How to Obtain the Application Forms and Guidelines

(Note) This PDF file cannot be printed out and used for application.

This PDF file is for reference purposes only. If you wish to apply, please make sure to obtain the application guideline booklet (Japanese version only) and use the designated form included in the booklet.

[To pick up in person]

The booklet is available at the counter in front of the Admissions Section, Student Support Office, Koganei Campus (1st floor of the Administration Building). Pick one up at your own discretion. (8:30 a.m. to 5:15 p.m. except weekends and holidays)

[To request by mail]

If you wish to receive the booklet by mail, please send a self addressed envelope (A4 size) with stamps (250 yen for regular delivery or 510 yen for express delivery) attached to the address below. Please write "Request for Application Guidelines for the Master's Program of the Graduate School of Engineering" in red next to the address.

Please note that it may take some time before the application is sent. When requesting by mail, please allow sufficient time before the application period.

Contact Address :
2-24-16 Naka-cho, Koganei-shi, Tokyo 184-858
Admissions Section, Student Support Office, Koganei Campus,
Tokyo University of Agriculture and Technology(TUAT)
TEL: +81-(0)42-388-7014
E-mail :tnyushi@cc.tuat.ac.jp

Tokyo University of Agriculture and Technology Graduate School of Engineering

Master Course (Master)

Application Forms and Guidelines

For October 2023 / April 2024 Enrollment

Tokyo University of Agriculture and Technology
Graduate School of Engineering

Tokyo University of Agriculture and Technology Graduate School of Engineering
Master Course Application Forms and Guide for April 2023 Enrollment

(1) The following application guide and forms are intended for the Master's course. Applicants who wish to go Department of Industrial Technology and Innovation refer to another application guide and forms.

(2) The University offers the International Specialized Program (English course) in each department. For those who wish to apply for the International Specialized Program, please read " The Screening of Admission Qualifications (12); Special Selection for the International Specialized Program " on pages 10-11 and " 5. International Specialized Program " on page 16. The application period, application procedures, and selection process are all different from other entrance examinations.

1. Application Quota

Department	Number of applicants to be accepted	
	October 2023 Enrollment	April 2024 Enrollment
Biotechnology and Life Science	several	61
Biomedical Engineering	several	33
Applied Chemistry	several	54
Applied Physics and Chemical Engineering	several	47
Mechanical Systems Engineering	several	76
Electrical Engineering and Computer Science	several	86
Total	several	357

2. Admission Qualifications

Standard Selection

Applicants must meet one of the following qualifications:

(1) Have graduated from a university; or are expected to graduate from a university before entering the Master Course.

(2) Were conferred a bachelor's degree in accordance with Section 7, Article 104 of the School Education Act; or are expected to be conferred such a degree before entering the Master Course.

(3) Have completed 16 years of school education overseas; or are expected to complete such a program before entering the Master Course.

(4) Have completed 16 years of overseas school education by taking a correspondence course offered in Japan by an overseas school; or are expected to complete such a program before entering the Master Course.

(5) Have completed a curriculum in an educational institution in Japan with curricula of an overseas university (only if completion of such curricula corresponds to completion of 16 years of school education in the pertinent country), which is regarded as an institution in line with the pertinent country's education system and is designated by the Minister of Education, Culture, Sports, Science and Technology, Japan; or are expected to complete such a curriculum before entering the Master Course.

(6) Those who have received the degree corresponding to Bachelor from an overseas university or other school by completing three-year curriculum, including completion of a correspondence course offered by an overseas educational institute in Japan, or completion of a curriculum of an educational institute which is recognized as the institute having the curriculum of university in the overseas country and recognized according to the previous qualification. The university or the school should be accredited by the government or accreditation organization, or should be designated as an equivalent to the accredited university or school, regarding the comprehensive aspects of the education and research; or are expected to receive the degree before entering the Master Course.

(7) Have completed a specialist course at a special technical school stipulated by the Minister of Education, Culture, Sports, Science and Technology, Japan after the date designated by the Minister; or are expected to complete such a course before entering the Master Course.

(8) Are designated by the Minister of Education, Culture, Sports, Science and Technology, Japan

(9) Are recognized on the basis of individual admission qualification screening that they have scholastic abilities equivalent to or higher than those of university graduates, and will be 22 years old or older on the first day of the month when they enroll.

Special selection for third-year undergraduates

(10) Are recognized by the Graduate School of Engineering as having acquired designated credits with excellent

records, and meet any of the following criteria:
a. Have enrolled for three years or more in a university as of March 31, 2024.
b. Have completed 15 years of education in an overseas school.
(Those who expected to graduate in March 2024 for April 2024 Admissions are excluded.)

Special selection for adults
(11) Have working experience for over 1 year at research institution or education institution or company; or, have working experience for over 1 year and meet one of the (1)～(8) Qualifications.

Special selection for the International Specialized Program
(12) Intend to study in the International Specialized Program and meet one of the (1)～(9) Qualifications.

Note:
*Individual admission qualification screening will be conducted for applicants applying as (9) of admission qualification. (See page7)
*Preliminary screening will be conducted for applicants applying as (10) of admission qualification. (See page8)
*Applicants who want to apply as (12) must contact your prospective supervisor at TUAT and obtain his/her approval before you apply. (See page 9-10)
*Applicants who meet all of the following criteria can be exempted from the written academic achievement test:
a. (1) or (2) of admission qualification, (1) or (2) of (11) of admission qualification
b. Are expected to graduate from a university by the end of March 2024.
c. The Graduate School of Engineering is your preference.

Applicants who want an exemption from the written academic achievement test must tell your prospective supervisor at TUAT before you apply.

3. Application Deadline

June 1, 2023 to July 21, 2023 (Except Saturdays, Sundays, and Holidays)
Hours: 9:00–12:00, 13:00–17:00
Note:
※Applicants who want an exemption from the written academic achievement test must apply from June 1, 2023 to June 7, 2023.
※You cannot apply for both Standard Selection and Special Selection at the same time.
※Postal mail applications must arrive within the application deadline.

4. Application Procedure

In case you submit your application by post ,write “Enclosing application documents for the Graduate School of Engineering (Master Course)” on the front of the envelope in red. You also need to enclose a self-addressed N3 envelope with a 344yen stamp on the envelope (write your address with postal code and your name) to receive an admission voucher for examination.

(1) Application documents

Documents	Notes
Application Form; Photograph Voucher (Designated form)	1) An ID picture, without headwear, and taken within 3 months prior to application (4cm x 3cm) must be attached in the designated place. 2) Fill in the name of your expected research supervisor of the department to which you are (or may be) accepted.
Entrance examination fee (paid using provided payment slip designated by our Graduate School)	30,000 yen. Obtain the designated payment slip for the entrance examination fee at the counter of the Koganei Student Support Office, make your payment at the post office or JAPAN POST BANK, receive the *Certificate of Transfer Payment Receipt* with the stamp of the branch and date, and attach it on the designated place of *Payment Confirmation Slip of Entrance Examination Fee*. In addition, ensure to keep the *Transfer Payment Invoice and Receipt Slip*, as it acts as the receipt of your

	payment. *As payment of the entrance examination fee will be confirmed with the stamp of branch and date of the payment shown on the *Certificate of Transfer Payment Receipt*, make your payment only at a post office or Japan Post Bank. (Payments are not accepted via ATM transaction.) If you are applying from outside of Japan, you are advised to consult with your potential supervisor first. However, government sponsored foreign student should contact with Admissions Section as soon as extension of scholarship is confirmed.
Payment Confirmation Slip of Entrance Examination Fee	Attach the Receipt of the *Certificate of Transfer Payment*
Certificate of (expected) graduation	A certificate of (expected) graduation issued by their universities (departments) Applicants with Application Qualification (10) or who are expected to graduate Tokyo University of Agriculture and Technology are not required for submission.
Original test score sheet for the English tests	1) Submit the original and copy of score sheet for one of the English tests below: ・Official Score Certificate of TOEIC L&R ・International Program Score Report of TOEIC-IP (implemented at TUAT) ・Test Taker Score Report of TOEFL iBT (including Home Edition) ・Test Taker Score Report of TOEFL ITP (implemented at TUAT) 2) The test date on the score sheet should be no older than April 1, 2021. 3) The test score is used as a part of the judgement of acceptance. 4) If you submit your application by hand, we check the original score sheet right then and return it to you. If you submit your application by postal mail, we send the score sheet back to you with the admission voucher. 5) Replacement of score sheet is not accepted. 6) Check the conversion of the TOEFL iBT scores into the TOEIC L&R score at 4(2). Note1: Applicants who has a bachelor's degree; or are expected to have a bachelor's degree at the university of the country or region that official language is English are not required for submission. 7) Score sheet must be an original; PDF downloaded from the ETS website are not accepted. Note2: For TOEFL iBT score, the “Test Date Scores” in the Paper Score Report is subject to evaluation (“My Best Score” is not subject to evaluation).
Academic transcript	Academic transcript issued by their universities (departments) Applicants who are expected to graduate Tokyo University of Agriculture and Technology are not required for submission.
Certificate of the degree conferment	Applicants who meet Application Qualification (2) are required for submission.
Statement of Purpose (Designated form)	Clearly state the general outline of the research you are currently conducting (desire to conduct), as well as

	why you wish to apply for the course. Note: write the score at the bottom of a designated form
Business report or performance report	Applicants with Application Qualification (11) are required for submission
Name & Address voucher (Designated form)	Fill in all the necessary information. If any information, such as address changes after submission, make sure to contact the Admissions Section, Koganei Student Support Office immediately.
Certificate of employment	Applicants with Application Qualification (11) are required for submission.
Original Copy of Certificate of Residence	Non-Japanese applicants must submit a Certificate of Residence (stating such as your nationality, residential status, permitted period of stay and its expiration date).
Result of the Examination for Japanese University Admission for International Students (Foreign applicants are (expected) graduate from foreign universities. However applicants for International Specialized Program (English course) are not required for submission.	1) The only subject you should take is Japanese 2) Submit the original and a copy of Academic Transcript. 3) The examination date on the result should be no older than 1 June, 2022. However, if you take the examination in June, 2023 and you cannot submit a result by the application deadline; you need to submit the copy of the application for the Examination for Japanese University Admission for International Students. 4) If you submit your application by hand, we check the original sheet of the result right then and return it to you. If you submit your application by postal mail, we send back the original sheet of the result back to you with the admission voucher.

(2) The conversion of the TOEFL iBT scores into the TOEIC score

TOEFL ITP	TOEFL iBT	TOEIC LR・IP
673-677	120	990
670	119	990
667	118	990
660-663	117	990
657	116	990
650-653	114-115	990
647	113	990
640-643	111-112	990
637	110	980
630-633	109	965
623-627	106-108	950
617-620	105	925
613	103-104	910
607-610	101-102	900
600-603	100	880
597	98-99	865
590-593	96-97	850
587	94-95	836
580-583	92-93	820
577	90-91	805

TOEFL ITP	TOEFL iBT	TOEIC LR・IP
570-573	88-89	800
567	86-87	780
563	84-85	770
557-560	83	750
553	81-82	740
550	79-80	730
547	77-78	720
540-543	76	700
537	74-75	690
533	72-73	680
527-530	71	665
523	69-70	650
520	68	645
517	66-67	635
513	65	625
507-510	64	610
503	62-63	600
500	61	590
497	59-60	580
493	58	565

TOEFL ITP	TOEFL iBT	TOEIC LR・IP
487-490	57	550
483	56	540
480	54-55	530
477	53	520
470-473	52	500
467	51	490
463	49-50	480
460	48	470
457	47	460
450-453	45-46	445
447	44	435
443	43	420
437-440	41-42	410
433	40	400
430	39	385
423-427	38	370
420	36-37	350
417	35	345
410-413	34	330
407	33	315

TOEFL ITP	TOEFL iBT	TOEIC LR・IP
400-403	32	300
397	30-31	290
390-393	29	270
387	28	260
380-383	26-27	250
377	25	230
370-373	24	215
363-367	23	200
357-360	22	180
353	21	160
347-350	19-20	150
340-343	18	130
333-337	17	110
330	16	100
323-327	15	80
317-320	14	60
313	13	50
310	0-12	35

(3)

Contact information for application submission and inquiries:

Admissions Section, Koganei Student Support Office, Tokyo University of Agriculture and Technology
2-24-16 Naka-cho, Koganei-shi, Tokyo 184-8588
TEL: +81-42-388-7014 E-mail: tnyushi@cc.tuat.ac.jp

5. Selection Procedures

The selection will be conducted comprehensively through academic achievement test (a written academic achievement test and an oral examination), an academic transcript, and score sheet for one of the English tests, or a business report or a performance report.

