application Fee (Entrance Examination Fee): JPY 30,000** Applicants must pay the application fee online at E-Shiharai Net, using a credit card within the application fee payment period. Save a “Payment Verification” page that appears at the end of the payment process as a PDF file. Applicant who is a Japanese Government (MEXT) Scholarship student is not required to pay this fee. In that case, please submit a certificate verifying that you have been granted the scholarship (受給証明書). The application fee is non-refundable. However, the application fee may be refunded in the following cases, with bank remittance or transaction handling fees borne by the applicant. 1. Applicants paid the application fee but did not submit the application documents 2. Applications could not be processed due to lacking necessary documents, etc. 3. Applicants will receive the MEXT Scholarship and enroll at Tokyo Tech Payment Period: **September 11, 2023–December 6, 2023**
8	**Official Academic Transcripts** 1) For applicants to Integrated Doctoral Program and Master's Program: official academic transcripts for undergraduate programs 2) For MEXT scholarship applicants previously enrolled in a graduate school: official academic transcripts for graduate programs 3) If the applicant’s grades have not been reflected due to a difference in evaluation systems at the university in which he/she was enrolled and his/her current university (including Tokyo Tech) -- such as those involving transfer, exemptions, etc. -- the transcripts from the original institute(s) that granted the credits should also be submitted.
9	**Certificate confirming graduation or expected graduation issued from applicant’s previous or current university** The documentation must verify the applicant’s eligibility for admission, and must include his/her name, confirm graduation (or expected graduation), and include the date of graduation. If the applicant graduated or is graduating early or has skipped a grade or year, an official document or letter issued by the university indicating as such must be submitted.

10	**Certificate confirming degree or expected degree issued from applicant's previous or current university** The documentation must verify the applicant's degree (or expected degree), and must include the recipient's name, confirm the degree awarded, and include the date issued and the degree program taken.

Note:
Documents 8 & 9 & 10:
Documents written in a language other than English or Japanese must be accompanied by a certified English or Japanese translation. Translations should be certified by a public institution or the issuing university.

Document 9 & 10:
Certificates for 9 and 10 above need not be separate documents. A document certifying both graduation and the degree awarded may be submitted.

If applicant's university dose not issue a certificate of expected graduation and degree, official letter, issued by applicant's current university, indicating applicant's name, date of birth, expected date of graduation, expected degree may be accepted as substitute.

11	**Evaluation Sheet with Recommendation (in a single document)** (★) Must be issued by a supervisor or head of department or similar official at applicant's previous or current university to verify potential of the applicant
12	**Recommendation Letter** Recommendation Letter from the Dean or equivalent official of the applicant's home university addressed to the President of Tokyo Institute of Technology (free format) This letter must be issued from the university the applicant attended for full time study. Please note that **Non-MEXT scholarship applicants** are **not** required to submit this letter.

★：Designated formats can be downloaded from each IGP program page.

■ Application Documents for Individual Assessment of Admission Eligibility

Applicants who fall under eligibility conditions (3), (4), or (5) must contact the Admissions Division before proceeding with the online application, and ask if they need to go through the Individual Assessment of Admission Eligibility or submit the relevant documents.

Applicant who is required to go through Individual Assessment of Admission Eligibility**,** must submit **Application for Individual Assessment of Admission Eligibility** (★) with the following supplementary documents

For applicants of the Master's / Integrated Doctoral Education Program:

- Certificate of Enrollment as a research student/fellow after graduation from an undergraduate course of study at a university

■ Application Documents for Scholarships

Scholarship Application Documents

Applicants who wish to apply for the scholarship listed in Section 7, "Scholarship" are required to prepare the necessary documents（★） and submit those via online application system. Before applying for the scholarship, applicants are required to check the application qualifications carefully and refer to the explanation in Section 7, "Scholarship" in this application guide.

★：Designated formats can be downloaded from each IGP program page.

Completion of the online Application Process

The entire online application process must be completed no later than **December 6, 2023 at 23:59 (JST).** Applicants must fill out the online form and submit the application documents via the Tokyo Tech online submission system no later than this deadline.

Note:

(1) Admission may be withdrawn at any time, even after enrollment, if the application documents are found to be invalid or contain false information.

(2) The information provided in application documents is used only for entrance examinations and related purposes. The policy regarding the use of personal information is as follows:
a. Personal information obtained through the application process will be used for selection of applicants. Only in the case of enrolling applicants will it be used for (i) enrollment procedures, (ii) administrative purposes (student records, academic guidance), (iii) student support (health management, career support, application for scholarships and tuition exemption), and (vi) procedures related to the collection of tuition.
b. Entrance examination results may be used in the future to improve applicant selection methods.
c. In performing the tasks described in items a and b, some duties may be delegated to outside contractors. These contractors may, where necessary, be provided with all or part of obtained personal information to complete their duties.

(3) Tokyo Tech will not accept or consider any documents received after the stated deadline or any incomplete applications.

(4) Submitted documents cannot be changed after completing the application.

5. Admission procedures

Admission screening

8 **Tokyo Tech schedules interviews and/or written examinations**
Departments or academic supervisors will notify applicants (via email) about interview and/or examination dates.

9 **Interviews and/or written examinations take place**
Applicants attend interviews and/or take written examinations as designated by departments.

Interview or/and Examination

The examination period and subjects differ among departments. After completion of application, applicants will be notified about the schedule of interview or/and examination by the intended academic supervisor or department. Please refer to the contact details (on page 3-4) for inquiries and further information.

Admission Decision

The admission decision will be made based on the application documents and screening and interview processes including an internet-based interview.
The Announcement of Successful Applicants (in PDF format) will be posted on the "Admissions Results" web page around **15:00 on Monday, March 4, 2024.**
Inquiries via email, telephone, etc. regarding the result of examination will not be answered.

Notification of results

10 A list of successful applicants will be published on the Tokyo Tech website.
Each applicant receives an admission decision. Successful applicants will be notified about documents required for enrollment by the admissions division via email.

6. Enrollment Fee and Tuition

Students admitted to the Master's and Doctoral Programs are required to pay the following fees.

Enrollment Fee	JPY 282,000
Annual Tuition	JPY 635,400

（Enrollment and tuition fees are subject to change. The amounts indicated above do not include bank handling charges.）

Payment of the enrollment fee and tuition for the fall (first) semester can be postponed, and payment of tuition for the spring (second) and subsequent semesters can be waived, upon application and approval.

7. Scholarship

Applicants for IGP(A) are able to apply for the following scholarships under certain conditions.
* Japanese citizens may not apply for the following scholarships.

I. MEXT Scholarship (Integrated Doctoral Education Program Only)

Applicants for Integrated Doctoral Education Programs with outstanding academic performance records may have a chance to apply for the Japanese Government (MEXT) Scholarship. The scholarship provides round-trip airfare to Japan, and a monthly stipend of JPY147,000 for master's students and JPY148,000 for doctoral students. This stipend is subject to change as specified by the regulations of the MEXT Scholarship program. Successful MEXT Scholarship recipients are not required to pay admission or tuition fees.

Those who wish to apply for this scholarship must see a separate online application guide to check if they are eligible.
https://www.titech.ac.jp/english/international-student-exchange/prospective-students/scholarships/mext-university-general

The candidates nominated for a MEXT Scholarship will be notified together with the admission decision in mid-March. The notification of scholarship recipients will be sent to applicants in early August at the latest.

Integrated Doctoral Education Program participants are required to achieve a satisfactory level of performance while enrolled into the Master's Program, in order to continuously receive the MEXT Scholarship benefits in Doctoral Program.

How to apply

Applicants for this scholarship must submit required documents via online application system together with application documents for IGP(A). Formats for application documents are available from the program page.

II. JASSO （Overseas Applicants Only）

Overseas applicants who enroll at Tokyo Tech have the chance to apply for the “Reservation Program for Monbukagakusho Honors Scholarship for Privately-Financed International Students by Pre-arrival Admission” from the Japan Student Services Organization (“JASSO”).

The monthly amount of this scholarship is JPY48, 000 and is subject to change as specified by JASSO. This scholarship will be paid from October 2024 to March 2025 (6 months). Applicants must pay the enrollment and tuition fees even if they are selected for this scholarship. Please note that those who are granted any other scholarship that doesn’t allow plural grants cannot apply for this scholarship simultaneously.

Upon your application for IGP(A), no other application documents are required for the JASSO Scholarship.
Students who intend to apply for the JASSO scholarship must check if they fulfil all the following six criteria and select “JASSO” as your intended scholarship in the intended scholarship section of the online application system. For those who selected “JASSO”, the Student Support Division will contact them for further instruction via email by the beginning of August 2024. The selection will be conducted during August and the result will be announced via email by the beginning of September.

Qualification criteria for the JASSO Scholarship

1. Applicant must not be receiving a scholarship that cannot be combined with other scholarships.
2. Applicant must have the status of residence “Student” when entering Japan.
3. Allowance (excluding enrollment fee, tuition fee, etc.) received by the applicant must not exceed an average of 90,000 yen per month.
4. If the applicant has a financial supporter in Japan, his/her annual income must be less than 5 million yen.
5. Applicant’s Japanese or English ability must be over the following level.
   - Japanese JLPT (Japanese Language Proficiency Test) Level 1 or 2, EJU Over 200 in Japanese subjects
   - English Over B2 level in CEFR
     (For example, TOEFL iBT over72, IELTS over 5.5, TOEIC L&R over 785)
6. Applicant must be living overseas (not in Japan) when applying for the International Graduate Program.

8. Others

Prevention of Infectious Diseases

To manage the risk of infectious diseases at the Institute, international students (including those from other domestic universities, technical colleges, and Japanese language schools) who have passed the entrance exam, are urged to submit a health certificate signed by a physician in the last three months before enrollment.

Tokyo Tech will apply on behalf of successful applicants for a Certificate of Eligibility (COE) after the examination results are released. There may be cases, however, where the COE application is rejected by the Immigration Services Agency of Japan. Those without a COE will not be permitted to enter Japan, and will be withdrawn from Tokyo Tech if they have already completed the enrollment procedure. Please also note that enrollment and tuition fees once paid will not be refunded under any circumstances. Tokyo Tech has a system for postponing payment of those fees.

