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2025/03/17

# 2026

# **Department of Chemical System Engineering**

# Graduate School of Engineering The University of Tokyo

**Guide to Entrance Examination** 

**Master's Program** 

**Doctoral Program** 

If you have any questions about this guide, please contact:

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#### • Education and research objectives of the Department of Chemical System Engineering

Our department aims to produce chemical technologists and researchers through the methodology of chemical system engineering that emphasizes the design of factors to analyze and control chemical phenomena ranging from the molecular level to a global scale. At the same time, our department aims to contribute to a sustainable society through problem-solving research concerning the environment, energy, safety and security, and medicine. These are the educational and research objectives of our department.

- Website of the department: https://www.chemsys.t.u-tokyo.ac.jp/?lang=en
- Information about the entrance examinations including problems in the past: https://www.chemsys.t.u-tokyo.ac.jp/curriculum/graduate/admission/?lang=en
- Briefing sessions for the entrance examination: The details of the briefing sessions for the entrance exam will be announced on the above department website.

#### To enroll in the Graduate School of Engineering, applicants should complete the Entrance Application Form via Admission Application Form Creator posted on the website of Application Guidelines for Graduate School of Engineering.

Note: Please check the latest version of the guide posted on the department website.

## Information about the 2026 Entrance Examinations of Department of Chemical System Engineering, Graduate School of Engineering, The University of Tokyo

Please check the website below for the latest information. If there are any changes to the Guidelines for Applicants for Graduate School of Engineering or the Guide to Entrance Examinations for the Department of Chemical System Engineering, the information will be posted on the website. Website of Graduate School of Engineering:

 https://www.tu-tokyo.ac.jp/en/soe/admission/general

 Website of the Department of Chemical System Engineering:

 https://www.chemsys.tu-tokyo.ac.jp/curriculum/graduate/admission/?lang=en

#### 1. Application Period, Examination Dates, etc.

(Also refer to the Guidelines for Applicants for Graduate School of Engineering)

#### Master's Program (Regular Admission in Oct. 2025/Apr. 2026, and Special Selection for Foreign Students)

Application Period <sup>1)</sup>	May 30 to June 5, 2025
Foreign Language	TOEFL Score Submission <sup>2)</sup>
Examination Dates <sup>3)</sup>	August 25 to August 26, 2025 <sup>4</sup> )
Announcement of Successful Applicants <sup>5)</sup>	September 5, 2025

#### **Doctoral Program**

Doctoral 110g	2			
		Application Schedule A		Application Schedule B
		Admission in Apr. 2026	Admission in Apr. 2026 Admission in Oct. 2025	
Application Period <sup>1)</sup>		May 30 to June 5, 2025		November 28 to December 4, 2025
Foreign Language		TOEFL Score Submission <sup>2)</sup>		
<b>D</b>	Primary	August 25 to August 27, 2025 <sup>4</sup> )		February 4, 2026 <sup>4)</sup>
Examination Dates	Secondary	February 4, 2026 <sup>6)</sup>	Conducted at the same time with the primary examination	Conducted at the same time with the primary examination
Announcement of Successful Applicants <sup>5)</sup>		February 12, 2026 (Primary: September 5, 2025)	September 5, 2025	February 12, 2026

1) The application form and other required documents should be prepared using the Web Application System and uploaded online.

2) See page 7 for submission of official TOEFL scores.

- 3) Prior to the examination dates, document screening will be conducted based on the documents enclosed with the application form. Applicants will be notified of acceptance or rejection by e-mail when the examination admission card is issued in early July.
- 4) Refer to the "Examination Schedule" (page 10).
- 5) The examination numbers of successful applicants will be posted on the website of Graduate School of Engineering.
- 6) Details will be notified in due course. For those who have already obtained master's degree or professional degrees at the time of application or who are expected to receive master's degree by September 30, 2025, the secondary examination will be conducted at the same time with the primary one.