However, applicants who want an exemption from the written academic achievement test will be conducted comprehensively through both the oral examination and the academic transcript.

(1) Admission for an exemption from the written academic achievement test

1) Applicants who wish to be exempted from the written academic achievement test will be judged by the academic transcript or a business report or a performance report.
For applicants exempted from a written academic achievement test will take an oral test.
Please note that you will take the written academic achievement test in case your request for an exemption of the test is disapproved..

2) Announcement for the result of qualification to be exempted from the written academic achievement test
Applicants who belong to Faculty of Engineering will be informed by each department on June 19.
Other applicants will be informed by postal mail send out on June 19.

3) Oral Test
Date: July 3, 2023 Place: Koganei Campus
Details will be notified to eligible applicants.

4) Announcement for the of an Oral Test result
Applicants will be informed by postal mail send out on July 7.
Please note that you will take the written academic achievement test in case you do not pass the oral test.

5) Announcement of successful applicants
September 8, 2023, at 1:30PM.

(2)Entrance Examination by a written academic achievement test and an oral test

1) Subjects

Department	Written test	Oral test
Biotechnology and Life Science	Life sciences	Advanced subjects and study related to the desired major
Biomedical Engineering	Mathematics and advanced subjects and study related to the desired major*[1]	
Applied Chemistry	Advanced subjects and study related to the desired major	
Applied Physics and Chemical Engineering	Mathematics and advanced subjects and study related to the desired major*[2]	
Mechanical Systems Engineering	Advanced subjects and study related to the desired major	
Electrical Engineering and Computer Science	Mathematics and advanced subjects and study related to the desired major	

*[1]Note: For the specialized subjects of the Department of Biomedical Engineering, questions are taken from biology, mechanics, electromagnetics, and electric circuits.

*[2]Note: For the specialized subjects of the Department of Applied Physics and Chemical Engineering, select four subjects, including thermodynamics, from the following seven: thermodynamics, transport phenomena theory, reaction engineering, separation engineering, electromagnetics, quantum mechanics, and statistical mechanics

2) Date, Time and place

	Time Table	17-Aug					18-Aug
		10	11	12	13	14	
Department	Biotechnology and Life Science				Life Science 12:30～15:00		Oral Test
	Biomedical Engineering	Math 10:00～11:00			Advanced Subject 12:30～14:30		Oral Test
	Applied Chemistry				Advanced Subject 12:30～15:00		Oral Test
	Applied Physics and Chemical Engineering	Math 10:00～11:00			Advanced Subject 12:30～15:00		Oral Test
	Mechanical Systems Engineering	Math 10:00～11:00			Advanced Subject 12:30～14:30		Oral Test
	Electrical Engineering and Computer Science	Math 10:00～11:00			Advanced Subject 12:30～14:00		Oral Test

3)Special selection for adults

	Time Table	17-Aug					18-Aug
		10	11	12	13	14	
Department	Biotechnology and Life Science			Life Science 12:30～15:00			Oral Test
	Biomedical Engineering	Math 10:00～11:00		Advanced Subject 12:30～14:30			Oral Test
	Applied Chemistry			Advanced Subject 12:30～15:00			Oral Test
	Applied Physics and Chemical Engineering	Math 10:00～11:00		Advanced Subject 12:30～15:00			Oral Test
	Mechanical Systems Engineering			Advanced Subject 12:30～14:30			Oral Test
	Electrical Engineering and Computer Science	Math 10:00～11:00		Advanced Subject 12:30～14:00			Oral Test

6. Announcement of Successful Applicants

Date: Friday, September 8, 2023 at PM1:30
The list of successful applicants will be shown on the TUAT website
The *Notice of Acceptance* will be mailed to successful candidates on the same day.

7. Admission Procedure

(1) Date
For October 2023 Enrollment— September 15, 2023
For Aprill 2024 Enrollment— March 15, 2024
Details of procedures will be announced to successful candidates later.

(2) Required fees upon admission and others
1) Admission fee — 282,000 yen
2) Annual Tuition fee — 535,800 yen [267,900 yen each for the first and second semester]

Note: Payment of tuition fees is required after entrance.
The fees set above are current and may be subject to change before the date of admission procedure. In addition, should the tuition fee change during enrollment, the new fee will be applicable upon amendment. Details on the payment of admission fee will be informed later.

3) Other required documents — Entrance Agreement (use provided form)
Working applicants who wish to enter the course while employed must submit the Entrance Agreement provided by persons such as the head of the department. Please note that if you are unable to submit the Entrance Agreement, your admission may be revoked.

8. Important Notes

(1) Ensure to contact and obtain confirmation from your potential supervisor before you apply.
(2) No signature (approval sign) of the potential supervisor in the application form, it cannot be filed.
(3) Applicant for Collaborative field who do not have a chance to meet supervisors until the application, obtain an approval sign on the application form by sending post to the supervisor in advance. So you must prepare applications fairly early.
(4) No part of any documents may be altered once application is submitted.
(5) Should you violate any part of this Application Forms and Guide and instructions given by the university, you may be denied to take the examination.
(6) Ensure to bring your Examination Voucher with you when you come for your examination.
(7) Ensure to bring your writing tools. Apart from that, bring a scientific electronic calculator (Reset all), a straight edge ruler and a pair of compasses. However, these are not allowed in the math exam.
(8)Applicant cannot use electronic devices like electronic dictionaries, mobile phones, smartphones and wearable devices.
(9) In principle, applicants are not allowed to enter the examination room if 30 minutes or more elapsed since the start of the examination. Also, applicants are not allowed to leave the examination room within 30 minutes after the start of the examination.
(10) Successful applicants of a special selection for third-year undergraduates should submit an academic transcript issued by their universities to Admissions Section, Koganei Student Support Office by the end of March, 2024.
(11) If applying for exemption of admission/tuition fee and scholarship after enrollment, for upon the submission by the applicants and depending on the systems of the exemption of admission/tuition fee and scholarship,

depending on the scholarship organization system, your academic transcript certificate of achievement which you submitted upon entrance exam application, and the result of your entrance examination may be used for consideration. Regarding personal information, acquired upon your application, your information will be adequately treated according to our Privacy Policy (available on the university website).

(12) The examination fee is non-refundable, regardless of any reason.

(13) No part of any potential department, division may be altered once application is submitted.

(14)In principle, the delay of Chuo-line is considered as delay of transportation on the day of the examination.

(15)In case a disaster occurs on the day of the examination or the day before, it will be notified on the following website.

http://t-board.office.tuat.ac.jp/T/menu.php

(16) Applicants who need special care due to disability (Prescribed in Article 22-3 of School Education Act), consult with an expected research supervisor and Admission Section, Koganei Student Support Office as soon as possible, before you apply.

(17) In accordance with the "Foreign Exchange and Foreign Trade Act", Tokyo University of Agriculture and Technology (TUAT) has established "Tokyo University of Agriculture and Technology Regulations for Security Export Control" and has been conducting strict screening of prospective students to be admitted into TUAT. In case a prospective student or the contents of his/her studies/research is subject to regulation as defined by the above-mentioned Act or Regulations, TUAT must apply to the Ministry of Economy, Trade and Industry (METI) of Japan for its permission to allow his/her enrollment in TUAT, and s/he may not be able to begin his/her studies or research immediately at TUAT for the time being. Furthermore, in case METI denies a TUAT's application in order to maintain international peace and security, the prospective student may not be able to pursue his/her studies or research at TUAT as a result.

The Screening of Admission Qualifications (9)

Qualification approval will be conducted as follows.

1. Documents for Submission

1) Qualification Screening Application Form (provided form)
2) A personal history
An academic background, business career, research career and social activities (provided form)
3) Statement of Purpose (free format; A4, about 500 words)
4) Othersgraduation research, project study or research report

2. Submission date, time and place

Date: May 8, 2023 – May 12, 2023
Time: 9:00 AM – 12 PM, 1 PM – 5:00 PM
Place: Tokyo University of Agriculture and Technology. Koganei Campus
(Admissions Section on the 1st floor of Administration Building (CUBE))

Note: Submission of your application by postal mail is accepted; please write on the address side of the envelope in red, "Enclosing application documents for the Graduate School of Engineering (Master Course)"

3. Date of Oral Examination

May 18, 2023

4. The result will be send out by postal mail on June 9, 2023.

The Pre-Screening of Admission Qualifications (10); Special Selection for Third-Year Undergraduates

1. Documents for Submission

1) Pre-Screening Application Form (provided form)

2) Academic Transcript issued by their universities (departments

Applicants who are expected to graduate Tokyo Agriculture and Technology are not required for submission.

3) Statement of Purpose

Clearly state the general outline of the research you are currently conducting (wish to conduct), as well as why you wish to apply for the course. (Free format; A4)

4) Lecture notes or syllabus of Faculty/Department for Undergraduates

Applicants who are expected to graduate Tokyo Agriculture and Technology are not required to submit.

2. Submission date, time and place

Date: May 8, 2023 – May 12, 2023
Time: 9:00 AM – 12 PM, 1 PM – 5:00PM
Place: Tokyo University of Agriculture and Technology, Koganei Campus
(Admissions Section on the 1st floor of Administration Building (CUBE))

Note: Submission of your application by postal mail is accepted; please write on the address side of the envelope in red, “Enclosing application documents for the Graduate School of Engineering (Master Course)”

3. The result will be send out by postal mail on June 9, 2023.

4. Successful applicant of “Special Selection for Third-Year Undergraduates” will have their undergraduate student status withdrawn. Please note that you will no longer be eligible to take state examination that requires Bachelor's degree.

Students can file with the National Institution for Academic Degrees and Quality Enhancement of Higher Education to undergo an assessment and pass an examination, should they seek to obtain a Bachelor’s degree.

The Screening of Admission Qualifications (12); Special Selection for International Specialized Program

Selection for applicants who apply as qualifications (12) shall be made as follows.

1. Application Requirements

Applicants must meet all of the following requirements (1) to (3).

(1) Applicants must have an excellent academic record at their last graduated university.

(2)Applicants are required to fulfill at least one among the following English proficiencies.

1) A score of qualification or examination test equal to or more than B2 equivalent of Common European Framework of Reference for Languages (CEFR) in English.

2) Applicants who completed the educational course that satisfies entrance qualifications for a Japanese graduate school master's course in English as the main language.

3) Applicants who are recognized by our Graduate School of Engineering as having the English proficiency specified in 1) above.

(3) Applicants must have a strong desire to study at the Graduate School of Engineering and be willing to enter the Doctoral course after completing the Master's course.

2. Application Procedure

Applicants must contact their prospective supervisor at least one month prior to the application deadline and obtain his/her approval before submitting the application. Applications submitted without the approval of the applicant's prospective supervisor will not be accepted.