9. Inquiries

Answers to frequent asked questions about IGP admissions are included on the FAQ page below.
https://www.titech.ac.jp/english/admissions/prospective-students/graduate-programs/igp-faq

For other inquiries, please contact the Admissions Division at the following email addresses.

Inquiries about	**email** **designated words in the subject box**
Application procedures	ryugakusei@jim.titech.ac.jp [Question about application] IGP(A)2024 Fall_Full Name
Consent email/letter submission	ryugakusei@jim.titech.ac.jp [Consent Submission] IGP(A)2024 Fall_Full Name
Online application (for applicants)	Igp.submission@jim.titech.ac.jp [Question about submission] IGP(A)2024 Fall _Full Name

Upon sending your question by email, please put the designated words in the subject box.

In circumstances where you need to send Tokyo Tech hard copies of the required documents by post, please contact ryugakusei@jim.titech.ac.jp (see “Application procedures” of the above table) for advice.

We strongly recommend that you contact us as soon as possible if you have any questions about application procedures. As the procedures can take time, be sure to submit the documents early enough before the deadline. Please note that we cannot provide any support if you send inquiries/emails at the moment just before the application deadline.

Appendix

List of Faculty

IGP(A), commencing in Fall 2024

List of Faculty
Tokyo Institute of Technology International Graduate Program (A)
Commencing in Fall 2024

A-1 International Graduate Program in Science for Innovative and Quantum-expert Leaders (PSIL)

(1) Dept. of Mathematics

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	OCHIAI, Tadashi	Number Theory, Arithmetic Geometry		・Mathematics
Professor	SHIMOMOTO, Kazuma	Commutative algebra, Singularity theory, number theory		・Mathematics
Professor	TAGUCHI, Yuichiro	Number Theory		・Mathematics
Professor	NAITO, Satoshi	Representation Theory		・Mathematics
Associate Professor	OYA, Hironori	Representation Theory		・Mathematics
Associate Professor	SUZUKI, Masatoshi	Analytic Number Theory		・Mathematics
Associate Professor	MA, Shohei	Algebraic Geometry		・Mathematics
Associate Professor	YATAGAWA, Yuri	Arithmetic Geometry		・Mathematics
Professor	ENDO, Hisaaki	Topology		・Mathematics
Professor	GOMI, Kiyonori	Algebraic Topology, Mathematical Physics		・Mathematics
Professor	HONDA, Nobuhiro	Complex Geometry		・Mathematics
Associate Professor	KALMAN, Tamas	Topology		・Mathematics
Associate Professor	NOSAKA, Takefumi	Topology		・Mathematics
Professor	KAGEI,Yoshiyuki	Partial Differential Equations		・Mathematics
Professor	TONEGAWA, Yoshihiro	Partial Differential Equations, Geometric Measure Theory		・Mathematics
Professor	NINOMIYA, Syoiti	Computational Finance, Mathematical Finance, Probability Theory		・Mathematics
Professor	MIURA, Hideyuki	Theory of Partial Differential Equations		・Mathematics
Associate Professor	ONODERA, Michiaki	Partial Differential Equations		・Mathematics
Associate Professor	FUJIKAWA, Ege	Complex Analysis		・Mathematics
Associate Professor	MIURA, Tatsuya	Partial Differential Equations		・Mathematics
Professor	NISHIBATA, Shinya	Theory of Partial Differential Equations		・Mathematics

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	SUZUKI, Sakie	Knot Theory, Quantum Topology		・Mathematics
Associate Professor (Lecturer)	TSUCHIOKA, Shunsuke	Quantum Algebra, Representation Theory		・Mathematics

(2) Dept. of Physics

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	ITO, Katsushi	Particle Physics (Theory)		・Physics
Professor	KAGAWA, Fumitaka	Condensed-matter physics, Phase control, Nonequilibrium (Experiment)		・Physics
Professor	KUZE, Masahiro	Particle Physics (Experiment)		・Physics
Professor	KOZUMA, Mikio	Quantum optics, Laser cooling, Bose Einstein condensation		・Physics
Professor	SATOH, Takuya	Ultrafast dynamics, optical condensed matter physics		・Physics
Professor	SASAMOTO, Tomohiro	Statistical physics		・Physics
Professor	JIDO, Daisuke	Nuclear Hadron Physics (Theory)		・Physics
Professor	JINNOUCHI, Osamu	High Energy Particle Physics (Experiment)		・Physics
Professor	SEKIGUCHI, Kimiko	Nuclear Physics (Experiment)		・Physics
Professor	NAKAMURA, Takashi	Nuclear Physics (Experiment)		・Physics
Professor	HIRAHARA, Toru	Surface Physics, Nano /spin-Science		・Physics
Professor	FUJISAWA, Toshimasa	Electron dynamics in semiconductor nanostructures		・Physics
Professor	MUKAIYAMA, Takashi	Laser cooling of atoms, ion traps, quantum sensing, Fermi degenerated gases, ultracold chemistry		・Physics
Professor	MURAKAMI, Shuichi	Theoretical Condensed Matter Physics, spintronics, geometrical phases		・Physics
Professor	OHZEKI, Masayuki	Quantum Mechanics and Statistical Physics for Information processing (Machine learning and Quantum Computation)		・Physics
Professor	NOTOMI, Masaya	Nanophotonics, Photonic crystals, Metamaterials		・Physics
Associate Professor	ISHIZUKA, Hiroaki	Theoretical condensed matter physics, transport phenomena, magnetism		・Physics
Associate Professor	IMAMURA, Yosuke	Particle Physics (Theory)		・Physics
Associate Professor	UCHIDA, Masaki	Topological and correlated materials, Molecular beam epitaxy, Quantum transport phenomena		・Physics
Associate Professor	KOGA, Akihisa	Strongly correlated electron systems		・Physics
Associate Professor	SUYAMA, Teruaki	Cosmology, gravitational waves (Theory)		・Physics

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	SEKIZAWA, Kazuyuki	Nuclear Physics (Theory)		・Physics
Associate Professor	SOMIYA, Kentaro	Gravitational Wave Detector		・Physics
Associate Professor	NISHIDA, Yusuke	Theoretical Quantum Physics, Ultracold Atoms		・Physics
Associate Professor	FUJIOKA, Hiroyuki	Nuclear and Hadron Physics (Experiment)		・Physics
Associate Professor	PU, Jiang	Physical properties and devices of 2D materials and their heterostructures		・Physics
Associate Professor	MATSUSHITA, Michio	Optical spectroscopy of single proteins		・Physics
Associate Professor	YATSU, Yoichi	Astrophysics (Experiment)		・Physics
Visiting Professor	DOTANI, Tadayasu	X-ray Astronomy (Experiment)	JAXA	・Physics
Specially Appointed Professor	HIGEMOTO, Wataru	Strongly correlated electron systems, Muon science	JAEA	・Physics
Visiting Professor	MATSUHARA, Hideo	Infrared Astronomy (Experiment)	JAXA	・Physics
Visiting Professor	MIYAKE, Takashi	Computational materials science	AIST	・Physics

(3) Dept. of Chemistry

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	KAWAGUCHI, Hiroyuki	Coordination Chemistry		・Chemistry
Professor	KAWANO, Masaki	Coordination Chemistry, Chemical Crystallography, Supramolecular Chemistry		・Chemistry ・Energy Science and Informatics
Professor	KONDO, Mio	Coordination chemistry, Catalytic chemicstry, Electrochemistry		・Energy Science and Informatics ・Chemistry
Professor	HIBARA, Akihide	Analytical chemistry, interface chemicstry, atmospheric chemistry, microfluidic bioanalysis		・Chemistry
Professor	MAEDA, Kazuhiko	Inorganic Materials Chemistry, Photocatalysis		・Energy Science and Informatics ・Chemistry
Professor	YASHIMA, Masatomo	Materials Science, Crystallography, Solid State Chemistry & Physics, Solid State Ionics, Crystal Structure Analysis, New Inorganic Materials		・Energy Science and Informatics ・Chemistry
Associate Professor	UEKUSA, Hidehiro	Chemical Crystallography, Organic Crystal Chemistry		・Chemistry
Associate Professor	FUKUHARA, Gaku	Analytical Chemistry, Supramolecular Chemistry		・Chemistry
Professor	ISHIUCHI, Shun-ichi	Physical Chemistry, Laser Spectroscopy		・Chemistry
Professor	TANIGUCHI, Kouji	Solid State Chemistry		・Energy Science and Informatics
Associate Professor	OKIMOTO, Yoichi	Optical Spectroscopy of Solids		・Energy Science and Informatics ・Chemistry
Associate Professor	KITAJIMA, Masashi	Physical Chemistry		・Chemistry
Associate Professor	NISHINO, Tomoaki	Surface Chemistry		・Chemistry

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	YAMAZAKI, Masakazu	Physical Chemistry, Atomic and Molecular Physics		・Chemistry
Professor	OHMORI, Ken	Organic Chemistry		・Chemistry
Professor	GOTO, Kei	Organic Chemistry		・Chemistry
Professor	TOYOTA, Shinji	Physical Organic Chemistry		・Chemistry ・Energy Science and Informatics
Associate Professor	ONO, Kosuke	Organic Chemistry, Supramolecular Chemistry		・Chemistry
Associate Professor	KUDO, Fumitaka	Bioorganic Chemistry		・Chemistry
Associate Professor	TAKAYA, Jun	Organic Chemistry		・Chemistry
Professor	NOGAMI, Kenji	Geochemistry, Volcanology		・Chemistry
Associate Professor	TERADA, Akihiko	Volcanology		・Chemistry