#### 2. Examination Location

The examination will be held at the Hongo Campus, The University of Tokyo. Please refer to the "Campus Map for Examination" (page 11).

- (1) The examination rooms for the subjects to be taken by each applicant will be notified when the examination admission card is issued. Please also refer to the department website.
- (2) Examinees are required to enter the designated examination room or waiting room at least 20 minutes before the start of the examination. If examinees are late to the examination, report immediately to the proctor.
- (3) Examinees who are less than 30 minutes late for the start of each examination will be allowed to take the examination. Examinees who are late for the start of the oral examination will not be allowed to take the examination.

#### 3. Items to Bring

- (1) <u>Items that need to be brought</u>: Examination admission card; black pencil (or mechanical pencil); eraser.
- (2) <u>Items that may be brought</u>: A calculator capable of performing exponential and logarithmic calculations (mobile phones including smart phones are not permitted for use as a calculator); pencil sharpeners (not desk-top type); watches (with timekeeping functions only).
- (3) Mobile phones should be turned off before entering the examination room and placed in a bag or purse. It is not allowed to use the mobile phone as a watch or calculator.
- (4) Other instructions may be given separately to applicants for the doctoral program.

#### 4. Notes on the examination

- (1) Once the examination has begun, examinees will not be allowed to leave the room even if they have completed all the answers or would like to forfeit the examination.
- (2) The examination admission card should be always placed on the desk during the examination.
- (3) The answer sheets and problem booklets must not be taken home.

#### 5. Other Notes

- (1) Any changes to e-mail address or current address after applications should be notified immediately.
- (2) Successful applicants will be posted on the website of the Graduate School of Engineering. Inquiries about examination status by phone or e-mail will not be responded.
- (3) The laboratory assignments for successful applicants will be posted on the website and bulletin board of the Department of Chemical System Engineering in the Engineering Building No. 5. Applicants will also be contacted by e-mail. Inquiries by phone will not be responded.
- (4) Successful applicants should contact the supervisor of the laboratory to which they are assigned.

## Master's Program, Admission Application Guide

- 1. Applicants should be qualified to enter the master's program, regardless of their major or year of qualification.
- 2. Applicants should select the laboratory of their choice from the list of the laboratories.
- 3. Applicants should fill in the <u>Questionnaire Sheet</u> and <u>Reasons for Application and Career Plan</u> downloaded from the department website and submit them with the application form. Applicants should fill in the order of preference of laboratories in the <u>Questionnaire Sheet</u>, <u>contact the laboratory of your</u> <u>first choice, and receive detailed guidance from the supervisor in advance</u>. The laboratory preference has no bearing on the decision of acceptance or rejection. Successful applicants will be notified of their laboratory assignment after the announcement of acceptance.
- 4. Document screening will be conducted based on the documents enclosed with the application form to comprehensively judge the applicant's basic academic skills and suitability for the Department of Chemical System Engineering. Applicants will be notified of acceptance or rejection by e-mail when the examination admission card is issued in early July.
- 5. Foreign applicants who have graduated or are expected to graduate from a foreign university may apply for the Special Selection for Foreign Students. They should contact the desired supervisor in advance to obtain permission to take the Special Selection. The examination subjects for the Special Selection are the same as those for general admission. Successful applicants for the Special Selection will be assigned to the laboratory of their desired supervisor.
- 6. Only those who have passed the document screening can take the following examination subjects. Note that failure to take all of the following subjects will result in failure of the examination.
- 7. The pass/fail decision will be made by considering the results of the following subjects comprehensively.

#### A. Foreign Languages (English)

<u>The applicant should take TOEFL iBT/TOEFL iBT Home Edition.</u> TOEFL scores cannot be replaced with any other foreign language (English) examination scores. Details of official TOEFL score submission are provided on page 7, "Notes regarding Submission of Official TOEFL Scores" and by the "Notice regarding Foreign Language (English) Examinations in 2026 Graduate School of Engineering, The University of Tokyo Entrance Examinations (How to submit TOEFL score)", which can be downloaded from the website of Graduate School of Engineering.