(1)Application Documents

1	Application Form for International Specialized Program	Use designated form.
2	Field of study and research plan	Use designated form.
3	Statement of Purpose	Use designated form.
4	Research achievement	Use designated form.
5	Abstract of bachelor's thesis (or equivalent paper)	Written in English on A4 size paper, no more than 600 words.
6	Certificate of (expected) graduation	A certificate of (expected) graduation issued by their universities (departments).Applicants who are expected to graduate TUAT are not required for submission.
7	Academic transcript	Academic transcript issued by their universities (departments) Applicants who are expected to graduate TUAT are not required for submission.
8	Certificate of degree (expected)	Not required if the type of degree and date of conferment are clearly indicated on the certificate of (expected) graduation.
9	Letter of recommendation	A letter of recommendation, by the dean or head of the applicant's affiliated institution. This letter must be addressed to the president of Tokyo University of Agriculture and Technology.
10	Certificate for language skill	A certificate to prove that you meet the 1) or 2) of the Application Requirements (2). Those who are recognized by the University as meeting 3) of the Application Requirements (2) may be exempted from submission.
11	Entrance examination fee (30,000 yen)	Applicants currently residing in Japan must pay using the payment form enclosed in the Japanese version of the application guidebook. Applicants outside Japan are advised to refer to their prospective supervisor for details.

12	A certificate of residence in Japan or a copy of the ID of the applicant's country of nationality (only for applicants with foreign nationality)	Applicants currently residing in Japan must submit a copy of their certificate of residence (showing nationality, status of residence, and period of stay), and applicants who have not yet arrived in Japan must submit a copy of a document that proves their nationality status in their home country (e.g. passport, family register, citizenship certificate, etc.).

(2)Remarks

Download the designated forms for Application Documents 1-3 from the following URL, print them out on both sides of A4 paper, and submit them. The URL can be accessed from the QR code on the right.

https://www.tuat.ac.jp/documents/tuat/admission/nyushi_daigakuin/youkou/2024_ISP_form.zip

All the documents should be typewritten in either English or Japanese. In the case the document is not English or Japanese, attach the translation in English or Japanese with it. The submitted documents will not be returned.

(3)Application Period

From June 1 ,2023 to July 21, 2023. (except Saturdays, Sundays, and holidays)

In case of sending by mail, the application must arrive by the end of the application period. Documents submitted outside the application period will not be accepted.

(4) Contact information for application submission and inquiries:	Admissions Section, Koganei Student Support Office, Tokyo University of Agriculture and Technology 2-24-16 Naka-cho, Koganei-shi, Tokyo 184-8588 TEL: +81-42-388-7014 Office hour: 8:30am-12:00pm, 1pm-5:15pm

3. Selection Procedures

(1) First round selection (document screening)

In the first round of selection, applicants will be examined comprehensively based on the content of the submitted application documents. The result will be notified on July 28, 2023.

(2) Second round of selection (to be conducted only for applicants who have passed the first round of selection)

The second round of selection will be based on an oral examination. The examination will be held on August 18, 2023. The examination may be conducted online. Details will be provided only to successful applicants in the first round.

4. Announcement of Successful Applicants

The list of successful applicants will be shown on the TUAT website for 3days from September 8, 2023.

Notification of acceptance will be mailed to successful applicants on the same day. For those who have not yet entered Japan on the day, a copy of the acceptance notification will be sent as an electronic file, and the original will be delivered after the applicant arrives in Japan.

5. Admission Procedure

Admission procedure is the same as that for the Standard Selection. Refer to p.5.

6. Important Notes

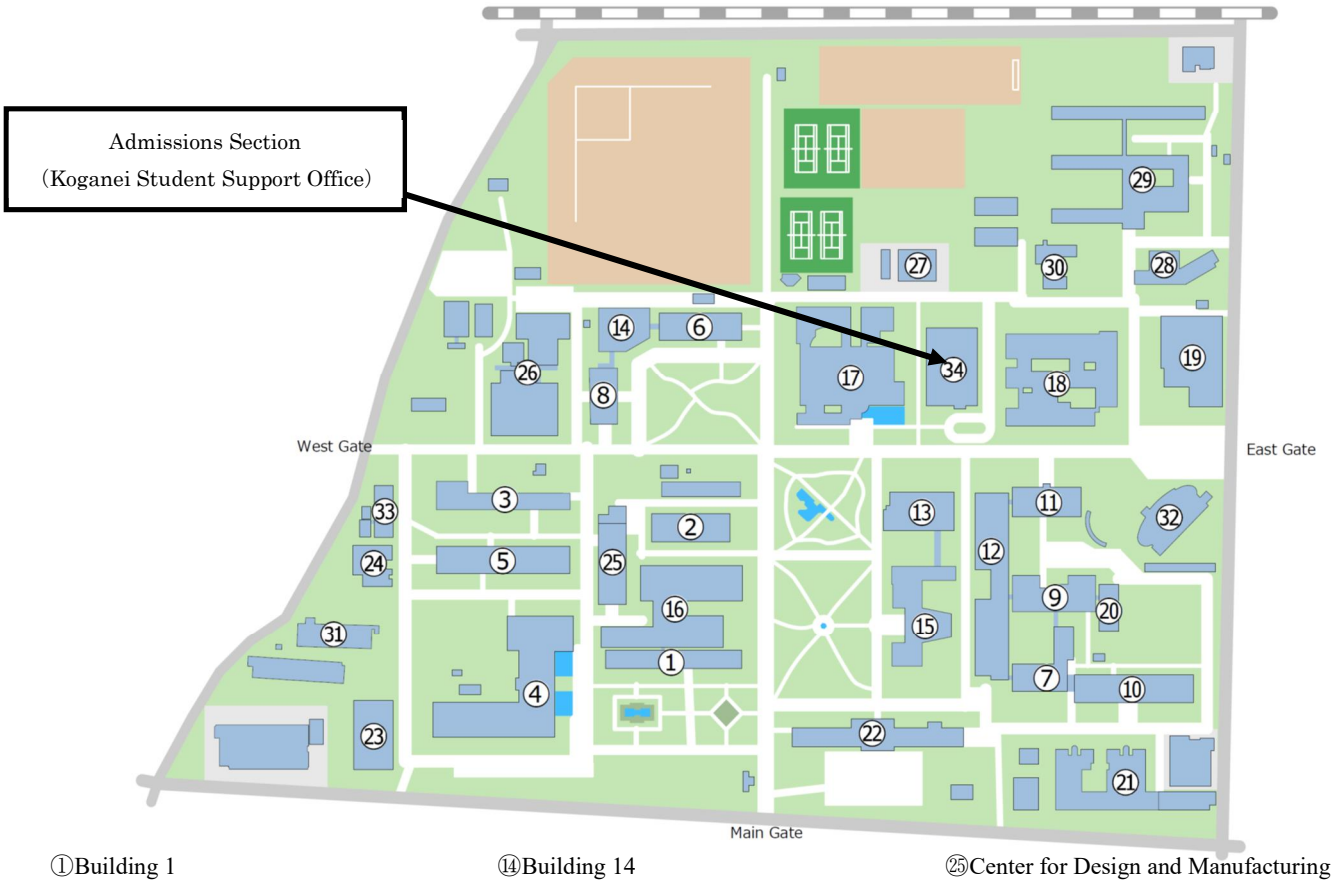
(1) Applicants may not apply for both the Standard Selection and the Special Selection.

(2) If the oral examination for the second round is conducted online, the following items will be required, so prepare them in advance.

1) A bright, quiet room with no one other than the examinee alone.
2) An Internet access that enables stable video calls.
3) A device capable of making online video calls and chatting, equipped with a camera, microphone, speakers, and a screen large enough so that the interviewer's instructions can be seen.

(3) Other notes are the same as those for the Standard Selection on p. 6, so check those as well.

Koganei Campus Map



①Building 1
②Building 2
③Building 3
④Building 4
⑤Building 5
（Instrumentation Analysis Center）
⑥Building 6
⑦Building 7
⑧Building 8（Information Media Center）
⑨Building 9
⑩Building 10
⑪Building 11
⑫Building 12
⑬Building 13
（Organization for the Advancement of Education and Global Learning）
⑭Building 14
⑮Lecture Hall Building for the Faculty of Engineering
⑯New Building 1
⑰Koganei Library
⑱Graduate School of Bio-Applications and Systems Engineering (BASE)
⑲Faculty of Engineering Multipurpose Hall, Co-op Store and Cafeteria
⑳CAD/CAM Laboratory
㉑ University Research Administration Center – URAC
㉒Nature and Science Museum
㉓ Research Center for Science and Technology
㉔Center for Environment and Safety
㉕Center for Design and Manufacturing
㉖Gymnasium
㉗Faculty of Engineering RI Laboratory Building
㉘Koganei International House
㉙Dormitory “Keyaki”
㉚Dormitory “Sakura”
㉛Staff Housing
㉜ The 140th Year Commemorative Building (Ellipse)
㉝Research Center for Next Generation Capacitor
㉞Administration Building(CUBE): Administration Office and Health Service Center

Directions :
8 minutes walk from JR Higashi-Koganei Station (40 minutes from Tokyo Station, 22 minutes from Shinjuku Station by JR Chuo Line rapid train).

Guide to the Master Course
Graduate School of Engineering of Tokyo University of Agriculture and Technology

1. Education objectives

The Graduate School of Engineering (Master's Program) accepts students from Japan and overseas who are interested in the natural environment and scientific technology and making efforts to improve themselves. They seek to broaden their vision and acquire thorough knowledge, and supported by a strong sense of ethics and personal autonomy, they want to become engineers and researchers who play an active role in international society. Recently, we have seen remarkable developments in science and technology, and ICT has become more sophisticated and advanced. We have also seen developments in border areas as well as in specialized comprehensive fields related to various specialized fields. These advances have been astounding, and in the Graduate School of Engineering we are engaged in a wide range of research and education from basic science and engineering to applied advanced technology designed to meet these kinds of current demands. Our goal is to foster researchers and specialists who have a wealth of imagination and creativity and can carry out wide-ranging, advanced research and development.

2. Admission policy

Aiming to develop individual students, the Graduate School of Engineering is looking for applicants who meet the following requirements:

(1) Applicants who have a high level of ethics, sufficient basic academic knowledge of their field of study, and a broad view of their area of specialization.

(2) Applicants who are on a quest to find truth in nature, have a manufacturing mindset, and are interested in science and technology. They should also be able to think independently in pursuing their research and cooperate and collaborate with others while being dedicated to solving research problems and contributing to society.

(3) Applicants who are willing to take on the challenges facing humankind and can consider and judge from multiple perspectives and set their own research themes.

(4) Applicants who have a high level of communication ability in Japanese or English.

Department of Biotechnology and Life Science

Our objectives are twofold: (i) to train students to acquire an international mindset, communication skills, and the ability to make presentations at domestic and international conferences and write technical papers and (ii) to develop human resources who, as experts in cutting-edge biotechnology, can act immediately in response to the needs of modern society while being active at the core of society as researchers, specialists, and professionals with the ability to discover new needs and seeds of new technologies. In consideration of these aims, we therefore seek people who satisfy the following admissions policy:

(1) Applicants must have (i) sufficient basic academic skills in chemistry, life sciences, and engineering to study in the field of biotechnology and life science and (ii) the high ethical standards required of researchers and engineers.

(2) Applicants must have an inquisitive mind for cutting-edge research in the field of biotechnology and be eager to contribute to society through interdisciplinary and international cooperation and collaboration.

(3) Applicants must be able to (i) set research themes proactively through advanced expertise, analytical skills, and insight in the field of biotechnology and (ii) be willing to take on the challenges facing humanity boldly.

(4) Applicants must possess advanced communication skills in Japanese or English.

Department of Biomedical Engineering

While aiming to give students the specialized knowledge related to the leading technology at the core of modern medicine, through collaboration with specialists from different fields, we aim to foster students who can acquire practical abilities based on biomedical innovation and develop as leaders in international society. As researchers, specialists, and professionals, these leaders can serve as bridges between various industrial fields and sow the seeds for developing the medical

devices and health practices of the future. In consideration of these aims, we therefore seek people who satisfy the following admissions policy:

(1) Applicants who have a high sense of ethics, basic academic knowledge and ability, and a broad desire to learn from biomedical engineering
(2) Applicants who are on a quest to find truth in nature, have a manufacturing mindset, and are interested in biomedical fields. They also think independently while pursuing their research, can cooperate and collaborate with various researchers, engineers, and specialists who cross borders between disciplines, and are dedicated to solving research problems and contributing to society.
(3) Applicants who are able to (i) consider and judge various problems facing humanity related to health, medicine, and sanitation from multiple perspectives, (ii) set their own research agenda, and (iii) be willing to boldly take on the challenge of research connected to the development of new fields of research, medicine, and healthcare technology.
(4) Applicants who are highly skilled in communicating in Japanese or English.