(4) Dept. of Earth and Planetary Sciences

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	UENO, Yuichiro	Geology, Biogeochemistry		・Earth and Planetary Sciences
Professor	SATO, Bunei	Observational Astronomy, Exoplanets		・Earth and Planetary Sciences
Professor	NAKAJIMA, Junichi	Seismology, Geophysics		・Earth and Planetary Sciences
Professor	NAKAMOTO, Taishi	Astrophysics, Planetary Formation		・Earth and Planetary Sciences
Professor	YOKOYAMA, Tetsuya	Geochemistry, Cosmochemistry		・Earth and Planetary Sciences
Associate Professor	ISHIKAWA, Akira	Geology, Solid Earth Geochemistry		・Earth and Planetary Sciences
Associate Professor	OHTA, Kenji	Study of the Earth's Deep Interior, High-Pressure Mineral Physics		・Earth and Planetary Sciences
Associate Professor	OKUZUMI, Satoshi	Astrophysics, Planetary Formation		・Earth and Planetary Sciences
Associate Professor	OZAKI, Kazumi	Earth System Science, Theory of Earth's Evolution		・Earth and Planetary Sciences
Associate Professor	KEBUKAWA, Yoko	Astrochemistry, Prebiotic chemistry		・Earth and Planetary Sciences
Associate Professor	GILBERT, ALEXIS	Organic Geochemistry, Biogeochemistry		・Earth and Planetary Sciences
Associate Professor	KANDA, Wataru	Physical Volcanology, Geomagnetism	Institute of Innovative Research, Multidisciplinary Resilience Research Center	・Earth and Planetary Sciences
Professor	SEKINE, Yasuhito	Earth and Planetary Environment Evolution, Astorobiology	Earth-LifeScience Institute	・Earth and Planetary Sciences
Professor	HERNLUND, John	Geophysical Modeling	Earth-LifeScience Institute	・Earth and Planetary Sciences
Professor	GENDA, Hidenori	Comparative Planetology, Aqua Planetology	Earth-LifeScience Institute	・Earth and Planetary Sciences

A2 Interdisciplinary Program on Cyber-Physical System for SmartSociety (CPSSS)

As of Aug. 30, 2023

(1) Dept. of Mechanical Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	SAITO, Takushi	[Thermofluid field] Development of thermal design technology for electrification of machinery, Analysis of transport phenomena including interface, Development of heat transfer control technology using nanomaterials		・Mechanical Engineering
Professor	SUEKANE, Tetsuya	[Thermofluid field] CO2 Geological Storage, Enhanced Oil Recovery, Transport in Porous Media, Numerical Simulation of Multiphase Flow		・Mechanical Engineering
Professor	TANAHASHI, Mamoru	[Thermofluid field] Fluid Dynamics, Heat and Mass Transfer, Combustion		・Mechanical Engineering
Professor	NOZAKI, Tomohiro	[Thermofluid field] Plasma Chemistry, Reaction Engineering, Thermal Engineering		・Mechanical Engineering
Professor	FUSHINOBU, Kazuyoshi	[Thermofluid field] Thermal Engineering (Ultrafast Laser Diagnosis & Processing, Additive Manufacturing, Automotive Electronic Packaging, Digital Printing, Energy Equipment)		・Mechanical Engineering
Professor	MURAKAMI, Yoichi	[Thermofluid field] CO2 Adsorbent Development, Materials Development for Batteries, Thermal Energy Harvesting & Storage, Photon Upconversion		・Mechanical Engineering
Associate Professor	ONISHI, Ryo	[Thermofluid field] Environmental Turbulent Flows, CFD, Machine Learning, Data Assimilation, Micro-Meteorology Forecasting System		・Mechanical Engineering
Associate Professor	SASABE, Takashi	[Thermofluid field] Advanced Energy Engineering		・Mechanical Engineering
Associate Professor	SUZUKI, Sayaka	[Thermofluid field] Thermal Engineering, Environmental Energy Engineering, Fire, Environmental Impacts of Fire and Combustion		・Mechanical Engineering
Associate Professor	HASEGAWA, Jun	[Thermofluid field] Plasma Science and Engineering, Ion Beam Science and Engineering, Fusion Energy, Fusion Neutron Source		・Mechanical Engineering
Assistant Professor (Tenure Track)	KODAMA, Manabu	[Thermofluid field] X-ray measurement, machine learning analysis, electrochemical simulation, next-generation EV battery, water electrolysis		・Mechanical Engineering
Professor	ARAKI, Wakako	[Materials and processing fields] Mechanics of materials, Fracture mechanics, Solid state ionics, Mechanics and ionics of ion-conducting oxides		・Mechanical Engineering
Professor	HIRATA, Atsushi	[Materials and processing fields] Surface Engineering		・Mechanical Engineering
Associate Professor	AONO, Yuko	[Materials and processing fields] Functional Surface and Thin Film, Laser Processing		・Mechanical Engineering
Associate Professor	AKASAKA, Hiroki	[Materials and processing fields] Synthesis and Evaluation of Inorganic Carbon Materials		・Mechanical Engineering
Associate Professor	INABA, Kazuaki	[Materials and processing fields] Continuum Mechanics		・Mechanical Engineering
Associate Professor	SAKAGUCHI, Motoki	[Materials and processing fields] Mechanics and Strength of Materials		・Mechanical Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	TANAKA, Tomohisa	[Materials and processing fields] Production engineering, Manufacturing, Tribology		・Mechanical Engineering
Associate Professor	MIZUTANI, Yoshihiro	[Materials and processing fields] Structural Reliability Engineering, Application of Artificial Intteligence		・Mechanical Engineering
Associate Professor	YAMAZAKI, Takahisa	[Materials and processing fields] Materials for Space Use, Advanced Joining and Surface Coating		・Mechanical Engineering
Associate Professor	YAMAMOTO, Takatoki	[Materials and processing fields] Bionanotechnology, Micro TAS		・Mechanical Engineering
Professor	KIM, Joon-wan	[Mechanical system field] MEMS, Micro Mechatronics, Bio Mechatronics		・Mechanical Engineering
Professor	SHINSHI, Tadahiko	[Mechanical system field] Mechanical Systems Using Magnetic Force, Magnetic MEMS, Ultrasonic Medical Instruments Artificial Heart		・Mechanical Engineering
Professor	YANAGIDA, Yasuko	[Mechanical system field] Bio-MEMS/NEMS, Biosensing, Biofunctional Engineering		・Mechanical Engineering
Specially Appointed Professor	KOBAYASHI, Tsune	[Mechanical system field] Analysis and Design of Mechanical Elements, Mechanisms for Automobiles		・Mechanical Engineering
Associate Professor	ISHIDA, Tadashi	[Mechanical system field] Biomedical MEMS, Nanobiology		・Mechanical Engineering
Associate Professor	SAKAMOTO, Hiraku	[Mechanical system field] Space Structures, Dynamics, Numerical Analysis		・Mechanical Engineering
Associate Professor	NAKANO, Yutaka	[Mechanical system field] Vibration Engineering		・Mechanical Engineering
Associate Professor	NISHISAKO, Takashi	[Mechanical system field] Nano/micro Fluid, Emulsion, Micro Chemistry, Bio chemistry, MEMS		・Mechanical Engineering
Associate Professor	HIJIKATA, Wataru	[Mechanical system field] Mechatronics, Medical Device, Wireless Power Transmission		・Mechanical Engineering
Associate Professor	TAKAHASHI, Hideharu	[Mechanical system field] Smart Agricultural and Forestry Engineering, Remote Sensing, Zero-carbon Energy, Environmental Restoration and Utilization of Unused Resources		・Mechanical Engineering
Specially Appointed Associate Professor	MATSUURA, Daisuke	[Mechanical system field] Analysis and Design of Mechanical Elements, Robotics, Mechatronics, Visual Measurement, Visual Servo, Non-contact Manipulation, Welfare equipment		・Mechanical Engineering
Assistant Professor (Tenure Track)	CHUJO, Toshihiro	[Mechanical system field] Astrodynamics, Trajectory design, Guidance, Navigation, and Control, Deep space mission design, Spacecraft system, Dynamics simulation		・Mechanical Engineering
Professor	ENDO, Gen	[Mechanical system field] Robotics, Mechatronics, Mechanism Design		・Mechanical Engineering ・Engineering Sciences and Design
Professor	OKADA, Masafumi	[Intelligent system field] Robotics, Control Engineering		・Mechanical Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	SHINO, Motoki	[Intelligent system field] Cooperative Assist and Control in Human-Machine Systems, Intelligent Mobility, Behavioral and Physiological Information based System Design, Comfort Design, Automated Driving Technology		・Mechanical Engineering
Professor	TAKEDA, Yukio	[Intelligent system field] Mechanical Systems Design		・Mechanical Engineering
Professor	NISHIDA, Yoshifumi	[Intelligent system field] Living Centric Design, Living Function Support, Artificial Intelligence, IoT		・Mechanical Engineering
Professor	MAEDA, Shingo	[Intelligent system field] Soft Materials, Soft Robotics		・Mechanical Engineering
Associate Professor	SUGAHARA, Yusuke	[Intelligent system field] Mechanical Systems Design		・Mechanical Engineering
Associate Professor	TAKAYAMA, Toshio	[Intelligent system field] Robothics & Mechatronics, Mechanism, Soft robot, Medical device, Microfluidic device		・Mechanical Engineering
Associate Professor	TANAKA, Hiroto	[Intelligent system field] Biomimetics, Fluid dynamics of animal flight and swimming, Flapping-wing aerial/underwater robots, Micro fabrication		・Mechanical Engineering
Specially Appointed Associate Professor	ENDO, Mitsuru	[Intelligent system field] Human Collaborative Robot, Light-weight Actuator, Mechatronics, Industrial Robot		・Mechanical Engineering
Associate Professor (Lecturer)	MIURA, Satoshi	[Intelligent system field] Human-Machine Interface, Brain-Machine Interface, Medical Robotics, Welfare Robotics,Surgical Robotics		・Mechanical Engineering

