Admission Guide for Entry in Academic Year 2017

Department of Information and Communication Engineering

Graduate School of Information Science and Technology
The University of Tokyo

Master's Program

Doctoral Program

Contact [Department Admission Office] Department Office of Electrical Engineering and Information Systems

Address: Faculty of Engineering Building #2, 4th Floor, 7-3-1 Hongo Bunkyo-ku, Tokyo 113-8656, Japan

Phone: 03-5841-6712

Department Team (Information and Communication Engineering), Graduate School of Engineering / Information Science and Technology Academic Affairs Support Group, The University of Tokyo

> Visit our department's admission page through the graduate school's home page:
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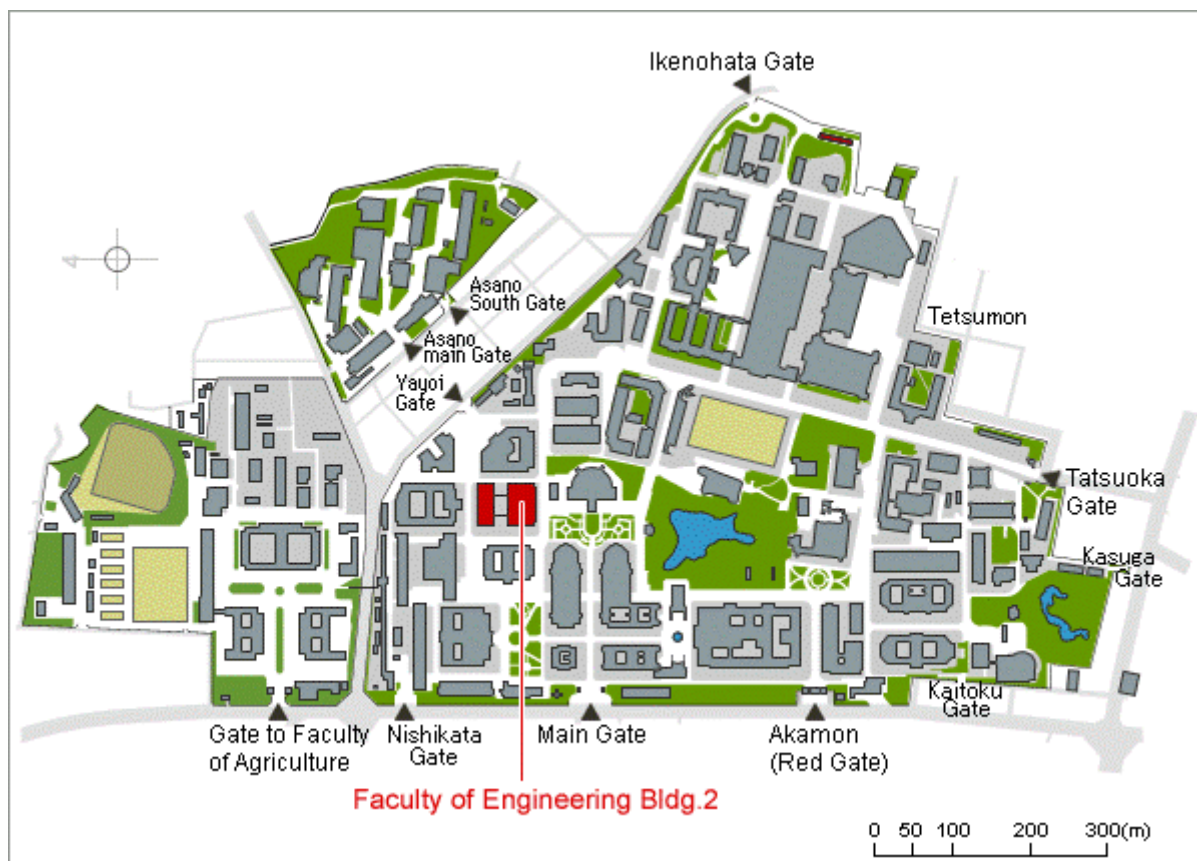> http://www.i.u-tokyo.ac.jp/index_e.shtml
>
> (click "Information and Communication Engineering" – "Admission")

Note: This guide should be read together with the graduate school's admission guide: "2017 Admission Guide: {Master's / Doctoral} Program, Graduate School of Information Science and Technology, The University of Tokyo."