#### **B.** Written Examination

Examination Subject	Remarks
<ul> <li>Major Subjects</li> <li>Physical Chemistry (2 problems) (Thermodynamics, Chemical Kinetics, Quantum Chemistry, etc.)</li> <li>Inorganic Chemistry (1 problem)</li> <li>Chemical Engineering (2 problems) (Mass and Heat Transfer, Reaction Engineering, Unit Operations, Process Systems Engineering, etc.)</li> </ul>	Select and answer 3 problems from a total of 5 problems listed on the left. Please refer to notes below
ScoringMajor Subjects450 points possibleForeign Language (English)120 points possible	

#### NOTES:

If you would like the problem booklet in English, please fill in a circle in the designated box on the Questionnaire Sheet.

#### C. Oral Examination

You will be asked about reasons for application, career plan, and the research you wish to pursue in the master's program. Basic academic skills and suitability for the Department of Chemical System Engineering will also be judged. The total examination time will be about 10 minutes. Details will be provided when the examination admission card is issued.

# **Doctoral Program, Admission Application Guide**

- 1. Applicants should be qualified to enter the doctoral program, regardless of their major or year of qualification.
- 2. Applicants should <u>contact the laboratory of your choice and receive detailed guidance from the supervisor in advance</u>.
- 3. Applicants should fill in their desired laboratory on the <u>Questionnaire Sheet</u> downloaded from the department website and submit it with the application form.
- 4. Examination subjects are listed below. For applicants who have completed or are expected to complete the master's course at the University of Tokyo, only the oral examination is conducted in the primary examination.
- 5. The pass/fail decision will be made by considering the results of the following subjects comprehensively.

#### I. Primary Examination

#### A. Foreign Languages (English)

<u>The applicant should take TOEFL iBT/TOEFL iBT Home Edition</u>. TOEFL scores cannot be replaced with any other foreign language (English) examination scores. Details of official TOEFL score submission are provided on page 7, "Notes regarding Submission of Official TOEFL Scores" and by the "Notice regarding Foreign Language (English) Examinations in 2026 Graduate School of Engineering, The University of Tokyo Entrance Examinations (How to submit TOEFL score)", which can be downloaded from the website of Graduate School of Engineering.

#### **B.** Written Examination

Examination	Remarks	
<ul> <li>Specialized Sciences</li> <li>Examination on basis subjects related to chemical system engineering (Up to 2 problems from the Major Subjects of the master's program examination. The number of problems to be answered and subjects should be as directed by the desired supervisor)</li> <li>Examination about your field of expertise</li> </ul>		Please refer to notes below
Scoring Specialized Sciences Foreign Language (English)	450 points possible 120 points possible	

#### NOTES:

If you would like the problem booklet in English, please fill in a circle in the designated box on the Questionnaire Sheet.

#### C. Oral Examination

Applicants will make a 10-minute presentation on their past research results and future research plans, followed by a 10-minute question-and-answer session and a comprehensive examination. Details will be provided when the examination admission card is issued.

#### **II**. Secondary Examination

Applicants who successfully pass the primary examination will be required to take the second examination regarding their master's thesis. Details will be provided later.

## Notes regarding Submission of Official TOEFL Scores

Details of official TOEFL score submission should be checked in the "Notice regarding Foreign Language (English) Examinations in 2026 Graduate School of Engineering, The University of Tokyo Entrance Examinations (How to submit TOEFL score)", which can be downloaded from the website of Graduate School of Engineering.

https://www.t.u-tokyo.ac.jp/en/soe/admission/general-guideline

The deadlines (in JST) for submitting the score report in the Department of Chemical System Engineering are listed below.

		Deadline for submitting the score report	
Master's program		August 6, 2025 (Wed)	
Doctoral Program	Application Schedule A	August 6, 2025 (Wed)	
	Application Schedule B	January 9, 2026 (Fri)	

Be sure to request to transmit the official score report to the destination shown below when registering for the TOEFL test. Applicants who already have the score and plan to submit it should also request to transmit the official score report to the destination shown below.