(2) Dept. of Systems and Control Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	AMAYA, Kenji	Inverse Problems, Computational Mechanics, Electrochemical Analysis, Optical Analysis		・Systems and Control Engineering
Professor	IMURA, Jun-ichi	Robot Intelligent Control, Control Theory Hybrid Systems Theory		・Systems and Control Engineering
Professor	KURABAYASHI, Daisuke	Biorobotic systems, Distributed systems, Motion planning		・Systems and Control Engineering
Professor	KOSAKA, Hidenori	Thermodynamics, Fluid Dynamics, Internal Combustion Engine		・Systems and Control Engineering
Professor	SAMPEI, Mitsuji	Control Theory		・Systems and Control Engineering
Professor	TSUKAGOSHI, Hideyuki	Soft Robotics, Biomimetics, Fluid Powered Control, Medical Actuator		・Systems and Control Engineering
Professor	NAKAO, Hiroya	Nonlinear Dynamics, Stochastic Processes, Self-organization Phenomena		・Systems and Control Engineering
Professor	NAKASHIMA, Motomu	Sports Engineering, Biomechanics, Biorobotics, Musculoskeletal Analysis, Welfare Engineering		・Systems and Control Engineering
Professor	NAKADAI, Kazuhiro	Robot Audition, Computational Auditory Scene Analysis, Human-Machine Interaction		・Systems and Control Engineering
Associate Professor	ISHIZAKI, Takayuki	Systems and Control Theory, Power Systems, Distributed Energy Management System, Optimization		・Systems and Control Engineering
Associate Professor	KAWAKAMI, Rei	Open world vision, Multimodal recognition, Physics-based vision, Vision for AR/VR		・Systems and Control Engineering
Associate Professor	SATO, Susumu	Environmental Load Reduction in Transportation System, Control of Advanced Exhaust After-Treatment System, Alternative Fuels for Internal Combustion Engine		・Systems and Control Engineering
Professor	TANAKA, Masayuki	Computational photography, Image processing		・Engineering Sciences and Design ・Systems and Control Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	HATANAKA, Takeshi	Cyber-Physical & Human Systems, Cyber-Physical Campus Energy Management, Networked Mobility, Distributed Optimization, Learning and Games		・Systems and Control Engineering
Associate Professor	HAYAKAWA, Tomohisa	Control Theory, Dynamical Systems Theory, Smart Society, Game Theory		・Systems and Control Engineering
Associate Professor	HARA, Seiichiro	Surface profile sensing, measurement information processing / evaluation, machining information sensing, surface texture design		・Systems and Control Engineering
Associate Professor	MIYAZAKI, Yusuke	Biomechanics, Injury Preventive Engineering, Digital Human Modeling		・Systems and Control Engineering
Associate Professor	YAMAKITA, Masaki	Control Engineering, Robotics		・Systems and Control Engineering
Specially Appointed Professor	OKUTOMI, Masatoshi	Computer Vision, Image Processing	Prof. Okutomi belongs to a Collaborative Research Cluster with micware Co.,Ltd and can accept only doctor course students under appropriate conditions. Please make contact with the admission chair of the department in advance.	・Systems and Control Engineering
Specially Appointed Associate Professor	MONNO, Yusuke	Image Processing, Computer Vision, Computational Imaging	Associate Prof. Monno belongs to a Collaborative Research Cluster with micware Co.,Ltd. Please make contact with the admission chair of the department in advance.	・Systems and Control Engineering

(3) Dept. of Electrical and Electronic Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	ITO, Hiroyuki	Low Power CMOS Circuits, Internet of Medical Things, IoT in Agriculture		・Electrical and Electronic Engineering
Professor	OKADA, Kenichi	Wireless Circuit Design, 5G/6G, Millimeter-Wave/Terahertz Communication, IoT, Analog/Digital Circuit Design		・Electrical and Electronic Engineering
Associate Professor	SHIRANE, Atsushi	Integrated Circuits, Wireless Communication, Wireless Power Transfer, Satellite Communication		・Electrical and Electronic Engineering
Professor	TOKUDA, Takashi	Microdevices and circuits for biomedical and IoT		・Human Centered Science and Biomedical Engineering ・Electrical and Electronic Engineering
Associate Professor	AOYAGI, Takahiro	Electromagnetic Compatibility (EMC)		・Electrical and Electronic Engineering
Associate Professor	AMEMIYA, Tomohiro	Photonics informatics, Integrated photonics, Photonic nanostructure		・Electrical and Electronic Engineering
Professor	UENOHARA, Hiroyuki	Optical Communications, Optical Signal Processing, Photonic Switching, Photonic Integration		・Electrical and Electronic Engineering
Professor	SAKAGUCHI, Kei	Wireless communications, 5G/6G, IoT, mmWave, Wireless power transmission, Connected car, Automated driving		・Electrical and Electronic Engineering
Associate Professor	TRAN, Gia Khanh	Gbps-class wireless backbone network, Radio resource management using AI, IoT networks employing drones		・Electrical and Electronic Engineering
Associate Professor	SHOJI, Yuya	Lightwave Circuits, Optical Communication		・Electrical and Electronic Engineering
Associate Professor	TABARU, Marie	Biomedical Engineering Measurement, Agricultural Engineering Measurement, Acoustic Engineering		・Human Centered Science and Biomedical Engineering ・Electrical and Electronic Engineering
Professor	NAKAGAWA, Shigeru	Semiconductor laser, Semiconductor vertical microcavity, Integrated photonics, Optical transmission		・Electrical and Electronic Engineering
Professor	NISHIYAMA, Nobuhiko	Photonic Electronic Convergence Circuit, Semicondcutor Lasers, Ultra high-speed transceiver and Measurement System using Photonic Integrated Circuit		・Electrical and Electronic Engineering
Professor	HIROKAWA, Jiro	Millimeter-wave/Terahertz-wave planar antennas, Electromagnetic wave analysis		・Electrical and Electronic Engineering
Assistant Professor (Tenure Track)	TOMURA, Takashi	Satellite onboard antenna, wireless communication, large-scale electromagnetic analysis.		・Electrical and Electronic Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	MIYAMOTO, Tomoyuki	Optical wireless power transmnission, Optical devices and functional modules		・Electrical and Electronic Engineering
Associate Professor	OHMI, Shun-ichiro	Semiconductor Devices		・Electrical and Electronic Engineering
Associate Professor	KAKUSHIMA, Kuniyuki	Nanoelectronics and MEMS		・Electrical and Electronic Engineering
Associate Professor	KODERA, Tetsuo	Quantum computing technology, Quantum Information devices, Nano quantum electronics		・Electrical and Electronic Engineering ・Energy Science and Informatics
Associate Professor	SUZUKI, Safumi	Terahertz Devices, Active Metamaterials, THz Wireless Communication, THz Radar System, THz 3D Imaging		・Electrical and Electronic Engineering
Associate Professor	IWASAKI, Takayuki	Diamond Quantum Sensor, Solid-state Quantum Emitter for Quantum Communication, Diamond Device		・Electrical and Electronic Engineering ・Energy Science and Informatics
Professor	WAKABAYASHI, Hitoshi	Semiconductor Devices, Nano-electronics, LSI		・Electrical and Electronic Engineering
Associate Professor	WATANABE, Masahiro	Quantum Devices, Hetero-epitaxial Engineering		・Electrical and Electronic Engineering
Associate Professor	ARAI, Keigo	Quantum Metrology, Quantum Sensing & Imaging, Quantum Information, Artificial Intelligence		・Electrical and Electronic Engineering
Associate Professor	IINO, Hiroaki	Organic Electronics, TFT, Imaging Devices		・Electrical and Electronic Engineering
Associate Professor	SUGAHARA, Satoshi	Integrated Devices and Circuits		・Electrical and Electronic Engineering
Associate Professor	TOMA, Mana	Plasmonics and biosensors for mobile health		・Electrical and Electronic Engineering
Associate Professor	PHAM, Nam Hai	Semiconductor/metal spintronics, Ferromagnetic semiconductor, Topological insulator		・Electrical and Electronic Engineering
Professor	MANAKA, Takaaki	Organic and Polymer Electronics, Organic Devices, Nonlinear Optics		・Electrical and Electronic Engineering
Associate Professor	TAGUCHI, Dai	Dielectric physics, Organic electronics, Nonlinear Optics		・Electrical and Electronic Engineering
Associate Professor	MIYAJIMA, Shinsuke	Photovoltaic materials and devices		・Energy Science and Informatics ・Electrical and Electronic Engineering
Professor	YAMADA, Akira	Semiconductor Physics, Solar Cells, Compound Thin-Film Solar Cells		・Energy Science and Informatics ・Electrical and Electronic Engineering
Associate Professor	OKINO, Akitoshi	Atmospheric Plasma Engineering, Spectrochemistry, Plasma Medicine		・Human Centered Science and Biomedical Engineering ・Electrical and Electronic Engineering
Assistant Professor (Tenure Track)	KAWABE, Kenichi	Power system engineering, Renewable energy sources		・Electrical and Electronic Engineering ・Energy Science and Informatics
Associate Professor	TAKEUCHI, Nozomi	Plasma Engineering, Electrostatics, High Voltage Engineering		・Electrical and Electronic Engineering ・Energy Science and Informatics
Professor	CHIBA, Akira	Electric Machine, Magnetic Suspension	indicates person who will retire in March, 2026.	・Electrical and Electronic Engineering ・Energy Science and Informatics
Associate Professor	KIYOTA, Kyohei	Electric Machines, motor, generator, magnetic suspension		・Energy Science and Informatics ・Electrical and Electronic Engineering
Associate Professor	HAGIWARA, Makoto	Power Electronics, Smart Grid, Renewable Energy		・Energy Science and Informatics ・Electrical and Electronic Engineering
Professor	FUJITA, Hideaki	Power Electronics, Electrical Machinery		・Electrical and Electronic Engineering ・Energy Science and Informatics
Assistant Professor (Tenure Track)	SANO, Kenichiro	Power Electronics, High voltage dc transmission		・Electrical and Electronic Engineering ・Energy Science and Informatics