Map of Examination Venue
The University of Tokyo, Hongo Campus
(7-3-1 Hongo Bunkyo-ku, Tokyo 113-8656)

Department of Information and Communication Engineering

Graduate School of Information Science and Technology

Faculty of Engineering Bldg.2

Toei Subways and Tokyo Metro:

    Hongo-sanchome (Marunouchi Line M21 or Oedo Line E08), Nezu (Chiyoda Line C14),

    Todai Mae (Namboku Line N12), or Kasuga (Mita Line I12 or Oedo Line E07)

Toei Bus:

    "Todai Seimon Mae" (東大正門前) on route 東 43 or 茶 51; or "Todai Konai" (東大構内) on route 学 01 or 学 07

Objectives of the Department

The mission of Department of Information and Communication Engineering is to innovate and establish key principles and technologies in computing, communication, and human-computer interaction that empower and shape the future of our increasingly connected and computerized society, in a manner that harmonizes with human being. To this end, we offer education in master's and doctoral programs to train students enthusiastically pursuing the field, with the hope to make a significant contribution to the society's better future and to play leading roles in the next generation, based on their solid understanding of both information and communication technologies and our information society.

Keywords: processor architecture; programming languages; operating systems; high performance computing; databases; big data processing; cloud computing; information security; privacy protection; communication theory; signal processing; information network; mobile communication systems; ubiquitous computing; sensor networks; intelligent transportation systems; geographic information processing; WWW and SNS analysis; natural language processing; machine learning; artificial intelligence; genetic algorithms; informational biology; complex systems; multimedia; image processing; computer vision; image searching; virtual reality; augmented reality

1. Schedules and Venues

1.1. Master's Program, Summer Exam

Date and Time	Venue	Subject	Remarks
Aug. 22 (Mon) 2016 10:00 - 12:30	Faculty of Engineering Building #2, 4th floor, lecture room 241	Mathematics	See 2.5.
Aug. 22 (Mon) 2016 15:00 - 17:30	Ditto	Specialized subjects	See 2.6.
Aug. 29 (Mon) 2016 9:30 -	Waiting room: Faculty of Engineering Building #2, 4th floor, lecture room 241 Exam rooms: Faculty of Engineering Building #2, 3rd floor, meeting room 1A and 1C	Oral exam	See 3.2. Only applicants who passed mathematics, specialized subjects, and paper screening will take this exam

1.2. Doctoral Program, Summer Exam

Date and Time	Venue	Subject	Remarks
Aug. 22 (Mon) 2016 15:00 - 17:30	Faculty of Engineering Building #2, 4th floor, lecture room 241	Specialized subjects	See 2.6 and 4.3

| Aug. 29 (Mon) 2016 9:00 - 18:00 | Waiting room: Faculty of Engineering Building #2, 4th floor, lecture room 241 Exam rooms: Faculty of Engineering Building #2, 3rd floor, lecture rooms 243 and 244 | Oral exam | See 4.4 All applicants should take this exam |

1.3. Master's Program, Winter Exam

Date and Time	Venue	Subject	Remarks
Feb. 1 (Wed) 2017 9:00 - 11:00	Faculty of Engineering Building #2, 4th floor, lecture room 244	Mathematics	See 2.5
Feb. 1 (Wed) 2017 13:00 - 15:30	Ditto	Specialized subjects	See 2.6
Feb. 2 (Thu) 2017 11:40 - 13:30	Waiting room: Faculty of Engineering Building #2, 3rd floor, meeting room 3	Oral exam	See 3.2 All applicants should take this exam

1.4. Doctoral Program, Winter Exam

Date and Time	Venue	Subject	Remarks
Feb. 1 (Wed) 2017 13:00 - 15:30	Faculty of Engineering Building #2, 4th floor, lecture room 244	Specialized subjects	See 2.6 and 4.3
Feb. 2 (Thu) 2017 9:00 - 11:30	Waiting room: Faculty of Engineering Building #2, meeting room 3	Oral exam	See 4.4 All applicants should take this exam

2. General Notices

This section describes general rules that apply to the entrance exams of both master's and doctoral programs.

2.1. Application Due and Procedures

See "Section 5. Application Procedures" in the Admission Guide of Graduate School of Information Science and Technology.

Should questions arise about this guide, consult the Department Admission Office in the cover page, not the Admission Office of the Graduate School of Information Science and Technology, the office the application documents will be mailed to.

2.2. Faculty Advisor Preference Survey

Fill the preference card form in the end of this guide and enclose it in your application. Your preferences shall not affect your qualification. When successful in the exam, you will be notified of the advisor, along with the notification

of the exam.

2.3. Late Announcements

During the examination period, exam venues will be shown on display boards near entrances of Faculty of Engineering Building #2. Check a display board for changes and updates after this guide is printed.

2.4. English Evaluation

Your English skill is evaluated by TOEFL score reported via an Official Score Report. For details, see "Guidelines for Submission of TOEFL Scores," accompanying the Admission Guide of Graduate School of Information Science and Technology.

2.5. Mathematics

See "Section 4: Examination subjects and expected number of students for each department" in the Admission Guide of Graduate School of Information Science and Technology for details.
The mathematics is a subject of only the exam of Master's Program, not of Doctoral Program.