DI(Designated Institution) code:	8596
Department code:	99

# **Research Laboratories**

### [Recruiting]

Master's Program: 28 individuals

The number of students in the master's program per research laboratory is in principle 1 to 5. (This does not apply to Institute of Space and Astronautical Science)

Doctoral Program: 13 individuals

Laboratories	Supervisors	QR code
YAMADA-KITADA LAB.	Atsuo YAMADA, Professor Atsushi KITADA, Associate Professor KO Seongjae, Lecturer	
SAKAI-NISHIKAWA LAB.	Yasuyuki SAKAI, Professor Masaki NISHIKAWA, Associate Professor	
TAKANABE-OBATA-KISHIMOTO LAB.	Kazuhiro TAKANABE, Professor Masao KATAYAMA, Associate Professor (Environmental Science Center) Keisuke OBATA, Lecturer Fuminao KISHIMOTO, Lecturer	
NAKAYAMA LAB.	Akira NAKAYAMA, Professor	
SUGIYAMA-BADR LAB.	Hirokazu SUGIYAMA, Professor Sara BADR, Associate Professor	
TUNG LAB.	Vincent TUNG, Professor	
ITO-INAGAKI LAB.	Taichi ITO, Professor Natsuko INAGAKI, Associate Professor	
WAKIHARA LAB. Institute of Engineering Innovation	Toru WAKIHARA, Professor	
OHTA LAB. Institute of Engineering Innovation	Seiichi OHTA, Associate Professor	
MOGI LAB. Environment, Health and Safety Office	Toshio MOGI, Professor	

OGURA LAB. Institute of Industrial Science <sup>1)</sup>	Masaru OGURA, Professor	
SUGIHARA LAB. Institute of Industrial Science <sup>1)</sup>	Kaori SUGIHARA, Associate Professor	
TSUJI LAB. Environmental Science Center	Yoshiko TSUJI, Professor	
KIKUCHI LAB. Institute for Future Initiatives	Yasunori KIKUCHI, Professor	
HABU LAB. Institute of Space and Astronautical Science <sup>2)</sup>	Hiroto HABU, Professor	

#### [Locations of Research Laboratories]

All research laboratories except those marked with 1) and 2) are located on the Hongo Campus.Hongo Campus7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656, JAPAN

1) Institute of Industrial Science

4-6-1, Komaba, Meguro-ku, Tokyo 153-8505, JAPAN

 Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency (JAXA) 3-1-1 Yoshinodai, Chuo-ku, Sagamihara-shi, Kanagawa-ken 252-5210, JAPAN

#### [Contact]

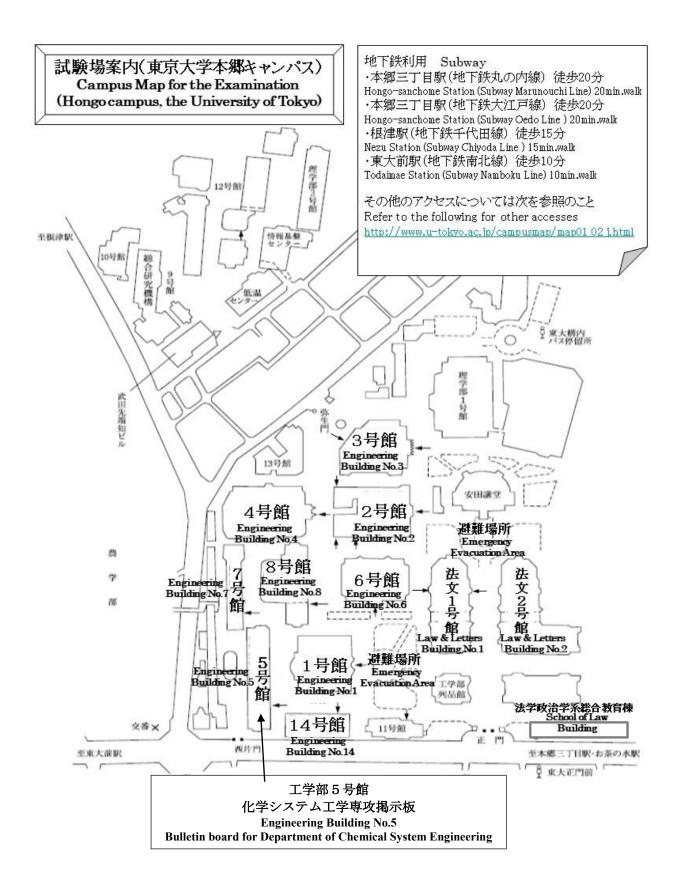
If you have any questions about this guide, please contact:

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# **Examination Schedule**

Program	Subject		Date	Notes
	Foreign Language (English)		Submit TOEFL score by August 6 (Wed).	• See page 7
Masters' Program		tten Examination Major Subjects)	August 25 (Mon) 13:00 to 15:30 (JST)	
	Or	al Examination	August 26 (Tue) from 9:00 (JST)	• Details will be provided when the examination admission card is issued.
		Foreign Language (English)	Submit TOEFL score by August 6 (Wed).	• See page 7
Doctoral Program (Application Schedule A)	Primary <sup>1)</sup>	imary <sup>1)</sup> Written Examination August (Specialized Sciences) 13:00 to		• Follow the instructions of the desired supervisor
		Oral Examination	August 27 (Wed) from 9:00 (JST)	• Details will be provided when the examination admission card is issued.
	Secondary		February 4 (Wed), 2026	• Conduct at the same time with the primary examination for admission in Oct. 2025.
		Foreign Language (English)	Score submission by January 9 (Fri), 2026	• Submit TOEFL score
Doctoral Program (Application Schedule B)	Primary <sup>1)</sup>	Written Examination (Specialized Sciences)	February 4 (Wed), 2026	• Details will be provided when the examination admission card is issued.
		Oral Examination	February 4 (Wed), 2026	• Details will be provided when the examination admission card is issued.
	Secondary		Conduct at the same time with the primary examination	

1) For applicants who have completed or are expected to complete the master's course at the University of Tokyo, only the oral examination is conducted in the primary examination.



# Be sure to submit Questionnaire Sheet downloaded from the department website with your application form

# **Questionnaire Sheet** (<u>Sample</u>)

#### Department of Chemical System Engineering, Graduate School of Engineering, The University of Tokyo

Full Name		*Examinee ID Number	
Graduation University	University: Faculty and/or Department:		
Contact Information	Address: Phone number: E-mail address:		

\*Do not fill in

#### Order of preference of laboratories (Master's program)

- Provide your numerical order of preference in the boxes to the right of each laboratory.
- Make sure to fill in the boxes all up to the 15th choice.
- The laboratory preference has no bearing on the decision of acceptance or rejection. Successful applicants will be notified of their laboratory assignment after the announcement of acceptance.
- Contact the supervisor of the laboratory of your first choice in advance, and fill in a circle in the box on the right.


#### Laboratory of your choice (Doctoral program)

- Fill in the name of the desired laboratory.
- Contact the supervisor of the laboratory of your choice in advance, and fill in a circle in the box on the right.

Name of Laboratory		
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Fill in a circle in the box on the right if you would like the English version	of the
major subjects or specialized sciences examinations.	

Applicants for the master's program only: Be sure to submit "Reasons for Application and Career Plan (about 400 English words)" on one A4 sheet downloaded from the department website with your application form. The contents could be used in the oral examination. The use of generative AIs such as Chat GPT is forbidden.

# **Reasons for Application and Career Plan Sheet (Sample)**

Department of Chemical System Engineering, Graduate School of Engineering, The University of Tokyo

Full Name		*Examinee ID Number	
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\*Do not fill in