Academic Supervisor		Research Field	Remarks	Graduate Major

(4) Dept. of Information and Communications Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	ISSHIKI, Tsuyoshi	System-LSI Design Methodology, Embedded Processor Design		・Information and Communications Engineering
Professor	OKUMURA, Manabu	Natural Language Processing, Text Summarization, Text Mining, Sentiment Analysis		・Information and Communications Engineering
Associate Professor	OBI, Takashi	Medical Informatics, Madical Image Processing, Information Security, Secure System		・Information and Communications Engineering ・Human Centered Science and Biomedical Engineering
Professor	KANEKO, Hirohiko	Visual Information Processing, Human Space Perception, Eye Movements,Multimodal Sensory Interaction		・Human Centered Science and Biomedical Engineering ・Information and Communications Engineering
Professor	KOIKE, Yasuharu	Human Interface, Computational Neuroscience		・Human Centered Science and Biomedical Engineering ・Information and Communications Engineering
Associate Professor	SASAKI, Hiroshi	Computer Architecture, Computer Security, Computer Systems, Internet of Things (IoT), Workload Characterization		・Information and Communications Engineering
Visiting Professor	SATO, Imari	Computer Vision, Computer Graphics, Image-Based Modeling and Rendering, Machine Learning	Do not accept students this time.	・Information and Communications Engineering
Associate Professor	SHINOZAKI, Takahiro	Speech Understanding, Dialogue System, Reinforcement Learning, Machine Learning		・Information and Communications Engineering ・Human Centered Science and Biomedical Engineering
Professor	SUZUKI, Kenji	Deep learning, Machine Learning, Computer-aided Diagnosis, Biomedical Image Understanding, Artificial Intelligence.		・Human Centered Science and Biomedical Engineering ・Information and Communications Engineering
Professor	SLAVAKIS Konstantinos	Signal Processing, Machine Learning, Data Analytics		・Human Centered Science and Biomedical Engineering ・Information and Communications Engineering
Associate Professor	NAGAI, Takehiro	Color Science and Technology、Material Perception Science、 Visual Psychophysics		・Human Centered Science and Biomedical Engineering ・Information and Communications Engineering
Associate Professor	NAKATANI, Momoko	Human Computer Interaction, Service Design, Communication Enhancement, Well-being		・Engineering Sciences and Design
Associate Professor	NAKAHARA, Hiroki	Reconfigurable Computing,High-Performance Computing,FPGA, Machine Learning		・Information and Communications Engineering
Professor	NAKAMOTO, Takamichi	Human Interface, Olfactory Display, Odor Sensing System, Sensor Information Processing	Retire in March 2025	・Information and Communications Engineering
Associate Professor	NISHIO, Takayuki	Wireless Networks, Application of Machine Learning, Federated Learnimg, Ambient Sensing, Multi-modal System, Resource Coordination		・Information and Communications Engineering
Associate Professor	HASEGAWA, Shoichi	Virtual Reality, Physics Engine, Haptics, Character motion, Interaction		・Information and Communications Engineering ・Engineering Sciences and Design
Associate Professor	HARA, Yuko	Low-Energy Embedded Systems, Internet of Things (IoT), Hardware/Software Co-design, Hardware Security		・Information and Communications Engineering
Professor	FUKAWA, Kazuhiko	Wireless Communications, Wireless Communication Networks, Intelligent Signal Processing, Adaptive Filter Theory		・Information and Communications Engineering
Associate Professor	FUNAKOSHI, Kotaro	Natural Language Processing, Multimodal Dialogue System, Human-Machine Interaction		・Information and Communications Engineering
Professor	MOTOMURA, Masato	Reconfigurable Hardware, Intelligent Computing, Deep Learning Processor, Annealing Machine	Do not accept students this time.	・Information and Communications Engineering
Professor	YAMAGUCHI, Masahiro	Optical Imaging and Display, Spectral Imaging, Pathology Image Analysis, Holography		・Human Centered Science and Biomedical Engineering ・Information and Communications Engineering
Associate Professor	WATANABE, Yoshihiro	Computer Vision, Augmented Reality, Digital Archiving, Human-computer Interaction		・Information and Communications Engineering

(5) Dept. of Industrial Engineering and Economics

Academic Supervisor	Research Field	Remarks	Graduate Major

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	ICHISE, Ryutaro	Artificial Intelligence, Machine Learning, Semantic Web, Data Mining		・Industrial Engineering and Economics
Professor	INOUE, Kotaro	Corporate Finance, Corporate Governance		・Industrial Engineering and Economics
Professor	UMEMURO, Hiroyuki	Affect and Emotion, Gerontechnology, Human Factors		・Industrial Engineering and Economics
Professor	SHIOURA, Akiyoshi	Discrete Optimization, Operations Research, Algorithm Theory		・Industrial Engineering and Economics
Professor	SENOO, Dai	Knowledge Management, Leadership		・Industrial Engineering and Economics ・Engineering Sciences and Design
Professor	NAKATA, Kazuhide	Operations Research, Continuous Optimization, Machine Learning		・Industrial Engineering and Economics
Professor	MATSUI, Tomomi	Optimization Theory, Combinatorics, Operations Research		・Industrial Engineering and Economics
Professor	YAMATO, Takehiko	Microeconomic Theory, Experimental Economics		・Industrial Engineering and Economics
Associate Professor	AOKI, Hirotaka	Human Factors and Ergonomics, Industrial Engineering		・Industrial Engineering and Economics
Associate Professor	UOZUMI, Ryuji	Biostatistics, Applied Statistics, Medical Research, Data Science		・Industrial Engineering and Economics
Associate Professor	OGASAWARA, Kota	Cliometrics, Health Economics		・Industrial Engineering and Economics
Associate Professor	KAWASAKI, Ryo	Mathematical Economics, Game Theory		・Industrial Engineering and Economics
Associate Professor	GU, Xiuzhu	Healthcare management, Safety engineering, Human factors		・Industrial Engineering and Economics
Associate Professor	SEABORN Katie	Human-Computer Interaction, Inclusive Design, Game UX		・Industrial Engineering and Economics
Associate Professor	NAGATA, Kyoko	Financial Reporting, Company Analysis, Corporate Governance		・Industrial Engineering and Economics
Associate Professor	FUKUDA, Emiko	Industrial Economics, Game Theory		・Industrial Engineering and Economics
Associate Professor	HORI, Takeo	Dynamic Macroeconomics, Economic Growth		・Industrial Engineering and Economics
Visiting Professor	MASUI, Toshihiko	Environmental Economic Modeling	Supporting supervisor	・Industrial Engineering and Economics
Visiting Associate Professor	KANAMORI, Yuko	Environmental Economic Modeling	Supporting supervisor	・Industrial Engineering and Economics

A3 Advanced Human Resource Education Program for Emerging Materials Innovations to Solve Social Issues (eMAT-SOC)

(1) Dept. of Materials Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	AZUMA, Masaki	Solid State Chemistry		・Materials Science and Engineering
Professor	IKOMA, Toshiyuki	Bioceramics, Biosensing, Nanomedicine, Tissue Engineering		・Human Centered Science and Biomedical Engineering ・Materials Science and Engineering
Professor	INAMURA, Tomonari	Martensitic Transformation, Kink Deformation, Geometry of Microstructure		・Materials Science and Engineering ・Energy Science and Informatics
Professor	OBA, Fumiyasu	Computational Design of Electronic and Energy Materials		・Materials Science and Engineering
Professor	KAMATA, Keigo	Catalytic Chemistry, Environment-Friendly Chemical Process		・Materials Science and Engineering ・Energy Science and Informatics
Professor	KAMIYA, Toshio	Semiconductors, Optoelectronic Devices, Computer simulation		・Materials Science and Engineering
Professor	KITAMOTO, Yoshitaka	Nanoparticles, Magnetic Materials and Devices, Biomedical Devices, Biosensors		・Human Centered Science and Biomedical Engineering
Professor	KIMURA, Yoshisato	Materials Design based on Phase Diagrams and Microstructure Control, Intermetallics, Thermoelectric Materials, Heat Resistant Alloys		・Energy Science and Informatics ・Materials Science and Engineering
Professor	CROSS, JEFFREY S.	Biofuels, Catalyst, Materials Informatics, Waste to Renewable Energy Conversion, Energy Policy, Educational Technology, Learning Analytics		・Materials Science and Engineering
Professor	KOBAYASHI, Yoshinao	Metal Refining and Recycling, Safety Metallurgy for Nuclear Reactors, Phase Stability, Degradation of Materials in Reactors, Waste Management		・Nuclear Engineering ・Materials Science and Engineering
Professor	SHI, Ji	Metallic Functional Materials, Nanoheterostructures, Magnetic Thin Films		・Energy Science and Informatics ・Materials Science and Engineering
Professor	SONE, Masato	Metallic Material Design for Medical Device and the Evaluation Methodology, Hybrid Materials for Wearable Device, High Sensitive Sensor Material		・Human Centered Science and Biomedical Engineering ・Materials Science and Engineering
Professor	TADA, Eiji	Materials Electrochemistry, Corrosion and Protection, Corrosion Monitoring and Simulation, Surface Treatment		・Materials Science and Engineering
Professor	NAKADA, Nobuo	Microstructure and Mechanical Properties of Iron and Steels		・Materials Science and Engineering
Professor	VACHA, Martin	Optical Properties of Organic Materials		・Materials Science and Engineering ・Energy Science and Informatics
Professor	HAYAKAWA, Teruaki	Polymer Synthesis, Polymer Thin Films, Self-Organizing Organic and Polymeric Materials		・Materials Science and Engineering
Professor	HAYASHI, Miyuki	Physicochemical Properties of Materials, High Temperature Process Control		・Energy Science and Informatics ・Materials Science and Engineering
Professor	HARA, Michikazu	Catalysis, Surface Science		・Materials Science and Engineering ・Energy Science and Informatics
Professor	HIRAMATSU, Hidenori	Semiconductors, Thin film growth, Optoelectronic properties, Devices		・Materials Science and Engineering
Professor	FUJII, Toshiyuki	Mechanical Properties of Structural Materials, Crystallography and Crystal Defects, Electron Microscopy		・Materials Science and Engineering
Professor	FUNAKUBO, Hiroshi	Functionla Inorganic Materials , Thin Film Devices		・Materials Science and Engineering
Professor	HOSODA, Hideki	Materials Design, Shape Memory and Superelastic Alloys, Intermetallic Compounds, Smart Materials, Smart Composites, Biomaterials		・Materials Science and Engineering ・Human Centered Science and Biomedical Engineering ・Energy Science and Informatics