Department of Applied Chemistry

By teaching fundamental academic skills in chemistry and physics and conveying specialized knowledge in applied chemistry, materials science, and related fields, this program aims to foster highly skilled people who can (i) play leading roles in advancement of highly specialized science and technology as chemists and materials scientists working in fields related to nature, life, the environment, energy, and others, (ii) contribute to the formation of a safe and secure sustainable society, and (iii) play active roles internationally through their rich communication skills. In consideration of these aims, we therefore seek people who satisfy the following admissions policy:

(1) Applicants should possess sufficient basic academic skills in chemistry and physics and related fields and meet the ethical standards necessary for researchers and engineers.
(2) Applicants should be willing and able to create new value in regard to chemical substances from the atomic and molecular level and contribute to society and the world as experts in the field.
(3) Applicants should be willing to set their own research agenda in the fields of chemistry and materials science related to nature, life, environment, energy, etc. and boldly pursue unexplored theories and development of new research areas.
(4) Applicants should possess excellent communication skills in Japanese or English.

Department of Applied Physics and Chemical Engineering

The objective of the master's program is to foster engineers and scientists who can contribute to the formation of a sustainable society and play an active role in society and on the international stage. In particular, students will gain the ability to solve problems related to energy, the environment, and new materials through (i) their integrated understanding and application of expertise in chemical and physical engineering as well as (ii) their advanced professional leadership skills that will play a leading role in the field. In accordance with the above-described objectives of educational research and development of human resources, the Department of Chemical and Physical Engineering seeks students who satisfy the following requirements:

(1) Applicants should have sufficient basic academic skills in chemistry, physics, mathematics, English, etc. for studying chemical engineering and physical engineering as well as a broad perspective and a strong sense of ethics.
(2) Applicants should (i) be interested in research in the fields of chemical and physical engineering related to energy, the global environment, medicine and food, resources and materials or the process and measurement technologies that form the basis for solving problems in those fields and (ii) have a desire to contribute to society and the international community through activities in those fields.
(3) Applicants should be able to (i) consider and judge various problems facing humanity from multiple perspectives by integrating and utilizing chemical engineering and physical engineering, (ii) set their own research agenda, and (iii) be willing to boldly take on the challenge of solving those problems.
(4) Applicants should have excellent communication skills in Japanese or English languages.

Department of Mechanical Systems Engineering

Based on a high level of fundamental analytical ability in mathematics and physics and a broad and deep expertise in mechanical-systems engineering, the goal of the department is twofold: (i) design and create unique and world-leading advanced mechanical systems to create a science-and-technology-driven society on a global scale that can develop sustainably in harmony with the environment and (ii) train advanced engineers and researchers who can work internationally with a deep understanding and insight into world society and culture through their rich communication skills. In consideration of these aims, we therefore seek people who satisfy the following admissions policy:

(1) Applicants must have a broad perspective, sufficient basic academic skills for studying mechanical and systems engineering, and a high level of ethics.
(2) Applicants must have (i) a high level of academic ability for applying oneself to cutting-edge research in the field of mechanical-systems engineering and (ii) a strong desire to contribute to humanity and society through international activities in their field of specialization.
(3) Applicants must (i) have the ability to identify and solve problems based on advanced analytical skills, specialized knowledge, and insight in the fields of mathematics, physics, and mechanical-systems engineering and (ii) be highly motivated to take on research challenges in new and interdisciplinary research fields boldly.
(4) Applicants must have advanced communication skills in Japanese or English languages.

Department of Electrical Engineering and Computer Science

The aims of this program are twofold: first, to train students to acquire advanced technologies and related expertise in information engineering and electrical and electronic engineering, which support the foundations of modern society and, second, to train advanced IT engineers and researchers who can (i) explore and devise new technologies in electrical engineering and computer science in accordance with social needs and (ii) work internationally with advanced R&D capabilities created through collaboration with those having different specialties. In consideration of these aims, we therefore seek people who satisfy the following admissions policy:

(1) Applicants must have acquired sufficient basic knowledge and ethics in information engineering, electrical and electronic engineering, and basic science and engineering subjects.
(2) Applicants must (i) be interested in research in the fields of information engineering and electrical and electronic engineering and (ii) have a strong desire to contribute to society and the international community through activities in those fields.
(3) Applicants must (i) have the ability to identify and solve problems on the basis of their expertise in information engineering and electrical and electronic engineering and (ii) be willing to take on challenges in new research areas.
(4) Applicants must have excellent communication skills in Japanese or English languages

3. Organization

The Graduate School of Engineering consists of a Master's Course and a Doctoral Course.

Master's course consists of 6 departments; "Biotechnology and Life Science", "Biomedical Engineering", "Applied Chemistry", "Applied Physics and Chemical Engineering", "Mechanical Systems Engineering", "Electrical Engineering and Computer Science" , and each department corresponds to a specialized research field that contributes to today's leading-edge science and technology. Each of the departments in the Master's Course corresponds to the six departments that comprise the Faculty of Engineering and the six departments that comprise the Doctoral Course, respectively, creating an education and research system that is consistent from the undergraduate to the Doctoral Course.

The Graduate School of Engineering also has a Department of Industrial Technology and Innovation that aims to cultivate Research and Development capabilities and technology management through advanced engineering research. For further information, please refer to Industrial Technology and Innovation guidelines and forms.

4. Certification of Course-Completion and Degree Conferral

In principal, students who meets all of the following criteria will be conferred Master Degree (Technology or Academic).

1) Enrolled in the Graduate School of Engineering for 2 years or more
2) Earn 30 credits or more in each department.
3) Approved thesis for degree, and passed the final examination.

5. International Specialized Program

International Specialized Program (English course) has been established in each department. In this program, all lectures are conducted in English. Professors listed in this guide are also members of the International Specialized Program.

Information about planned admission for International Specialized Program (English course) is included in 1.Application Quota. For details on application requirements, application procedures, selection procedures, etc., refer to "Special Selection for International Specialized Program" on pages 10-11.

Department : Biotechnology and Life Science		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Cell engineering	Mikako SAITO mikako(at)cc.tuat.ac.jp	Disease model cells of diabetes. Regenerative cell engineering. ES cells. Single-cell gene engineering. Femtoinjection. Food safety control and regulatory science.
	Tetsushi MORI moritets(at)go.tuat.ac.jp	Exploitation and elucidation of the characteristics, role and molecular traits of novel/uncultivable environmental microorganisms using molecular biology based approaches.
Biomolecular and structural informatics	Yutaka KURODA ykuroda(at)cc.tuat.ac.jp	Biophysical and bioinformatics studies of protein/peptide aggregation, function, and immunogenicity at atomic/molecular level using recombinant DNA technologies, NMR, X-ray crystallography, and computational simulation.
	Hiroshi TSUGAWA htsugawa(at)go.tuat.ac.jp	Our laboratory studies the complex metabolic system of living organisms through the development of mass spectrometry omics techniques that illuminate the diversity of metabolites from plant, human, and the associated microbiome.
Structure and cellular function of biomolecules	Yasumoto NAKAZAWA yasumoto(at)cc.tuat.ac.jp	i) Structural analysis of silk fibroins. ii) Development of the medical implantation devices such as artificial cardiac valves and cardiovascular patches based on the silk fibroin.
Molecular biology and pathophysiology	Yoshihiro OHTA ohta(at)cc.tuat.ac.jp	Development of novel techniques for organelle imaging and their application to mitochondrial study. Cell death, Ca2+ signaling and generation of reactive oxygen species are mainly focused.
	Masaki INADA inada(at)cc.tuat.ac.jp	Molecular pathological investigation using gene targeted mice and disease models on mice.

Department : Biotechnology and Life Science		
Specialty & Major Research Fields	Academic Advisor	Research Subject
	Michiko HIRATA hirata(at)cc.tuat.ac.jp	Molecular pathology is investigating that based on gene editing techniques in molecular biochemistry. Focusing fields are development of drug screening models and diagnostic-imaging methods on life related diseases and skeletal disease including osteoporosis, periodontal disease and its related cancers.
Nanobiotechnology	Kazunori IKEBUKURO ikebu(at)cc.tuat.ac.jp	Nucleic acid engineering of aptamers for the application to diagnosis and novel bottom-up nanotechnology.
	Ryuji KAWANO rjkawano(at)cc.tuat.ac.jp	The goal of my research is to establish a system that uses biological nanopores for single-molecule detection. Channel membrane proteins have nanochannels around 1 nm in size. These biological nanopores are capable of detecting and electrically recognize even single molecules with a high signal-to-noise ratio. However, the channel size is limited by the inherent protein structure. I plan to develop artificial nanochannels such as synthetic nanopores or polypeptides combined with biomaterials (proteins and lipid bilayers) on the basis of MEMS technology for novel nanopore sensing.
Biobusiness	Wakako TSUGAWA tsugawa(at)cc.tuat.ac.jp (Collaborative faculty)	Development of novel biodevices for the in vitro diagnostics and environmental monitoring systems based on proteins or enzymes.
Molecular Biochemistry	Ryutaro ASANO ryutaroa(at)cc.tuat.ac.jp	Artificial protein design based mainly on antibody molecules and their detailed functional analyses for development of next-generation biologicals and biosensors.
Plant biotechnology	Akiyo YAMADA yamaden(at)cc.tuat.ac.jp	Molecular biological analysis of the genes based on the function of the proteins related to salt-tolerance phenotype of the halophyte.
Marine Biotechnology	Tomoko YOSHINO y-tomoko(at)cc.tuat.ac.jp	Development of novel bio-nanomaterials through genetic engineering by microorganisms for biosensing and biomedical applications.
Biomolecular engineering	Atsushi ARAKAKI arakakia(at)cc.tuat.ac.jp	Molecular analysis of biomineralization mechanism. Biomimetic synthesis of organic/inorganic hybrid nanomaterials using biological molecules.
	Tsuyoshi TANAKA tsuyo(at)cc.tuat.ac.jp	Production of biofuels, chemicals and pharmaceuticals on the basis of biological functions of various microorganisms. Development of Bio-sensing system based on lab-on-a-chip technologies.
Bioelectronics	Nobuhumi NAKAMURA nobu1(at)cc.tuat.ac.jp	Bioelectrochemistry and Raman spectroscopy of metalloproteins and construction of biofuel cells. Development of ionic liquids as ion conductors, solvents for biomass extraction and energy conversion.

Department : Biotechnology and Life Science		
Specialty & Major Research Fields	Academic Advisor	Research Subject
	Takahiro ICHIKAWA t-ichi(at)cc.tuat.ac.jp	Lipid molecules form bilayer structures that play an important role as a field for various functional biomolecules. In our laboratory, we aim for the construction of novel fields by controlling self-organization behavior of amphiphilic molecules.
Synthetic organic chemistry Bioorganic chemistry/chemical biology	Kazuo NAGASAWA knaga(at)cc.tuat.ac.jp (Collaborative faculty)	Total synthesis of biologically active natural products. Development of organocatalyst.
	Kaori SAKURAI sakuraik(at)cc.tuat.ac.jp	Development of novel chemical tools to study biological functions of glycolipids and natural products.
	Masayuki TERA tera(at)go.tuat.ac.jp	Design and synthesis of functional molecules controlling nucleic acids, proteins, and cellular surfaces.
Medicinal enzyme engineering	Christopher VAVRICKA chris(at)go.tuat.ac.jp	Computationally-driven enzyme engineering can now enable the sustainable biosynthesis of virtually any desired chemical product. Therefore, we are developing computational approaches for the discovery and engineering of specialized enzyme functions that can extend metabolic pathways to produce valuable medicinal compounds.
Biosociety engineering Biomolecules and proteomics	Masafumi YOHDA yohda(at)cc.tuat.ac.jp	Structure and function of molecular chaperones. Genetic analysis systems for SNP genotyping and bioremediation.
	Keiichi NOGUCHI knoguchi(at)cc.tuat.ac.jp (Collaborative faculty)	Structure analysis of bio-related molecules using X-ray diffraction, nuclear magnetic resonance, mass spectroscopy and electron microscopy methods.
	Kyosuke SHINOHARA k_shino(at)cc.tuat.ac.jp	We examine the role of cilia in our body. Cilia are nanomachine motor device that protrude from cell surface and play important role on transport of fluid in airway, brain, and oviduct. Using knockout mouse, electron microscopy, and protein engineering, we address molecular mechanism of motility and mechanical property of cilia: How cilia move or how cilia acquire their stiffness and integrity.
Theoretical linguistics	Yuji HATAKEYAMA hatayu(at)cc.tuat.ac.jp	Syntactic structure, semantic structure, and information structure.