2.6. Specialized Subjects

Five problems are given from the following fields, out of which you choose and answer to three in 2.5 hours: electrical / electronic circuits, computer architecture, digital circuits, algorithms and data structures, telecommunication, computer networks, signal processing, and information theory.

2.7. Withdrawal

In case you passed the exam but will not (or cannot) enroll for any reason, promptly inform the Admission Office of the Graduate School of Information Science and Technology of your intention to withdraw, via a written document (in any format).

2.8. Prohibition of Duplicated Qualifications in Summer and Winter Exams

Those who passed the summer exam of any department of the Graduate School of Information Science and Technology in the University of Tokyo are not eligible to take the winter exam of the same academic year.

3. Master's Entrance Exam

This section describes rules specific to the entrance exams of the master's program.

3.1. Communication to Prospective Advisors

You are recommended to contact at least one prospective advisor prior to your application.

3.2. Oral Exam

In the summer entrance exam of the master's program, only applicants who passed prior qualifications—mathematics,

specialized subjects, and paper screening based on submitted application documents—are subject to the oral exam on Aug. 29 (Mon), 2026. Subjects of the oral exam will be announced no later than noon of Aug. 26 (Fri), 2016, through the department home page and the display board in front of the department admission office. Details will be announced in the exam room after the exam on specialized subjects. In the winter exam, all applicants are subject to the oral exam.

You will be interviewed about written exams, ongoing work, fields of interest, and so on.

4. Doctoral Entrance Exam

This section describes rules specific to the entrance exams of the doctoral program.

4.1. Communication to Prospective Advisors

Communicate with at least one prospective advisor and discuss your research plan prior to your application.

4.2. Required Documents

Include the following in your application.

(i)   A Summary Paper

A paper summarizing your master's thesis project (or a similar activity) including its overview, objectives, results, and outlook. Follow the following guidelines.

- Clarify your research contributions.

- Do not exceed four A4-size single-side pages including figures and tables.

- Leave margins of about 1.5cm at top, bottom, left, and right and do not staple the papers, to ease photocopies.

- Print your current (or latest) affiliation, name, and page number on top of each page.

- Use Japanese or English.

(ii)   Recommendation Letter and List of Achievements

Submit the list of your achievements; also submit a letter of recommendation (in an arbitrary format) written by the advisor of your master's thesis project if possible. There are cases in which they are exempted; see 4.3 for the conditions.

(iii) Recommendation Letter by Your Superior

If you are a working applicant intending to continue your job after your successful enrollment, you must submit a letter of recommendation (in an arbitrary format) written by one of your superiors as well as the list of your achievements. They are necessary even if exemption rules in 4.3 would otherwise apply; a recommendation letter by the advisor of your master's thesis project is unnecessary.

4.3. Exemption of TOEFL, Specialized Subjects, Recommendation Letter, and

List of Achievements

- Submission of TOEFL score (2.4), specialized subjects (2.6), a letter of recommendation written by your master's thesis advisor (4.2), and the list of your achievements (4.2), are exempted if you graduated or are anticipated to graduate in this academic year from the master's program of any of the following departments: Department of Electrical Engineering and Information Systems, Department of Electrical Engineering, Department of Electronic Engineering, and Department of Information and Communication Engineering, in the Graduate School of Engineering, the University of Tokyo; Department of Frontier Informatics in Graduate School of Frontier Sciences, the University of Tokyo; and any Department in the Graduate School of Information Science and Technology, the University of Tokyo.

- They may be exempted if you graduated or are anticipated to graduate in this academic year from the master's program of any of the following departments: Department of Advanced Energy in Graduate School of Frontier Sciences, the University of Tokyo; Inter-Faculty Initiative in Information Studies in Graduate School of Interdisciplinary Information Studies, the University of Tokyo; and Department of Information Engineering in Graduate School of Engineering, the University of Tokyo. Ask the Department Admission Office for your eligibility.

4.4. Oral Exam

You should present your master's thesis research (or a similar activity). A projector will be available in the room; bring six copies of your handouts; you may bring other supplementary materials (video players are not available). The time available will be announced before your presentation, but is typically about 15 minutes. After your presentation, questions will be asked about the presentation as well as about the written exams. All applicants are subject to this oral exam.

Entrance Exam for Entry in Academic Year 2017
Information for Examinees

Department of Information and Communication Engineering
Graduate School of Information Science and Technology
The University of Tokyo

1. Schedule

See "Schedules and Venues" in this guide.

2. Venue

See "Map of Examination Venue; The University of Tokyo, Hongo Campus (7-3-1 Hongo Bunkyo-ku, Tokyo 113-8656)" in this guide.