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	MAJIMA, Yutaka	Single Nanoscale Electronic Materials and Devices, Resonant Tunneling Transistor, Nanogap Gas Sensor, DNA Sequencer, Ferroelectric Memory, Nanostructure Induced L10-Ferromagnetic Nanowire		・Materials Science and Engineering
Professor	MATSUSHITA, Nobuhiro	Novel Material Processes for Energy and Environmental, Biomedical, Electronic Applications		・Materials Science and Engineering
Professor	MATSUMOTO, Hidetoshi	Polymer Physics, Physical Chemistry of Organic Materials, Polymer Membranes and Thin Films, Energy and Environmental Materials, Nanofibers and Nanomaterials		・Energy Science and Informatics ・Materials Science and Engineering
Professor	MICHINOBU, Tsuyoshi	Polymer Synthesis, Semiconducting Polymers, Biomass Polymers		・Materials Science and Engineering
Professor	MIYAUCHI, Masahiro	Photocatalysis, Artificial Photosynthesis, Green House Gas Conversion, Hydrogen Carrier, Chemical Synthesis of Nanoparticles		・Energy Science and Informatics ・Materials Science and Engineering
Professor	MORIKAWA, Junko	Polymer Processing, Thermal Properties of Polymers		・Materials Science and Engineering ・Human Centered Science and Biomedical Engineering
Professor	YANO, Tetsuji	Ion-Dynamics in glass for mechanical and electrochemical use, Optical properties for devices, Glasses for environmental problems		・Materials Science and Engineering
Professor	YOKOTA, Hiroko	Nonlinear optical microscopy, Local structural analysis, Evaluation of new functionalities at topological defects		・Materials Science and Engineering
Associate Professor	ISOBE, Toshihiro	Environmental Ceramics, Porous ceramics, Membrane, Functional ceramics		・Materials Science and Engineering
Associate Professor	UEDA, Mitsutoshi	High Temperature Oxidation of Heat Resistant Steels and Alloys Physical Chemistry at High Temperature		・Energy Science and Informatics ・Materials Science and Engineering
Associate Professor	KATASE, Takayoshi	Oxide electronics, Energy materials, Thin film device		・Materials Science and Engineering
Associate Professor	KAWAMURA, Kenichi	Fuel Cells, Heat-resisting Alloys, Solid State Ionics, High Temperature Physical Chemistry, Electrochemistry		・Materials Science and Engineering
Associate Professor	KISHI, Tetsuo	optical materials, glass materials, optical devices, laser prrocess, adhesion science		・Materials Science and Engineering
Associate Professor	GOHDA, Yoshihiro	Electron Theory of Magnetic Materials, Heat-Resistant Alloys, and Nano-Interfaces		・Materials Science and Engineering
Associate Professor	KOBAYASHI, Equo	Non-ferrous Metals (Titanium, Aluminum, Magnesium, and Copper Alloys), Biomedical Materials, Composites, Phase Stability, Alloy Designing, Materials Characterization, and Standardization of Medical Equipmen	indicates person who will retire in March, 2028.	・Human Centered Science and Biomedical Engineering
Associate Professor	KOBAYASHI, Satoru	Heat resistant steels and alloys for energy and transportation, Microstructural control and design, Intermetallics, Creep, High temperature hydrogen d amage, Additive manufacturing		・Materials Science and Engineering
Associate Professor	SAGARA, Yoshimitsu	Organic Supramolecules, Stimuli-responsive Luminescent Materials, Mechanophore		・Materials Science and Engineering
Associate Professor	SASAGAWA, Takao	Strongly Correlated Electron Systems		・Materials Science and Engineering ・Energy Science and Informatics
Associate Professor	SANNOMIYA, Takumi	Nanophotonics, Plasmonic Materials, Nano Materials, Electron Microscopy, Cathodoluminescence		・Materials Science and Engineering ・Human Centered Science and Biomedical Engineering ・Energy Science and Informatics
Associate Professor	TAHARA, Masaki	Development of Functional Metallic Materials by Structural Phase Transition, Metallic Materials for Medical and Energy Applications, Metal 3D Printing		・Materials Science and Engineering ・Human Centered Science and Biomedical Engineering
Associate Professor	TSUGE, Takeharu	Biodegradable Plastics		・Materials Science and Engineering ・Human Centered Science and Biomedical Engineering
Associate Professor	TERADA, Yoshihiro	Microstructure Control and Mechanical Strength of High-Temperature Materials for Aerospace Applications, Alloy Development for Advanced Automobile Powertrain Applications		・Materials Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	NAKATSUJI, Kan	Surface and Interface Physics		・Materials Science and Engineering
Associate Professor	NABAE, Yuta	Organic and polymeric materials for catalysis, electrocatalysts for fuel cells, synthesis of aromatic polymers		・Energy Science and Informatics ・Materials Science and Engineering
Associate Professor	HAYASHI, Tomohiro	Nanobio science, Biointerface & Biomaterials, Materials Informatics		・Human Centered Science and Biomedical Engineering
Associate Professor	HAYAMIZU, Yuhei	Bio-interface, Nano Materials		・Materials Science and Engineering ・Human Centered Science and Biomedical Engineering
Associate Professor	HOSHINA, Takuya	Dielectric and Ferroelectric Materials, Phonon Analysis		・Materials Science and Engineering
Associate Professor	MATSUSHITA, Sachiko	Thermal Energy Conversion, Sensitized Thermal Cell, Renewable Energy （Electrochemistry, Materials Chemistry)		・Materials Science and Engineering ・Energy Science and Informatics
Associate Professor	MATSUDA, Akifumi	Nanomaterials for electronic and energy, Epitaxial thin films and nanostructures, Low-temperature nanomaterials synthesis, Highly-oriented flexible devices		・Energy Science and Informatics ・Materials Science and Engineering
Associate Professor	MURAISHI, Shinji	Aluminum Alloys, Microstructure and Mechanical Properties, Upgrade Recycling, Dislocation Dynamics Simulation		・Materials Science and Engineering
Associate Professor	YAMAMOTO, Takafumi	Solid state chemistry, functional inorganic materials (magnetism, superconductivity, photofunctionality, catalytic property, etc)		・Materials Science and Engineering
Associate Professor	YOSHIDA, Katsumi	Severe environment resistant materials, Materials for nuclear and fusion applications, Ceramic-based composites, High performance porous ceramics		・Nuclear Engineering
Associate Professor	LEI, Xiao-Wen	Computational Materials Science, Function Design of Nanoscale Systems, Mathematical Science of Lattice Defect		・Materials Science and Engineering
Assistant Professor (Tenure Track)	Omagari, Shun	Functional Organic Materal, Functional Nanomaterial, Single-molecule Spectroscopy, Computational Chemistry		・Materials Science and Engineering
Assistant Professor (Tenure Track)	YASUI, Shintaro	Development of Emerging Functional Materials (Li-ion Battery, Energy Materials, Ferroelectrics, Piezoelectrics, Multiferroics)		・Nuclear Engineering ・Materials Science and Engineering
Assistant Professor (Tenure Track)	YAMAGUCHI, Akira	electrocatalysts, hydrothermal electrochemistry		・Energy Science and Informatics ・Materials Science and Engineering