※In the Graduate school of Engineering, Department of Biotechnology and Life Science, we give leading-edge research opportunities for adults such as cooperate researchers, to promote industry-academic collaborative research; we aim to provide a brush up course for adults in Department of Biotechnology (Course for Biosociety Engineering). In this course, adults can continue the work and obtain Master's degree and Doctor's degree; Quota is 4 for Master's course and 4 for Doctor's course.

Department : Biomedical Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Biomedical electronic nanodevices	Kenzo MAEHASHI maehashi(at)cc.tuat.ac.jp	Development of biomedical electronic nanodevices for early diagnosis and for realization of safe and secure society. Nanocarbons are expected for fabrication of devices owing to their unique structures and superior electrical properties. In this department, biological sensors and quantum devices are developed.
Biomedical Photonics	Kazuhiko MISAWA kmisawa(at)cc.tuat.ac.jp	To realize qualitative improvement of life, home medical care, and patient welfare, the demand for progress and innovation in medical diagnosis and treatment is increasing every year. Engineering technology (e.g., lectronics) in close collaboration with biology and medicine plays a key role in the latest advances in diagnosis/treatment. Based on “ultrafast optical science,” my group conducts comprehensive research and development ranging from basic to applied research in biomedical engineering systems. The purpose of this approach is to develop high-quality diagnostic and treatment options for future generations, leading to the creation of new industrial fields.
3D image technology	Yasuhiro TAKAKI ytakaki(at)cc.tuat.ac.jp	Holographic displays and light field displays which naturally satisfy human depth perception without any contradiction are developed to realize next-generation head-mounted displays and glasses-free 3D displays used for VR/AR technology and metaverse. Moreover, hologram contract lenses which can be placed into eyes are also developed to enable the augmentation of human vision.
Medical ultrasound	Kohji MASUDA masuda_k(at)cc.tuat.ac.jp	Our research topic is "Ultrasound," which is knowledge of physics and electrical engineering and has a potential to apply to both diagnosis and treatment without harming the human body. In collaboration with medical researchers, we are conducting research themes in various fields such as verification experiments of biological effects caused by ultrasound and information extraction using image processing and machine learning. We are working towards realization of therapeutic technology by combining these achievements.
Biomedical sensing	Kenji IKUSHIMA ikushima(at)cc.tuat.ac.jp	Innovative sensing technologies related to ultrasound and terahertz waves by utilizing our unique measurement schemes and advanced quantum technologies. We aim to visualize information that is inaccessible by conventional technologies and apply it to various fields such as medical diagnosis, cell evaluation, and inspection of food and industrial materials.
Biophysics	Yoshihiro MURAYAMA ymura(at)cc.tuat.ac.jp	Biophysics and Soft matter physics. Experimental study on biological function, especially, mechanical properties and rheology of biopolymers and mechanics of microorganism.

Department : Biomedical Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Lightwave sensing technology	Yosuke TANAKA tyosuke(at)cc.tuat.ac.jp	Our research deals with multi-function and high-speed optical signal processing, optical sensing systems along with related devices and data processing techniques, which are applied to monitoring artificial structures and biological objects.
Superconducting Materials	Akiyasu YAMAMOTO akiyasu(at)cc.tuat.ac.jp	Experimental research on superconductivity, superconducting materials, and superconducting application. Especially development of novel strong magnets using new high temperature superconductors for medical and green applications.
Biomaterials	Yuki AKAGI y-akagi(at)go.tuat.ac.jp	We are developing smart-materials based on chemistry, biology, and material engineering, to meet unmet medical needs. Furthermore, we aim to realize highly efficient/accurate diagnosis and treatment, by combining them with physical energy such as laser or heat.
Complex systems in microfluidic devices	Taiji OKANO okano(at)go.tuat.ac.jp	Research using artificial cell models with cell-like characteristics to investigate the mechanisms underlying living systems from the physical perspective. Development of microfluidic devices needed in advanced life science research.
Mechanobiology and engineering for human health and diseases	Daisuke YOSHINO dyoshino(at)go.tuat.ac.jp	Research for mechanobiology of human health and disease. Development of biomedical devices and medical techniques for vascular diseases.
Biomedical Spectroscopy	Terumasa ITO teru-ito(at)go.tuat.ac.jp	We develop new optical spectroscopy and imaging methods to analyze small molecules by manipulating the spatio-temporal properties of light. Using these technologies, we elucidate the effects and functions of physiologically active molecules and drugs on living tissues and cells.
Cultural anthropology	Yuichi ASAI asai(at)go.tuat.ac.jp	My major research fields are cultural anthropology, linguistic anthropology, and environmental anthropology. My research focuses on how human language constructs socio-cultural phenomenon and the natural environment. Since 2007, I have engaged in fieldwork in the Fiji Islands, South Pacific, and examined unique characteristics of Fijian ritual and mythical cosmology, through linguistic analysis of Fijian language.

Department : Applied Chemistry		
Speciality&Major Research Fields	Academic Advisor	Research Subject
Opto-electronic Materials	Yoshinao KUMAGAI 4470kuma(at)cc.tuat.ac.jp	Growth of compound semiconductor crystals from vapor phase based on the thermodynamic analysis and construction of growth system.
Energy Chemistry & Electrochemistry	Etsuro IWAMA iwama(at)cc.tuat.ac.jp	Material design and characterization of nanostructured materials for electrochemical energy storage. Modification of the material/electrolyte interfaces in electrodes for high power and energy-efficient applications.
Molecular Synthesis	Taichi KANO kano(at)go.tuat.ac.jp	Development of efficient synthetic methods for bioisosteres and their application to synthesis of biologically active compounds. Design of organocatalysts as artificial enzymes and their application to environmentally benign reactions.
Molecular Design	Akio SAITO akio-sai(at)cc.tuat.ac.jp	Development of novel and efficient procedures for the synthesis of heterocyclic compounds
Molecular Catalysis	Masafumi HIRANO hrc(at)cc.tuat.ac.jp	Activation of inactive bond in organic molecules by transition-metal complexes and the application toward molecular transformation with high atom efficiency.
	Keiji MORI k_mori(at)cc.tuat.ac.jp	Concise construction of fused-cyclic skeleton by sequential C–H bond functionalization and development of π-π interactions based novel chiral ligand.
Inorganic Solid State Chemistry	Kazuyuki MAEDA k-maeda(at)cc.tuat.ac.jp	Development of novel nanospace materials such as zeolite-related materials and coordination polymers, especially inorganic-organic hybrid nanosheets and related nanospace materials.
	Tatsuo NOMA noma(at)cc.tuat.ac.jp (Collaborative faculty) *Retires in March 2024	Synthesis and application of functional ceramic films including ferroelectrics, dielectrics and photo catalysts. Designing of processing method using high electric field at elevated temperatures.
Capacitor Technology (Sponsored Laboratories)	Kenji TAMAMITSU tamamitu(at)cc.tuat.ac.jp	Development of energy storage devices and their functional nanomaterials. Electrochemical energy storage by electric double layer capacitors. Lithium-ion capacitors and hybrid supercapacitors.
Organic and Polymeric Materials for Electronics and Optoelectronics	Takeshi SHIMOMURA simo(at)cc.tuat.ac.jp	*Functional Polymers for Flexible Molecular Electronics *Development of Conducting Polymer Nanofibers *Polymer Energy Devices Using Low-Dimensionality and Flexibility *Development of Soft Devices with Self-Assembling Properties

Department : Applied Chemistry		
Speciality&Major Research Fields	Academic Advisor	Research Subject
	Koji NAKANO k_nakano(at)cc.tuat.ac.jp	*Development of organic functional materials based on organic synthetic chemistry *Design and synthesis of new π-conjugated molecules, and their application to organic electronic/optoelectronic materials *Development of highly-active and selective polymerization catalyst
Fundamental Organic Chemistry for Molecular and Polymeric Materials	Akiko OKAMOTO aokamoto(at)cc.tuat.ac.jp	*Design and Analysis of Spatial Organization of Aromatic-Rings-Accumulated Organic Molecular Compounds: Single Molecular Spatial Organization in Crystal, Crystalline Molecular Packing, and Molecular Structure in Solution *Synthetic Study of Aromatic Condensation Polymers having Repeating Units of Non-coplanarly Accumulated Aromatic Rings
Polymeric Biomaterials	Yoshihiko MURAKAMI muray(at)cc.tuat.ac.jp	*Biomaterials *Surgical Tissue-Adhesive Materials *Gels for Endovascular *Drug-Release Matrix *Polymers Agent *Polymeric Film for Bioanalysis
	Takahiro MURAOKA muraoka(at)go.tuat.ac.jp	*Bio-inspired synthetic organic chemistry and supramolecular chemistry for 1) protein manipulation and stabilization, 2) membrane functionalization, and 3) cellular activity control.
Physical Chemistry of Organic and Polymeric Materials	Toshiyuki WATANABE toshi(at)cc.tuat.ac.jp	*Development of photoresponsive polymers *Development of reversible thermoresponsive recording of fluorescent image *Synthesis of diamond from carbon dioxide *Development of photoresponsive drug delivery systems
	Hiroyuki OZAKI hiroyuki(at)cc.tuat.ac.jp *Retires in March 2024	*Electronic and Geometric Structure Analysis of Extrathin (4−10 Å) Molecular Aggregates on Clean Surfaces *Creation, Characterization, and Manipulation of a Single Sheet (or Chain) of a Polymer
Organic and Polymeric Materials Chemistry	Yoko TATEWAKI ytatewa(at)cc.tuat.ac.jp	*Development of organic functional materials for electronics devices *Synthesis of conducting and magnetic materials *Preparation of self-assembly nanomaterials *Conducting and magnetic properties of organic devices
Organic and Polymeric Materials with Integrated Molecular Structure	Shinji KANEHASHI kanehasi(at)cc.tuat.ac.jp	Development of novel functional materials for sustainable society such as unutilized biomass-based products, gas separation, purification, and barrier materials for mitigation of climate change (i.e., global warming), clean energy production (e.g., hydrogen, biogas, natural gas), and food waste problem.
Material Systems Mathematics	Hiroshi GODA goda(at)cc.tuat.ac.jp	*Knots, links and 3-dimensional manifolds

Department : Applied Chemistry		
Speciality&Major Research Fields	Academic Advisor	Research Subject
	Eri HATAKENAKA hataken(at)cc.tuat.ac.jp	*Invariants of knots and manifolds in low dimensions
Material Technology for Organic and Polymeric Substances	Hiromu SAITO hsaitou(at)cc.tuat.ac.jp (Collaborative faculty)	*Polymer Blends *Mechanical and Optical Properties of Polymers *Morphology Design of Polymers by Supercritical Fluids *Crystallization of Polymers
Communication Studies	Ri NIN ninri(at)cc.tuat.ac.jp	Sociolinguistic Studies: Language varieties, Language behavior, Language life, Language contact, Language change, Language consciousness, Language acquisition, and Language planning.
	Lukas RIESER rieserl(at)go.tuat.ac.jp	Linguistics, formal semantics and pragmatics. Analysis of phenomena related to language content and use by methods of formal logic, aiming to shed light on phenomena like discourse particles, expectations behind utterances, and intonation, which are difficult to capture with extant methods in formal linguistics.