Toei Subways and Tokyo Metro stations: Hongo-sanchome (Marunouchi Line M21 or Oedo Line E08), Nezu (Chiyoda Line C14), Todai Mae (Namboku Line N12), or Kasuga (Mita Line I12 or Oedo Line E07)

Toei Bus: "Todai Seimon Mae" (東大正門前) on route 東 43 or 茶 51; or "Todai Konai" (東大構内) on route 学 01 or 学 07

(1) Exam rooms will be displayed on display boards near entrances of Faculty of Engineering Building #2, no later than 40 minutes prior to the exam.

(2) Enter the exam room by 15 minutes before the exam starts. If you arrive late, consult the proctor in the room.

3. Items to Bring

(1) Examination admission ticket.

(2) Black pencils (or black mechanical pencils), erasers, a pencil sharpener (an electric sharpener is not allowed), a clock or a watch only to see the time without other functions.

Turn off your mobile phones and PHS and do not have them in your pockets or wear them (e.g., with neck straps).

4. Rules during the Exam

(1) You are not allowed to exit from the exam room, whether you finish or resign; you are not allowed to temporarily leave the room either.

(2) Always show your examination admission ticket on the desk.

(3) Questions about exam problems will not be answered.

(4) Put your examinee's number on each of the answer sheets; do not put your name on them; answer one problem on a sheet. If the space is not enough on one side, use its back.

(5) Do not take answer sheets or problem booklets with you from the exam room.

Preference Card (Master's Program)

Department of Information and Communication Engineering

Graduate School of Information Science and Technology, The University of Tokyo

Examinee's number (for official use only)			Name	

Contact information during the exam period	E-mail: Phone: Mobile:

Education Undergraduate	Status: attending / graduated in year (　　)	University / College	Faculty	Department
Graduate	Status: attending / graduated in year (　　)	University / College	School	Department

A. Do you have preferred research fields?		YES / NO (circle one; if yes, specify in the order you prefer)		
	1			
	2			
	3			

B. Do you have preferred advisors? specify at least four		YES / NO (circle one; if yes, specify in the order you prefer)		
	1		5	
	2		6	
	3		7	
	4		8	

Do you want to enroll in October?	Yes / No (Circle one)

Guidelines for filling this form

1. You may specify research fields broadly (e.g., communication) or specifically (e.g., genetic algorithms).
2. Specify at least four and up to eight preferred advisors in row B (if all advisors you specified are unavailable, you may be assigned a professor not in your list). If multiple professors tie in your preference, you may indicate that in the rank column; for example, when three processors are equally favorable, modify 2 and 3 in the rank column to 1.
3. If you are a foreign research student mentored by a faculty of our department and wish to continue working under the same advisor, just specify the name of the faculty; if you want to change the advisor, specify four to eight as described above.
4. Include this card in your application.

Preference Card (Doctoral Program)

Department of Information and Communication Engineering

Graduate School of Information Science and Technology, The University of Tokyo

Examinee's number (for official use only)			Name		
Contact information during the exam period	E-mail: Phone: Mobile:				

Education	Status:		University / College	Faculty	Department
Undergraduate	attending / graduated in year （　　）				
Graduate	Status: attending / graduated in year （　　）		University / College	School	Department

Preferred faculty advisors	1	
	2	
	3	

Do you want to enroll in October?	Yes / No (Circle one)

Guidelines for filling this form

1. Specify three faculty advisors in the order you prefer.
2. If you are a foreign research student or a foreign master course student mentored by a faculty of our department and wish to continue working under the same advisor, just specify the name of the faculty; if you want to change your advisor, specify three.
3. Include this card in your application.

List of Faculties (as of April 1, 2016)

Department of Information and Communication Engineering
Graduate School of Information Science and Technology
The University of Tokyo

[A. Hongo Campus]

*	Professor	Tohru Asami
	Professor	Koiti Hasida
	Professor	Shuichi Sakai
	Professor	Kiyoharu Aizawa
	Professor	Hiroshi Esaki
	Professor	Hitoshi Iba
	Professor	Takashi Naemura
	Professor	Kenjiro Taura
	Associate Professor	Toshihiko Yamasaki
	Associate Professor	Yoshihiro Kawahara
	Associate Professor	Hidetsugu Irie
*	Project Associate Professor	Rie Yamaguchi
	Associate Professor	Yoshihiko Hasegawa
	Lecturer	Hideya Ochiai

[B. Komaba Research Campus … Institute of Industrial Science]

	Professor	Masaru Kitsuregawa
	Professor	Kaoru Sezaki
	Professor	Yoichi Sato
	Professor	Kanta Matsuura
*	Associate Professor	Toshihiro Nemoto
	Associate Professor	Shunsuke Kamijo
	Associate Professor	Masashi Toyoda
*	Associate Professor	Takeshi Oishi
	Associate Professor	Naoki Yoshinaga

[C. Hitotsubashi Campus … National Institute of Informatics]

*	Professor	Jun Adachi
	Professor	Shin'ichi Sato

Faculties labeled with * are unavailable this academic year.