(2) Dept. of Chemical Science and Engineering

Academic Supervisior		Research Field	Remarks	Graduate Major
Professor	ISHIZONE, Takashi	Polymer Synthesis, Living Polymerization		・Chemical Science and Engineering
Professor	OTSUKA, Hideyuki	Polymer Reactions, Smart Polymeric Materials, Polymer Synthesis		・Chemical Science and Engineering
Professor	SATOH, Kotaro	Polymer Synthesis,Precision Polymerization, Bio-Based Monomer		・Chemical Science and Engineering ・Energy Science and Informatics
Professor	TANAKA, Katsunori	Synthetic Organic Chemistry, Bioorganic Chemistry, Chemical Biology		・Human Centered Science and Biomedical Engineering ・Chemical Science and Engineering
Professor	TANAKA, Ken	Synthetic Organic Chemistry, Asymmetric Synthesis, Organometallic Chemistry		・Chemical Science and Engineering
Professor	NAKAJIMA, Yumiko	Organometallic Chemistry, Coordination Chemistry, Silicon Chemistry, Catalyst Chemistry, Hybrid Materials		・Chemical Science and Engineering
Associate Professor	ITO, Shigekazu	Physical Organic Chemistry, Organic Synthesis, Main Group Chemistry, Muon Science		・Chemical Science and Engineering
Associate Professor	KONISHI, Gen-ichi	Polymer Synthesis, Photochemistry, Fluorescent Dye, Liquid Crystal, Organic Chemistry		・Chemical Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	TANAKA, Hiroshi	Synthetic Organic Chemistry, Chemical Biology, Natural Product Chemistry		・Chemical Science and Engineering
Professor	OKOCHI, Mina	Biochemical Engineering, Peptide Engineering, Biosensing, Biotechnology, Medical and Biological Engineering		・Chemical Science and Engineering ・Human Centered Science and Biomedical Engineering
Professor	OHTOMO, Akira	Inorganic Solid State Chemistry, Thin Film, Surface and Interface, Device Physics		・Chemical Science and Engineering
Professor	SERIZAWA, Takeshi	Biomacromolecular Chemistry, Biomaterials Science and Engineering, Molecular Assembly		・Chemical Science and Engineering
Professor	TSUKAHARA, Takehiko	Analytical Chemistry, Radiation Chemistry, Environmental Science, Organic-inorganic hybrid material, Micro-Nano Chemistry, Radioactive Waste Management, Nuclear Fuel Cycle		・Nuclear Engineering
Professor	TOKITA, Masatoshi	Polymer Structures and Properties, Liquid Crystals, Polymer Brushes		・Chemical Science and Engineering
Professor	NAKAJIMA, Ken	Polymer Physics, Rubber Industry, Atomic Force Microscopy		・Chemical Science and Engineering
Professor	MURAHASHI, Tetsuro	Synthetic Inorganic and Organometallic Chemistry, Coordination Chemistry		・Chemical Science and Engineering
Associate Professor	ISHIGE, Ryohei	Structural analysis of polymers, thin film, synchrotron X-ray, vibrational spectroscopy, liquid crystal		・Chemical Science and Engineering
Associate Professor	SAWADA, Toshiki	Biomacromoleculer Science, Bioorganic Chemisgtry, Biotechnology, Biofunctional Materials		・Chemical Science and Engineering
Associate Professor	TAKAO, Koichiro	Actinide Chemistry, Coordination Chemistry, Nuclear Fuel Cycle, Fuel Reprocessing, Radioactive Wastes, Decontamination		・Nuclear Engineering ・Chemical Science and Engineering
Associate Professor	TAKAO, Toshiro	Organometallic Chemistry, Inorganic Chemistry		・Chemical Science and Engineering
Professor	IHARA, Manabu	Energy Conversion on Chemical Engineering, Electrochemistry, Fuel Cells, Solar Cells, Energy system		・Energy Science and Informatics ・Chemical Science and Engineering
Professor	SHIMOYAMA, Yusuke	Molecular crystal & assembly, Pharmaceutical・cosmetic formulation, CO2 utlization, Machine-learning, Information & data technology		・Chemical Science and Engineering ・Energy Science and Informatics
Professor	TAGO, Teruoki	Chemical Reaction Engineering, Catalytic Reaction Engineering, Catalyst & Environmental Chemical Process, Porous Catalyst		・Chemical Science and Engineering ・Energy Science and Informatics
Professor	NAKAMURA, Ryuhei	Origin of life, Earth-life science, Electrocatalysis		・Chemical Science and Engineering
Specially Appointed Professor	OOKAWARA, Shinichi	Microfluidic Transport Phenomena, CFD (Computational Fluid Dynamics), Microreactor		・Chemical Science and Engineering
Associate Professor	AOKI, Saiko	Tribology, Lubricating oil and additives, Surface Engineering, Affective Engineering		・Chemical Science and Engineering ・Energy Science and Informatics
Associate Professor	HARADA, Takuya	Carbon Capture & Utilization, Inorganic Materials, Chemical Pprocess Engineering, Low-carbon Energy System, Nuclear Energy		・Nuclear Engineering ・Chemical Science and Engineering
Associate Professor	MATSUMOTO, Hideyuki	Process Systems Engineering, Process Intensification, Nitrogen Cycle, Process Information, Renewable Energy		・Chemical Science and Engineering ・Energy Science and Informatics
Associate Professor	MANZHOS, Sergei	Materials modeling, machine learning, energy conversion and storage		・Energy Science and Informatics ・Chemical Science and Engineering
Associate Professor	MORI, Shinsuke	Plasma Processing, Heat Transfer		・Chemical Science and Engineering ・Energy Science and Informatics
Professor	INAGI, Shinsuke	Organic Electrochemistry, Polymer Chemistry		・Energy Science and Informatics ・Chemical Science and Engineering
Professor	OKAMOTO, Toshihiro	Synthetic Organic Chemistry, Organic/Polymer Materials Chemistry, Organic Electronics		・Energy Science and Informatics ・Chemical Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	TOMITA, Ikuyoshi	Polymer Synthetic Chemistry		・Chemical Science and Engineering ・Energy Science and Informatics
Professor	FUKUSHIMA, Takanori	Organic Functional Materials, Nanomaterials, π-Electronic Systems, Molecular Assembly		・Chemical Science and Engineering
Professor	YOSHIZAWA, Michito	Supramolecular Chemistry, Synthetic Chemistry, Nanospace, Water, Photofunction, Biosensor		・Chemical Science and Engineering
Associate Professor	SAWADA, Tomohisa	Supramolecular Chemistry, Organic Chemistry, Coordination Chemistry, Self-Assembly, Peptide, Topology		・Chemical Science and Engineering
Associate Professor	SHOJI, Yoshiaki	Functional π-Conjugated Molecules and Polymers, Highly Reactive Main-Group Species		・Chemical Science and Engineering
Associate Professor	NAKAZONO, Kazuko	Polymer synthesis, Supramolecular Chemistry		・Energy Science and Informatics ・Chemical Science and Engineering
Professor	SHISHIDO, Atsushi	Polymer Physical Chemistry, Liquid Crystals, Optical Function, Mechanical Function		・Chemical Science and Engineering ・Energy Science and Informatics
Professor	YAMAMOTO, Kimihisa	Nano-materials Chemistry, Metallochemistry, Macromolecular Science		・Chemical Science and Engineering
Associate Professor	IMAOKA, Takane	π-Conjugating Molecular Chemistry, Electron Transfer Chemistry, Nanomaterial Science		・Chemical Science and Engineering
Associate Professor	KUBO, Shoichi	Polymer Chemistry, Materials Chemistcy		・Chemical Science and Engineering ・Energy Science and Informatics
Associate Professor	TANAKA, Masayoshi	Biomolecular Chemistry, Protein Engineering, Applied Microbiology, Multi-Omics Science, Medical and Biological Engineering		・Human Centered Science and Biomedical Engineering ・Chemical Science and Engineering
Professor	ARAI, Hajime	Secondary battery, Metal-air battery, Electrochemistry, Operando (In situ) analysis		・Energy Science and Informatics ・Chemical Science and Engineering
Professor	HIRAYAMA, Masaaki	Energy Conversion Materials, Inorganic and Solid State Chemistry, Electrochemical Interface Design		・Energy Science and Engineering ・Chemical Science and Engineering
Professor	YAMAGUCHI, Takeo	Water Electrolysis and Fuel Cell Engineering, Bio-inspired Materials, Membrane Science and Engineering		・Chemical Science and Engineering ・Energy Science and Engineering
Associate Professor	KUROKI, Hidenori	Materials and Devices for Energy Conversion, Nanostructured Materials, Electrocatalysts, Functionalized Membranes		・Chemical Science and Engineering
Associate Professor	SUZUKI, Kota	Solid State Chemistry, Energy Convertion Materials, Novel Energy Storage Device, and Material Seaerch by Machiene Learning		・Energy Science and Informatics ・Chemical Science and Engineering
Associate Professor	TOYODA, Sakae	Environmental Chemistry, Material Cycle Analysis		・Chemical Science and Engineering ・Energy Science and Informatics
Associate Professor	YAMADA, Keita	Organic Geochemistry, Isotope Chemistry		・Chemical Science and Engineering ・Energy Science and Informatics
Associate Professor	YOKOI, Toshiyuki	Catalytic Chemistry, Nanospace Catalysts, Zeolite Science, Green Chemistry		・Chemical Science and Engineering
Associate Professor	WADA, Hiroyuki	Optical Materials, Nanoparticles, Solar cell, Optical thin film		・Energy Science and Informatics ・Human Centered Science and Biomedical Engineering ・Chemical Science and Engineering

A4 Graduate Program to Foster BioDX Leaders for Global Bio-Industry

As of Aug. 21, 2023

(1) Dept. of Life Science and Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	ISHII, Yoshitaka	Physical Chemistry, Structural Biology, Alzheimer's Disease		・Life Science and Technology
Professor	ITOH, Takehiko	Bioinformatics		・Life Science and Technology
Professor	UENO, Takafumi	Bioinorganic Chemistry, Biophysical Chemistry, Biosupramolecular Chemistry		・Life Science and Technology
Professor	OSAKABE, Yuriko	Plant Molecular Biology, Plant Molecular Physiology, Genetic Engineering, Genome Editing		・Life Science and Technology
Professor	KAMACHI, Toshiaki	Bioinorganic Chemistry, Cellular Imaging of Oxygen		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Professor	KAMIYA, Mako	Chemical Biology		・Life Science and Technology
Professor	KAWAI, Kiyohiko	Bioorganic Chemistry, Photochemistry, Nucleic Acid Chemistry, Single Molecule Analysis and Diagnosis (Pathological diagnosis)		・Life Science and Technology
Professor	KITAO, Akio	Computational Biology, Biophysics, Computational Chemistry, Protein Dynamics		・Life Science and Technology
Professor	KIMURA, Hiroshi	Epigenetics and Cell Biology		・Life Science and Technology
Professor	KINBARA, Kazushi	Bioinspired Synthetic Chemistry		・Life Science and Technology
Professor	KOMADA, Masayuki	Biochemistry and Cell Biology, Growth Factor Signaling, Membrane Trafficking, Tumor Biology		・Life Science and Technology
Professor	SEIO, Kohji	Bioorganic Chemistry		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Professor	TAGUCHI, Hideki	Protein science, Biochemistry, Protein Folding, Chaperone, Ribosome, Amyloid/Prion		・Life Science and Technology
Professor	TANAKA, Mikiko	Developmental Biology		・Life Science and Technology
Professor	HAYASHI, Nobuhiro	Molecular Biology and Proteomics		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Professor	HIROTA, Junji	Molecular Neuroscience		・Life Science and Technology
Professor	FUKUI, Toshiaki	Genetic Engineering, Metabolic Engineering, Extremophiles		・Life Science and Technology
Professor	HONGOH, Yuichi	Molecular Microbial Ecology, Symbiosis		・Life Science and Technology
Professor	MASUDA, Shinji	Plant Molecular Biology and Photobiology		・Life Science and Technology
Professor	MURAKAMI, Satoshi	Structural Biology, Protein Crystallography		・Life Science and Technology
Professor	YASUI, Takao	Quantum life science, bioanalytical chemistry, nanospace chemistry, nanobiodevices, liquid biopsy		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Professor	YAMAGUCHI, Yuki	Control of Gene Expression, Epigenetics, RNA Processing, Drug Discovery		・Life Science and Technology

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	AIZAWA, Yasunori	Cellular Genomics		・Life Science and Technology
Associate Professor	OHKUBO, Akihiro	Bioorganic Chemistry		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Associate Professor	KATO, Akira	Epithelial Transport, Animal Physiology		・Life Science and Technology
Associate Professor	KANO, Fumi	Cell Biology, Cell Editing, Bioimaging, Image Analysis		・Life Science and Technology
Associate Professor	SHIMOJIMA, Mie	Plant Molecular Biology and Biochemistry		・Life Science and Technology
Associate Professor	SHIRAKI, Nobuaki	Stem Cell Biology		・Life Science and Technology
Associate Professor	SUZUKI, Takashi	Molecular Neurobiology		・Life Science and Technology
Associate Professor	TAGAWA, Yoh-ichi	Developmental Engineering, Molecular Biology, Artificial Organ, Immunology		・Life Science and Technology
Associate Professor	TSUTSUMI, Hiroshi	Chemical Biology		・Life Science and Technology
Associate Professor	TO, Taiko	Plant, Epigenetics, Molecular Genetics, Genome Biology, Synthetic Biology (Basic Biology in Inheritance of Chromatin modification, Genome Dynamics. Development of Epigenome Editing Technology.)		・Life Science and Technology
Associate Professor	NAKAMURA, Nobuhiro	Molecular and Cellular Biology, Vascular Biology, Receptor-mediated signal transduction, Ubiquitination, Intracellular Trafficking		・Life Science and Technology
Associate Professor	NIKAIDO, Masato	Molecular Evolutionary Biology		・Life Science and Technology
Associate Professor	NOZAWA, Kayo	Genome foldings, Transcriptional regulation, Subnucleosome, Biochemical analysis, Structural biology, Cryo-EM, The development of affinity grid for cryo-EM, In-vitro reconstitution of high-order genome architectures		・Life Science and Technology
Associate Professor	NONOMURA, Keiko	Mechanosensing, PIEZO channel, Sensory neuron, Cerebrospinal fluid, Lymphatic vessel, live imaging, Mechanobiology, Developmental biology		・Life Science and Technology
Associate Professor	HATA, Takeshi	Organic Synthesis, Asymmetric Synthesis		・Life Science and Technology
Associate Professor	HIRASAWA, Takashi	Applied Microbiology and Metabolic Engineering		・Life Science and Technology
Associate Professor	FUJIE, Toshinori	Biomaterials, Polymer Science, Tissue Engineering, Bioelectronics		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Associate Professor	FUJITA, Naonobu	Cell and Developmental Biology		・Life Science and Technology
Associate Professor	MATSUDA, Tomoko	Bioorganic Chemistry, Biocatalysis, Green Chemistry		・Life Science and Technology
Associate Professor	MIE, Masayasu	Protein Engineering, Tissue Engineering, Biosensing		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Associate Professor	YATSUNAMI, Rie	Extemophile, Extemozyme, Protein Engineering, Directed Evolution, Metabolic Engineering,		・Life Science and Technology
Associate Professor	YAMADA, Takuji	Genome Science and Bioinformatics		・Life Science and Technology