Department : Applied Physics and Chemical Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Interfacial Chemical Engineering	Hiroshi TAKIYAMA htakiyam(at)cc.tuat.ac.jp	Research and development of industrial crystallization technology for producing crystalline particles such as pharmaceuticals, foods, battery materials and functional materials.
	Yuichiro NAGATSU nagatsu(at)cc.tuat.ac.jp	Fundamental study of chemo-hydrodynamics (liquid flow with chemistry) and applied study of chemo-hydrodynamics for environmental and energy fields.
Particle Technology	Wuled LENGGORO labwl(at)cc.tuat.ac.jp	At the intersection of chemical processing, particle/aerosol technology, transport phenomena (fluid, mass, and heat), and bio-systems. Develop technologies to contribute to protect food production and water systems, and save critical ecosystems. Bridging the "micro" and "macro" material-energy transfers within the global environment.
Chemical Energy Engineering	Hidehiro KAMIYA kamiya(at)cc.tuat.ac.jp *Retires in March 2024	
Chemical Information and Communication	Yi-Ting CHEN chen(at)go.tuat.ac.jp	Empirical studies on the morphology and semantics of linguistic constructions. In particular, corpus-based studies with a focus on the nonarbitrary form-meaning links of constructions from a Cognitive Linguistics perspective.
Environmental Bio-Engineering	Akihiko TERADA akte(at)cc.tuat.ac.jp (Collaborative faculty)	Development of bioreactor systems and materials for water/wastewater treatment by controlling complex microbial community in natural environments and control/prevention of biofilms for environmental/medical applications.
	Shohei RIYA sriya(at)cc.tuat.ac.jp	Development of recycling system for agricultural waste or sewage sludge. Waste treatment using anaerobic digestion, and residue processing into soil amendment. Study on nutrient or greenhouse gas dynamics in the soil amended with waste-derived material.
Optical and Electronic Materials Engineering	Hiromasa SHIMIZU h-shmz(at)cc.tuat.ac.jp	Research on integration of dissimilar materials including semiconductors, magnetic materials, macromolecules, biomaterials, highly efficient optical modulations, and highly sensitive sensors, for application to interdisciplinary activities.
	Satria Zulkarnaen BISRI satria-bisri(at)go.tuat.ac.jp	Development of optoelectronic and energy devices based on solution-processable quantum nanomaterials (e.g. colloidal quantum dots, 2D nanomaterials, carbon nanotubes, etc.) and iontronics (ion-controlled electronics), including photodetectors, transistors, solar cells, supercapacitors and light-emitting devices. Research on the emerging physical phenomena originated from precise assembly control of nanomaterials. Discovery of environmentally friendly and sustainable colloidal quantum dot compounds.

Department : Applied Physics and Chemical Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Atomic Processes	Atsushi HATAKEYAMA hatakeya(at)cc.tuat.ac.jp	Experimental studies in atomic, molecular and optical physics on the basis of laser spectroscopy, laser spin polarization, and laser cooling. The physics of atom-surface interactions and its applications to precision measurement and quantum manipulation.
Magnetism in Condensed Matter	Hiroko KATORI h-katori(at)cc.tuat.ac.jp	Research on phase transition phenomena in magnetic materials, such as geometrically frustrated systems, in which the spin, charge and lattice degrees of freedom are intertwined complexly. Search for novel physical properties and functions in these systems
Chemical Reaction Engineering	Chihiro FUSHIMI cfushimi(at)cc.tuat.ac.jp	Research and Development of reactors for pyrolysis, gasification or hydrothermal liquefaction. Development of thermal/biomass power plants that integrates with other renewable energy. Process development of biochemical production. Development of fluidized bed reactors for thermochemical reactions.
	Makoto SAKURAI sakuraim(at)cc.tuat.ac.jp	Research on the creation and design of the following new reaction field and reaction process. Development of high functional structured catalyst for application to the micro chemical process. Application of fine bubble process to the environmental field. Development of unsteady operation for high efficiency chemical process. Design of new high efficiency energy conversion process by thermochemical cycles.
Material Separation Engineering	Hideaki TOKUYAMA htoku(at)cc.tuat.ac.jp	Development of functional polymers and gels and process for metal separation, organic compound separation, drug delivery system, etc. Preparation of micro- or nanoparticles and porous materials.
	Hidenori OHASHI fr1057(at)go.tuat.ac.jp	Functional membrane development and systematic device design in energy and life-science fields based on the molecular transport understanding. (from lithium ion battery, protein refolding, to chemical grafting)
Process Systems Engineering	Yoshiyuki YAMASHITA yama_pse(at)cc.tuat.ac.jp *Retires in March 2025	Design and application of smart and dependable process control systems, process monitoring for connected industries, process simulators, and decision support for various process systems.
	Sanghong KIM sanghong(at)go.tuat.ac.jp	Development and applying process data analysis, process modeling, and process control technologies. The purpose is to realize anomaly detection, yield improvement, control performance improvement, etc. for a wide range of processes such as chemistry, semiconductors, and pharmaceuticals.
Organic Electronics	Toshihiko KAJI kaji-t(at)cc.tuat.ac.jp	Organic electronics and optics. Experimental research on organic electronic devices, such as solar cells, and on nanostructure/crystallinity control of organic thin films.
Quantum Functions	Yoshitaka MORISHITA morisita(at)cc.tuat.ac.jp *Retires in March 2024	Fabrication, characterization of high-functional resistive random access memory using porous alumina.
Quantum Optics	Kazuyuki MUROO muroo(at)cc.tuat.ac.jp	Study on quantum property of non-classical photon states, such as entangled multiphoton states, their interaction with matter, and quantum control of these states.

Department : Applied Physics and Chemical Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Quantum Electronics	Godai MIYAJI gmiyaji(at)cc.tuat.ac.jp	Experimental study on nonlinear optical interaction process between light and mater with intense femtosecond laser pulses and its application to material nano-processing technique.
Quantum Beams	Hiroki MINODA hminoda(at)cc.tuat.ac.jp	Development of transmission electron microscopy and its applications to biological specimens and functional materials in their actual environment.

Department : Mechanical Systems Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Fluid Mechanics	Masaharu KAMEDA kame(at)cc.tuat.ac.jp	Bubble dynamics, high-speed aerodynamics, and fluid measurements. Current research topics are (1) pressure-sensitive paint for unsteady aerodynamics, (2) fragmentation of vesicular magma in volcanic eruption, (3) supersonic air-inlets, and (4) mass transport by bubbling.
	Yoshiyuki TAGAWA tagawayo(at)cc.tuat.ac.jp	Main research field of Yoshiyuki Tagawa's lab is in multiphase flow / micro-fluidics. Current research topics are on supersonic microjets impacting on soft matters. Here we investigate the fundamental mechanism of generation of the microjets and their applications for medical devices / industrial processes. Also the dynamics of droplets are investigated.
Materials Engineering for Machinery	Tohru TAKAHASHI takahas(at)cc.tuat.ac.jp *Retires in March 2024	Research projects are under way about the microstructure, strength, deformation, performance and their interrelationship in metals, alloys and intermetallics. High temperature strength of TiAl-based intermetallics, thermo-mechanical behavior of NiTi-based shape memory alloys, and grain boundary sliding in Zn coincidence boundaries are experimentally investigated into their controlling mechanisms.
	Toshio OGASAWARA ogasat(at)cc.tuat.ac.jp	Experimental and analytical studies of advanced composite materials and composite structures for aerospace systems, automobiles, and robots. Development of novel composite materials such as carbon nanotube composites, ceramics/intermetallics composites, high temperature polymer matrix composites, ablator.
	Akinori YAMANAKA a-yamana(at)cc.tuat.ac.jp	Multi-scale simulation of microstructure evolution and elastoplastic deformation behavior in metallic materials (especially in steel) using phase-field method and crystal plasticity finite element analysis based on homogenization method and its experimental validation.
Strength of Materials	Satoshi TAKADA takada(at)go.tuat.ac.jp	Physics of granular materials and its application to powder technology. Analysis of response to external forces based on particle simulations and continuum modeling.
Elasto-Plasticity and Material Forming	Toshihiko KUWABARA kuwabara(at)cc.tuat.ac.jp *Retires in March 2025	Numerical simulation of material forming, constitutive modeling of metals based on multi-axial stress tests, development of experimental methods for evaluating the formability of metals, development of novel material forming technology, intellectualization of forming machines and dies.

Department : Mechanical Systems Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
	Keiichi NAKAMOTO nakamoto(at)cc.tuat.ac.jp	The research work is focused on the area of machine tool and machining technology to realize "Intelligent Shape Creation with True CAM (Computer Aided Manufacturing)". Our target is to develop effective manufacturing software regarding process planning and tool path generation in multi-axis control machining. In addition, we are working on various researches to machine the mold of optical elements with high efficiency and high precision.
Analysis of Mechanical Components	Yasuhisa ANDO y-ando(at)cc.tuat.ac.jp	Studies on micro/nano tribology and application of new functions to surfaces using micro fabrication technologies. Studies on applications and development of MEMS (microelectromechanical systems), such as 3D-microstages.
	Koji IKEDA ikedak(at)cc.tuat.ac.jp	Analysis, modeling, and evaluation of material degradation under contact, especially for the purpose of lower impact on environment. Target materials are lubricants derived from natural resource and polymers with self-lubrication, such as PVA-gel and palm-oil.
Vibration Analysis and Control	Takayoshi KAMADA kama(at)cc.tuat.ac.jp (Collaborative faculty)	Active vibration control, smart structure, health monitoring, earthquake resistance technology, base isolation and vibration control of building, vehicle control, elevator technology.
	Yuta KURASHINA kurashina(at)go.tuat.ac.jp	Our group is devising research on soft robotics using mechanical dynamics and soft matter. This includes research on hydrogel micro/nano devices and ultrasonic non-contact actuations for applications in drug delivery systems (development of drug release mechanisms), regenerative medicine (cellular tissue formation), and drug discovery modalities (design of drug carriers suitable for organs).
Thermal and Fluid Systems	Akira MURATA murata(at)cc.tuat.ac.jp	Heat and fluid flow related to gas turbines, Numerical simulation of turbulent heat transfer, Flow visualization, and Heat transport device utilizing phase change.
	Kaoru IWAMOTO iwamotok(at)cc.tuat.ac.jp	Efficient thermal-fluid control techniques for energy saving and environment impact mitigation will be developed. Efficient turbulence control techniques for drag reduction of airplanes, those for material engineering (efficient production of high-quality materials), those for bioengineering (effect of fluid pulsation) and those for chemical engineering (efficient production of hydrogen).
	Yuki UEDA uedayuki(at)cc.tuat.ac.jp	Engine and refrigerator powered by acoustic wave. We have investigated energy conversion, heat transfer, and mass transfer caused by thermoacoustic effects.

Department : Mechanical Systems Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
	Takuma HORI hori(at)go.tuat.ac.jp	Research on heat transfer: Heat and mass transfer in energy harvesting or storage devices, Thermal conduction in nanomaterials, Structure optimization, Coarse grained and multiscale simulations, Thermo-fluid dynamics in interfaces.
Simulation Engineering	Hiroshi MOURI h-mouri(at)cc.tuat.ac.jp *Retires in March 2024	Aiming to automatic driving, recognition technology of the surrounding circumstances using on-board sensors, state estimation techniques and the vehicle control technology have been studied, e.g. the localization technique based on the data of laser range finder, camera and satellite. In addition, investigation on vehicle dynamics control and the one on analysis of human drivers' error based on driving recorder data have been achieved.
	Pongsathorn RAKSINCHAROENSAK pong(at)cc.tuat.ac.jp	Research interests include the development of active vehicle control technologies with integrated sensing of human driver, vehicle motion and road surroundings for safety and security of motorized society, e.g. the safety devices for personal mobility, vehicle dynamics and control, and human-centered driver assistance systems.
	Takao MAEDA t-maeda(at)go.tuat.ac.jp	Our research interests are space exploration robotics and mechatronics, especially surface exploration robotics. Locomotion, autonomous algorithm, and integration of them are the main research topics. We also propose a new plan for future explorations. We develop new technologies required for future space exploration missions using simulation and experiment.
Precision Measurement	Wataru NATSU summer(at)cc.tuat.ac.jp (Collaborative faculty) *Retires in March 2025	The main research topics are: research and development on environmental-friendly production system for shape generation with ECM, EDM and polishing; phenomena elucidation and application technology for electrochemical machining; research and development on machining simulation technology; shape generation for Hard-to-machine materials with electrochemical and mechanical polishing; and research on micro deep-hole machining by EDM.
Control Systems	Yasutaka TAGAWA tagawa(at)cc.tuat.ac.jp *Retires in March 2025	Research is under way in developing novel devices for modeling and controlling of mechanical systems. Basic research and device development are performed for vibrational testing systems for the next generation, advanced motion simulator, and power assist systems for man-machine cooperative motion. Design method is studied for controlling systems based on transfer functions.
	Ryo ARIIZUMI	

Department : Mechanical Systems Engineering		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Manufacturing System Engineering	Hiroyuki SASAHARA sasahara(at)cc.tuat.ac.jp	Additive manufacturing. Physical simulation to predict the machining process. Development of a new machining/processing method which can give a functional additional value to the generated surface. New machining technology for energy saving and clean processing.
Precision Measurement	Itsuo HANASAKI hanasaki(at)cc.tuat.ac.jp	Cross-disciplinary approaches on the phenomena typically at micro/nano spatio-temporal scales with an emphasis on the theoretical aspects mainly based on the concepts of statistical mechanics and dynamical systems.
Algebraic Mechanical Engineering	Katsuyuki NAOI naoik(at)cc.tuat.ac.jp	Representation theory of infinite-dimensional Lie algebras and their q-analog
Geometric Mechanical Engineering	Nobutaka NAKAZONO nakazono(at)go.tuat.ac.jp	Study of discrete integrable systems. (Keyword: Painlevé equation, soliton equation, Toda lattice)
Intelligent Systems for Mechanical Engineering	Hiroyuki NISHIDA hnishida(at)cc.tuat.ac.jp	Research on magnetohydrodynamics, aerodynamics and flight dynamics of advanced space propulsions and reusable space vehicles. For example, research on control of high-energy plasma flow for advanced propulsion, development of flow control device and application of the flow control device to reusable space vehicle. Numerical simulation and experiment are conducted to address these objectives.
Mechanical Information and Communication	Takeshi SATO tsato(at)cc.tuat.ac.jp	Applied Linguistics, Second Language Acquisition, Educational Technology, Foreign Language Education.
	Jeffrey Matthew MOORE jmoore(at)go.tuat.ac.jp	Second language acquisition, sound symbolism.
Human Behavior Systems	Hideyuki TANAKA tanahide(at)cc.tuat.ac.jp	Basic research on perception and motor control mechanisms underlying human motor behaviors. Applied research based on the principle and theories of human behavior systems.
Human Motor Control	Hikaru YOKOYAMA h-yokoyama(at)go.tuat.ac.jp	Neuromuscular control of human movement, motor control, brain-machine interface, and rehabilitation engineering.

Department of Electrical Engineering and Computer Science		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Electronic System Engineering	Ya ZHANG zhangya(at)go.tuat.ac.jp	Fundamental and applied research on semiconductor quantum nanostructures and nanoelectromechanical systems. Development of the next-generation electronics, such as single electron transistors, quantum information processing devices, high-sensitivity terahertz sensors, etc.
Power Electronics	Mingcong DENG deng(at)cc.tuat.ac.jp	Nonlinear fault detection and nonlinear fault tolerant control system design using AI techniques, nonlinear control of smart material actuators and micro-hands.
Electronic Device Engineering	Jun-ichi SHIRAKASHI shrakash(at)cc.tuat.ac.jp	Novel nanofabrication techniques, single-electron transistors and atomic junctions. New computing architecture, Ising spin model, Ising spin computing and artificial synaptic devices. Quantum computing, noisy intermediate-scale quantum (NISQ), quantum annealing and quantum-classical hybrid algorithms.
	Wakana KUBO w-kubo(at)cc.tuat.ac.jp	Development of solar cells, optical devices, and functional materials based on light management technology realized by plasmonic metamaterials.
Integrated Functional Electronics	Tomo UENO tomoueno(at)cc.tuat.ac.jp	Development of Integrated Circuit based on novel device and process technology. Low temperature insulating film fabrication, OLED fabrication, electrical measurement, physical & chemical analysis.
Radio Communication System Engineering	Kenta UMEBAYASHI ume_k(at)cc.tuat.ac.jp	Wireless communication network, Signal processing and resource control for efficient and reliable wireless communication, Advanced signal processing for multiple antennas based communications, Cognitive radio techniques, Physical layer security, Nano-devise and Terahertz wireless communications.
	Takehito SUZUKI takehito(at)go.tuat.ac.jp	Terahertz antennas, Extreme materials in the terahertz waveband, Terahertz metamaterials, Extreme-sensitivity terahertz polarization measurements, ultrahigh-speed wireless communication in the terahertz waveband, Terahertz application systems.
Intelligent Systems	Kunihiro FUJIYOSHI fujiyosi(at)cc.tuat.ac.jp	Computer-Aided Design and Design-Automation of VLSI layout problem, using combinatorial algorithm and graph theory.
Electromagnetic Wave Engineering	Takuji ARIMA t-arima(at)cc.tuat.ac.jp	Computational electromagnetics, New materials for electromagnetic waves, Bio-electromagnetics.
Medical Information System Engineering	Akinobu SHIMIZU simiz(at)cc.tuat.ac.jp	Multidimensional Signal Processing. Medical Image Processing and Pattern Recognition based on Artificial Intelligence, Optimization Theory, and Mathematical Statistics. Computer-aided Diagnosis in Medical Imaging.
	Ken TAKIYAMA ken-taki(at)cc.tuat.ac.jp	Main themes are 1. Elucidation of neural mechanisms that relate to motor control and learning and 2. Proposal of efficient training to improve motor skill. Main techniques are neural network model and human behavioral experiments. We plan to utilize electroencephalograms and machine learning techniques.

Department of Electrical Engineering and Computer Science		
Specialty & Major Research Fields	Academic Advisor	Research Subject
Image Processing	Toshihisa TANAKA tanakat(at)cc.tuat.ac.jp	Biosignal informatics (brain-machine interfaces, neuroscience, cognitive science, biomedical information processing for medicine, and AI techniques based on signal processing, machine learning, and mathematical engineering). In addition, imaging audio/acoustics, communications, and biological applications.
	Kohei YATABE yatabe(at)go.tuat.ac.jp	Acoustic signal processing and its application to measurement, analysis and synthesis of sound.
Electronic Information and Communication	Takanobu TOBISHIMA tobit(at)cc.tuat.ac.jp	Relation between technologies / societies and plastic arts ; Questions of "Modernity" in arts ; Studies in images and design in modern life.
	Ichiro OKANO i-okano(at)cc.tuat.ac.jp	Socio-Informatics, Social Systems Theory, Communication Studies
Algorithmics	Keiichi KANEKO k1kaneko(at)cc.tuat.ac.jp	Algorithms for interconnection networks, parallel/distributed processing, dependable computing.
	Ryuhei MIYASHIRO r-miya(at)cc.tuat.ac.jp	Mathematical programming, discrete optimization, algorithm, modeling.
Systems Software	Mitaro NAMIKI namiki(at)cc.tuat.ac.jp (Collaborative faculty)	Systems software (operating systems, compiler, protocol stack, window system), embedded systems, high performance computer systems, distributed processing, network architecture, low power computer systems, information systems.
	Hiroshi YAMADA hiroshiy(at)cc.tuat.ac.jp (Collaborative faculty)	Operating systems, system virtualization, parallel and distributed systems, system software for dependable computing and cloud computing.
Artificial Intelligence	Katsuhide FUJITA katfuji(at)cc.tuat.ac.jp	Artificial intelligence related to autonomous agents, multi-agent systems, data mining, complex networks, knowledge management.
	Shun WATANABE shunwata(at)cc.tuat.ac.jp	Information theory, Communication Engineering Cryptography, Information security.
Computer System Engineering	Yu NAKAYAMA yu-nakayama(at)go.tuat.ac.jp	Mobile, IoT, and spatial information technologies for next generation information networks, applications, and schemes for utilizing them.
	Hiroe IWASAKI hiroe(at)go.tuat.ac.jp	Research and development of video processing architecture to realize AI processing and video encoding processing toward to location free for achieving the SDGs.
System Design	Takafumi SAITO txsaito(at)cc.tuat.ac.jp	Computer graphics, visualization, image/video processing, shape processing.

Department of Electrical Engineering and Computer Science		
Specialty & Major Research Fields	Academic Advisor	Research Subject
	Yuichi TANAKA ytnk(at)cc.tuat.ac.jp	Signal processing, machine learning, image processing and computer vision, biomedical information processing, and their applications for engineering and industry.
Biologically-inspired computing	Toshiyuki KONDO t_kondo(at)cc.tuat.ac.jp	Neurocomputing, evolutionary computation, cognitive robotics, cognitive interface design, brain-computer interface.
Image and vision computing	Ikuko SHIMIZU ikuko(at)cc.tuat.ac.jp	Computer vision, shape and appearance modeling, image recognition.
Computer networks	Nariyoshi YAMAI nyamai(at)cc.tuat.ac.jp	Research for administration, deployment, management, operation, and evaluation of large-scale distributed systems including the Internet, such as Internet architecture, network security, and so on.
	Hironori NAKAJO nakajo(at)cc.tuat.ac.jp	Processor micro-architecture, parallel processing, VLSI design, high performance computing, embedded computer.
Statistical classification and retrieval	Seiji HOTTA s-hotta(at)cc.tuat.ac.jp	Classification and clustering, invariances in recognition, information retrieval.
Human computer interaction	Kinya FUJITA kfujita(at)cc.tuat.ac.jp	Human-centered smart interface, telework, online communication, virtual reality.
Natural Language Information Science	Kazuko SHINOHARA k-shino(at)cc.tuat.ac.jp *Retires in March 2024	Cognitive linguistics, Conceptual Metaphor Theory, Spatial cognition and language.
	Ryoko UNO ryokouno(at)cc.tuat.ac.jp	Grammatical analysis and constructive approach to explore the cognitive basis of grammar
Mathematical Informatics	Nobuo HARA nhara(at)cc.tuat.ac.jp	Algebraic geometry and commutative algebra in positive characteristic. In particular, study of algebraic varieties and their singularities via the Frobenius morphism.
	Mikio MURATA mmurata(at)cc.tuat.ac.jp	Discretization and ultradiscretization of differential equations, Cellular automaton, Integrable systems and Painleve equations.

Collaborative Study Fields of Graduate School of Engineering		
The following academic study fields aim to activate collaborative study with external research institutes that are celebrated for their excellent research achievements. Note: Those who wish to study in any of the collaborative fields should obtain prior guidance from Chair of each department.		
Department : Biotechnology and Life Science		
Speciality&Major Research Fields	Academic Advisor	Research Subject
Nanotechnology-Based Cell Engineering (Cooperation Program with National Institute of Advanced Industrial Science and Technology (AIST))	Chikashi NAKAMURA chikashi-nakamura(at)aist.go.jp Hyonchol KIM kim-hc(at)aist.go.jp Ayana YAMAGISHI a-yamagishi(at)aist.go.jp	We develop a new biotechnology, “nanotechnology-based cell engineering”, by using nano/micro-device and nano-probe technologies to reveal functions of cancer cells, immune cells and iPS cells. The findings are applied for practical applications, in next-era cell therapies and diagnostics, e. g. genome editing therapy and liquid biopsy.
Department : Applied Physics and Chemical Engineering		
Speciality&Major Research Fields	Academic Advisor	Research Subject
Non-equilibrium Process Engineering (Cooperation Program with Mitsubishi Chemical Holdings Corporation)	Hiroyuki KAKIUCHI Naoki NOGUCHI Hideto HIDAKA	Most of industrial processing of chemical products is in continuous operation. On the other hand, non-equilibrium process operation is emerged recently. We study the theory and practical methods for unsteady and non-equilibrium processing systems.
Department : Mechanical Systems Engineering		
Speciality&Major Research Fields	Academic Advisor	Research Subject
Transport Systems Engineering (Cooperation Program with Railway Technical Research Institute)	Kazuyuki HANDA Hajime TAKAMI	Education and research are carried out, focusing on advanced analysis and design methods to develop higher-speed train systems for future generation: car body design applicable to higher-speed, technologies for lighter car body design and safety improvement. Social needs and problems for future transport systems are analyzed and evaluated.