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor (Lecturer)	ASAKURA, Noriyuki	Bioinorganic Chemistry, Biological Electron Transfer		・Life Science and Technology
Associate Professor (Lecturer)	KONDO, Toru	Biophysics, Microspectroscopy, Quantum biology, Biophotophysics, Single-protein spectroscopy, Photosynthesis, Life-earth coevolution		・Life Science and Technology ・Human Centered Science and Biomedical Engineering
Professor	KAJIWARA, Susumu	Microbial Infection, Immune Response, Biotechnology, Genome Editing		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Professor	KURODA, Kumi	Neuroscience of social behavior, Parental care, Infant development and attachment, Neuropsychobiology		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Professor	KOSHIKAWA, Naohiko	Tumor biology, Tumor diagnostics, Clinical proteomics		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Professor	NAKATOGAWA, Hitoshi	Molecular Cell Biology and Biochemistry		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Professor	NAKAMURA, Hiroyuki	Organic Synthesis, Medicinal Chemistry, Chemical Biology		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Professor	NISHIYAMA, Nobuhiro	Drug Delivery System, Biomaterials Science		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	URIU, Koichiro	Mathematical Biology, Mathematical Developmental Biology, Mathematical Chronobiology		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	OKADA, Satoshi	Molecular imaging, Chemical biology, Nanotechnology		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	OGURA, Shun-ichiro	Molecular Biology, Alternative Therapy for Tumor, Biometabolic Engineering, Biomarker		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	ORIHARA, Kanami	Immunology, Allergic diseases, Infectious diseases, Circadian rhythm, Preventive medicine		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	KADONOSONO, Tetsuya	Drug Discovery Science, Medicinal Protein Engineering, Tumor Biology		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	KITAGUCHI, Tetsuya	Bioimaging, Protein Engineering, Biosensors		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	MIURA, Yutaka	Polymer synthesis,Drug Delivery System, Biomaterials Science		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	MORI, Toshiaki	Bioorganic Chemistry, Polymer Chemistry		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Associate Professor	YOSHIDA, Keisuke	Plant Biochemistry, Plant Physiology, Photosynthesis, Environmental Acclimation		・Human Centered Science and Biomedical Engineering ・Life Science and Technology
Professor	MATSUURA, Tomoaki	Directed evolution, synthetic biology, cell-free science, biotechnology		・Life Science and Technology
Associate Professor	FUJISHIMA, Kosuke	Origins of life, Astrobiology, Synthetic biology, Directed evolution, RNA, peptide, Chemical evolution		・Life Science and Technology
Associate Professor	McGLYNN, Shawn	Origins of life, Enzyme evolution, prebiotic chemistry, microbial ecology, stable isotope fractionation, geomicrobiology		・Life Science and Technology
Professor	TAKINOUE, Masahiro	Artificial cell engineering, Molecular computing, DNA nanotechnology, Molecular Robotics, Biophysics, Synthetic biology		・Life Science and Technology
Professor	YANAGIDA, Yasuko	Bio-MEMS/NEMS, Biosensing, Biofunctional Engineering		・Human Centered Science and Biomedical Engineering

A5 Postgraduate Program for Environmental Designers Contributing to Resilient Cities

(1) Dept. of Architecture and Building Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	IKARASHI, Kikuo	Steel Structures		・Architecture and Building Engineering
Professor	OKUYAMA, Shin-ichi	Architectural Design		・Architecture and Building Engineering
Professor	OSARAGI, Toshihiro	Spatial Analysis and Planning, Disaster Mitigation Planning, Spatial Information Science		・Architecture and Building Engineering
Professor	KAGI, Naoki	Environmental Engineering, Building Servises, Indoor Air Quality, Air Cleaning, Wellness, Smart Building		・Architecture and Building Engineering
Professor	KONO, Susumu	Reinforced and prestressed concrete structures, EarthquakeEngineering		・Architecture and Building Engineering
Professor	SAIO, Naoko	Architectural Planning Urban and Rural Planning		・Architecture and Building Engineering
Professor	TAMURA, Shuji	Geotechnical Earthquake Engineering		・Architecture and Building Engineering
Professor	TSUKAMOTO, Yoshiharu	Architectural Design and Urban Research, Architectural Behaviorology		・Architecture and Building Engineering
Professor	HOTTA, Hisato	Composite Structures		・Architecture and Building Engineering
Professor	YAMAZAKI, Taisuke	History of Architecture, Architectural Design		・Architecture and Building Engineering
Professor	YOKOYAMA, Yutaka	Building Materials		・Architecture and Building Engineering
Associate Professor	OKI, Takuya	Architectural planning, Spatiotemporal analysis, Artificial Intelligence application		・Architecture and Building Engineering
Associate Professor	SHIOZAKI, Taishin	Architectural Design		・Architecture and Building Engineering
Associate Professor	NISHIMURA, Koshiro	Concrete Structures Earthquake Engineering		・Architecture and Building Engineering
Associate Professor	FUKUDA, Shintaro	Building Materials		・Architecture and Building Engineering
Associate Professor	FUJITA, Yasuhito	History of Architecture and Cities		・Architecture and Building Engineering
Associate Professor	MURATA, Ryo	Architectural Design		・Architecture and Building Engineering
Associate Professor	YUASA, Kazuhiro	Environmental Engineering, Building Services		・Architecture and Building Engineering
Professor	ISHIHARA, Tadashi	Building Structure, Earthquake Engineering, Structural Dynamics, Design Load		・Urban Design and Built Environment
Professor	KISHIKI, Shoichi	Base-Isolation and Passive Control Structure, Seismic Retrofit for Existing Buildings, Post-Earthquake Damage Evaluation and Rehabilitation		・Urban Design and Built Environment
Professor	DOHI, Masato	Community Planning and Design		・Urban Design and Built Environment
Professor	MATSUOKA, Masashi	Remote Sensing of Environment and Disaster, Geoinformatics and AI for Disaster Mitigation		・Urban Design and Built Environment

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	YAMANAKA, Hiroaki	Earthquake Engineering Strong Motion Seismology		・Urban Design and Built Environment
Associate Professor	ASAWA, Takashi	Urban and Built Environmental Engineering		・Urban Design and Built Environment
Associate Professor	OKAZE, Tsubasa	Urban enviromental engineering Snow engineering Disaster resilience for architectural and urban environment		・Urban Design and Built Environment
Associate Professor	SAKAMURA, Kei	City Planning, Community Design, Authenticity, Local Resource Management		・Urban Design and Built Environment
Associate Professor	SATO, Daiki	Structural Engineering, Earthquake Engineering and Wind Enginnering		・Urban Design and Built Environment
Associate Professor	NASU, Satoshi	Architectural Design and Theory Dwelling Culture and Environment		・Urban Design and Built Environment
Associate Professor	HIRAGA, Amana	Historic Architectural Preservation, History of Architecture		・Urban Design and Built Environment
Associate Professor	MANO, Yosuke	Urban Planning		・Urban Design and Built Environment

(2) Dept. of Civil and Environmental Engineering

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	IWANAMI, Mitsuyasu	Infrastructure Management, Marine Structure Engineering		・Civil Engineering
Professor	KANAE, Shinjiro	Hydrology, Hydrologic Cycle, Water Resources		・Civil Engineering
Professor	SASAKI, Ei-ichi	Bridge Engineering & Structural Engineering		・Civil Engineering
Professor	TAKAHASHI, Akihiro	Geotechnical Engineering		・Civil Engineering
Professor	TAKAYAMA, Yuki	Urban and Regional Economics, Regional Science		・Civil Engineering
Professor	YOSHIMURA, Chihiro	Water Environmental Engineering, Environmental Photochemistry, Applied Aquatic Ecology		・Civil Engineering
Associate Professor	UTSUMI, Nobuyuki	Hydrometeorology, Climate Change, Satellite Remote Sensing		・Civil Engineering
Associate Professor	SAWADA, Mai	Geotechnical Engineering, Unsaturated Soil Mechanics, Conservation of Historic Sites		・Civil Engineering
Associate Professor	SEO, Toru	Transportation Research, Traffic Flow Theory, Data Science		・Civil Engineering
Associate Professor	CHIJIWA, Nobuhiro	Structural Concrete, Multi-Scale Dynamics of Concrete, Maintenance of Infrastructure		・Civil Engineering
Associate Professor	FUJII, Manabu	Water and Environmental Engineering, Sustainable Development, Water Chemistry		・Civil Engineering
Associate Professor	MARUYAMA, Taizo	Applied Mechanics, Computaional Mechanics, Nondestructive Evalutaion		・Civil Engineering
Professor	SANADA, Junko	Rural Landscape and Rural Development, Value and Technology Transfer of Dry Stone Walling		・Urban Design and Built Environment
Professor	MUROMACHI, Yasunori	Transport and the Environment, Travel Behavior		・Urban Design and Built Environment
Professor	MORIKAWA, Hitoshi	Earthquake Engineering		・Urban Design and Built Environment