Aero Space Engineering (Cooperation Program with National Institute of Japan Aerospace Exploration Agency)	Takashi YAMANE Takashi AOYAMA Yasushi WATANABE Yoshiyasu HIRANO Yoji OKITA	Aircraft propulsion engineering, high-speed aerodynamics, structure/materials, aerodynamics/aeroacoustics and rotorcraft concerned with the developments of airplane and spacecraft are studied. In aircraft propulsion engineering, simulation technology of engine system for airplane, heat resistance and cooling technology of high temperature turbine are studied. In the high-speed aerodynamics, flow control at ultrasonic and hypersonic speed on engine intake and hypersonic boundary layer are studied. In the aerodynamics/aeroacoustics and rotorcraft, unsteady CFD on aircraft, non-linear sound propagation/transmission on rockets, and high-speed rotorcraft are studied. In the structure and materials, damage mechanisms of composite structures, and optimization of airframe structures are studied.
Traffic Safety Engineering (Cooperation Program with National Traffic Safety and Environment Laboratory, National Agency for Automobile and Land Transport Technology)	Michiaki SEKINE	The research and education for the development of advanced welfare society is promoted by applying the fundamental studies on symbiotic science and technology. Especially, the research and the education are studied at cooperated laboratories where the social environment foundations of safety in road traffic and social environment are guaranteed, verified and examined.
Human-Robot Cooperation Engineering (Cooperation Program with National Institute of Advanced Industrial Science and Technology(AIST))	Ko AYUSAWA Natsuki YAMANOBE Ryusuke SAGAWA	Research on cooperation between humans and robots by modeling of human behavior, motion retargeting for robots, and motion generation based on machine learning to realize collaboration and communication with robots.
Automobile prevention safe engineering (Cooperation Program with Japan Automobile Research Institute)	Nobuyuki UCHIDA Hisashi IMANAGA	Causation analysis of traffic accidents is a fundamental part of active safety research. Particularly, understanding of driver behavior during pre-crash period is important for developing preventive safety measures or Advanced Driver Assistance Systems (ADAS). Critical events captured by driving data recorder ("DORA-RECO") will be analyzed for the purpose. Instrumented vehicle experiments which reproduce typical pre-crash scenarios will be conducted for developing preventive safety measures.
Department: Electrical Engineering and Computer Science		
Speciality&Major Research Fields	Academic Advisor	Research Subject
Advanced Electronic Information System Technology (Cooperation Program with Central Research Laboratory of Hitachi, Ltd)	Masahiko ANDO LI Yongun	Optoelectronic Devices, Nanophotonics, Bioinformatics.

Information-Communication Engineering (Cooperation Program with National Institute of Information and Communications Technology)	Hiroyuki TSUJI Soichi WATANABE Nobumitsu HIROSE	Education and research for fundamental technologies related with wireless communication HF devices, communication systems, communication environment and electromagnetic wave measurement technologies which support the development of the next-generation information-communication application fields and their key technologies.
Biomedical Electronics (Cooperation Program with RIKEN)	Hideo YOKOTA Keiichi KITAJO Shin YOSHIZAWA Masanobu MURAYAMA	Electronics in biomedical engineering related to measurement, signal processing, interfacing, imaging, simulation, and mechatronics.
Fundamentals of advanced intelligence (Cooperation Program with RIKEN)	Mihoko OTAKE Qibin ZHAO Hiromi ARAI	Education and research for fundamental and applied artificial intelligence related to discrete optimization, search and parallel computing, tenor learning, approximate Bayesian inference, cognitive behavioral assistive technology.
Urban Space Informatics (Cooperation Program with National Institute of Advanced Industrial Science and Technology(AIST))	Akio SASHIMA	Analysis of Sensory Data, Machine Learning, Mathematical Analysis of Social Simulation, Service Design and Social Implementation. Education and research are carried out for "Urban Space Informatics," the aim of which is to realize utility and safety in urban space and humans living there. The approach is 1) to analyze and understand sensory data of urban space and humans by machine learning with target model, and 2) to explore possible worlds by social simulations with real sensory data.
Intelligent Data Engineering (Cooperation Program with Central Research Laboratory of Hitachi, Ltd)	Toshio MORIYA	Research Subject: Artificial intelligence technologies that process and leverage Big-data collected in Internet-of-Things (IoT) environments.

If you choose your potential supervisor following lists, you must contact Admissions Section.

Admissions Section, Koganei Student Support Office, Tokyo University of Agriculture and Technology
2-24-16 Naka-cho, Koganei-shi, Tokyo 184-8588
TEL: +81-42-388-7014
MAIL: tnyushi@cc.tuat.ac.jp
Office hour: 8:30am-12:00pm, 1pm-5:15pm

Biotechnology and Life Science
Yuji HATAKEYAMA

Biomedical Engineering
Yuichi ASAI

Applied Chemistry
Tatsuo NOMA
Ri NIN
Lukas RIESER

Applied Physics and Chemical Engineering
Yi-Ting CHEN

Mechanical Systems Engineering
Takeshi SATO
Jeffrey Matthew MOORE

Electronic Engineering and Computer Science
Ryoko UNO
Takanobu TOBISHIMA
Ichiro OKANO

For { October 2023 / April 2024 } Enrollment
(Circle an applicable item)

Identification Number.
* MC —

*do not write

Tokyo University of Agriculture and Technology Graduate School of Engineering
(Master Course)

志 願 票

Admission Voucher

I am applying for an exemption from the written academic achievement test				☐Yes ☐No	If Yes, note that the application deadline will be earlier.	
Preferred Department		Preferred Major Research Field *Check Note	First choice		Preferred Supervisor (Signature)	
			Second choice		Preferred Supervisor (Signature)	
Furigana Name			sex	Domicile (or Nationality)		
Date of Birth	(day) (month) (year)		M /F		(Foreign students to provide nationality)	
Current Address	(Postal Code —) (C/O)					
	TEL: ( ) — Home/Cell Phone ( ) E-Mail:					
Contact Address	(Postal Code —) (C/O)					
	TEL: ( ) — Home/Cell Phone ( )					

Resume		Month / Year	Remarks
	Academic Record (Please provide details from high school or special college)		
	Work Experience (If you have any academic record as a researcher, in a university, etc., please state it here.)		
	Remarks (Awards and penalties, or the period of school leave, etc.)		

Note 1: DO NOT fill in section marked *.
Note 2: Fill in only the Department and Supervisors indicated in the “Application Forms and Guide” for Master Course.
Note 3: Fill in only if you have second choice.
Note 4: USE black or blue pen only.
Note 5: Admission Voucher without the signature or the seal of your preferred supervisor will NOT be accepted..
Note 6: Read 8. Important Notes at page 7 carefully.

SAMPLE

Tokyo University of Agriculture and Technology
Graduate School of Engineering
(Master Course)

{ For October 2023 Enrollment
For April 2024 Enrollment }

(Circle an applicable item)

写　真　票

Photograph Voucher

Affix Photo Here.

Photo must be of top part of body, facing forward, without headwear, and taken within the last 3 months.

(4cm x 3cm)

Preferred Department	
Identification's No.	* MC —
Name	

Record of Attendance*	Attended / Absent

Note 1: DO NOT fill in section marked *.

DO NOT SEPARATE.

Tokyo University of Agriculture and Technology
Graduate School of Engineering
(Master Course)

受　験　票

Examination Voucher

{ For October 2023 Enrollment
For April 2024 Enrollment }

(Circle an applicable item)

Preferred Department	
Identification's No.	* MC —
Name	

(Remarks)

1. This voucher must be placed on the desk during the academic achievement test in full view of the test supervisor.
2. Keep this voucher safe, as it will be required on the day of announcement of successful applicants.
3. DO NOT fill in section marked *.

SAMPLE

志　望　理　由　書

Statement of Purpose
(Also fill in English test scores)

_____ University (graduated / expected to graduate)

_____ Faculty

Name _____

Preferred Department		Examinee's No.	* MC　—
Preferred Supervisor			
Purpose(400-500words)			
Score of English (Circle an applicable item)	TOEIC- L & R・TOEIC-IP	score	
	TOEFL-iBT・TOEFL-ITP		

DO NOT fill in sections marked *.
The statement may be made with a word processor using the same format.

SAMPLE

Identification Number.
* MC —

Date

個別入学資格審査申請書
Qualification Screening Application Form

furigana
Name signature

I will apply for Master Course (Department:) in Tokyo University of Agriculture and Technology Graduate School of Engineering and apply for the prescribed documents for Qualification Screening Application.

To: Dean of the Graduate School of Engineering, Tokyo University of Agriculture and Technology

SAMPLE

DO NOT fill in sections marked *.

History record
履歴調書

＊only for “The Screening of Admission Qualification(9)” applicants

Name				**Affix Photo Here.** Photo must be of top part of body, facing forward, without headwear, and taken within the last 3 months. (4cm x 3cm)
Sex	M/F	Domicile (or Nationality)		
Date of Birth	(day) (month) (year)			
Current Address				
	TEL: E-Mail:	Home/Cell Phone		
Final Education	(month) (year) Graduate / Withdrawal			

Learning, Employment ,Research , Social history	**Period**	**Details**
	(month) (year)	
	(month) (year)	
	(month) (year)	
	(month) (year)	

SAMPLE

Identification Number.
* MC —

３年次特別入試事前審査書
The Pre-Screening of Admission Qualifications Application Form

Affix Photo Here.
Photo must be of top part of body, facing forward, without headwear, and taken within the last 3 months.
(4cm x 3cm)

Current Address 〒 -

TEL
Home/Cell Phone
E-Mail

furigana
Name signature
Date of Birth (day) (month) (year)

I will apply for Master Course (Department:) in Tokyo University of Agriculture and Technology Graduate School of Engineering and apply for The Pre-Screening of Admission Qualifications (10); Special Selection for Third-Year Undergraduates (only for April 2019 enrollment)

To: Dean of the Graduate School of Engineering, Tokyo University of Agriculture and Technology

DO NOT fill in sections marked *.

SAMPLE

入学検定料納付確認票

Confirmation Voucher of Entrance Examination Fee Payment

Preferred Department	
Identification Number	* MC —

(Preferred Department must be filled in by the applicant.)

Affix the Certificate of Transfer Payment Receipt [for Submission to the University] here.

(Note)

1. Invalid without dated stamp of the post office or Japan Post Bank.
2. Applicant's name and address must be filled in where designated on the Certificate of Transfer Payment Receipt.
3. Keep the *Payment Billing and Receipt Slip* safe and DO NOT affix it here.
4. Entrance examination fee is not refundable under any circumstances.

SAMPLE

Name & Address Voucher

- Fill in your Preferred department and division, postal code, address and name in each designated columns.
- Ensure your name and addresses are accurately provided. Notify the Admissions Section immediately if any changes take place after the submission of your application.
- DO NOT fill in the section marked *.

宛名票

Name & Address Voucher

Preferred Department	

For notice of acceptance.

□□□-□□□□

Address

Mr./Ms

Examinee's No.	* MC —

Tear along here.

For mailing of entrance procedure information.

□□□-□□□□

Address

Mr./Ms

Examinee's No.	* MC —

Spare copy.

□□□-□□□□

Address

Mr./Ms

Examinee's No.	* MC —

SAMPLE