2019 Admission Guide

Department of Information Physics and Computing

Graduate School of Information Science and Technology,

The University of Tokyo

Master’s Program

Doctoral Program

Contact [Department Administration Office]

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656

Department administration office (Department of Information Physics and Computing), Graduate School of Engineering / Information Science and Technology Administrative Group,
The University of Tokyo
TEL: +81 (0)3-5841-6889
office@office.keisu.t.u-tokyo.ac.jp

Visit: http://www.i.u-tokyo.ac.jp/index_e.shtml

In addition to this brochure, please be sure to review the application guidelines for the Graduate School of Information Science and Technology.
I. Master’s Program

Based on the interdisciplinary nature of the Department of Information Physics and Computing, this Department seeks applicants from a wide range of fields, both inside and outside The University of Tokyo, with a fundamental understanding and knowledge of mechanics, electricity, physics, mathematics, and information. Examination subjects have been selected to ensure that applicants from diverse disciplines who are not students of The University of Tokyo can take the Examinations under conditions that are fair to all, with no priority or advantages offered to persons already registered at The University of Tokyo. As described in Section B, examinees can choose other subjects which are not conducted by this department in the specialized subjects.

A. Preference Card

Fill in boxes to the right of the names of the Faculty Advisors listed on the Preference Card (for Master’s Program) enclosed with this Guide, using numbers to order the preference up to sixth choice or an ‘X’ if not preferred. When indicating your preferred field, please write a detailed description being as specific as possible. Your application will be rejected if you do not fall under the supervision of any of the particular Faculty Advisors you number or you keep empty. Submit the Preference Card together with the other application documents. The laboratories in this department conduct research closely together. Therefore, students can pursue cross-section studies about Information Physics and Computing in any laboratory.
B. Examination Schedules

1. Regular education subjects

<table>
<thead>
<tr>
<th>Examination Date</th>
<th>Location</th>
<th>Examination Time</th>
<th>Examination Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20, 2018 (Monday)</td>
<td>School of Engineering Bldg. No. 6</td>
<td>10:00 – 12:30</td>
<td>Mathematics</td>
</tr>
</tbody>
</table>

Details on the Examination location will be posted on the bulletin board at the main entrance to Bldg. No. 6 of the School of Engineering at 9:00 a.m. on the day of the Examination.

TOEFL scores will be used to determine English ability. No written English Examination will be administered. For details, refer to “2019 Guidelines for Submission of TOEFL Scores; Graduate School of Information Science and Technology, The University of Tokyo,” which is enclosed in the School Application Guidelines.

2. Specialized subjects

a) Written Examination

For Examinations on Specialized Subjects, students shall choose one subject from among the following: “Information Physics and Computing”, “Mathematical Informatics”, “Computer Science”, and “Information and Communication Engineering”. Please note that dates, times, and locations differ depending on the subject.
### Specialized Subjects

<table>
<thead>
<tr>
<th>Specialized Subjects</th>
<th>Examination Dates, Times, and Locations</th>
<th>Scope of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Physics and Computing</td>
<td>August 21, 2018 (Tuesday) 10:00 – 13:00 School of Engineering Bldg. No. 6</td>
<td>Students will be required to select and solve three of five problems: “signal processing”, “electronic circuits”, “control”, “computer systems”, and “dynamics.”</td>
</tr>
<tr>
<td>Mathematical Informatics</td>
<td>Please refer to the “Guide to Department Entrance Examinations” for the Department of Mathematical Informatics.</td>
<td></td>
</tr>
<tr>
<td>Computer Science</td>
<td>Please refer to the “Guide to Department Entrance Examinations” for the Department of Computer Science.</td>
<td></td>
</tr>
<tr>
<td>Information and Communication Engineering</td>
<td>Please refer to the “Guide to Department Entrance Examinations” for the Department of Information and Communication Engineering.</td>
<td></td>
</tr>
</tbody>
</table>

Details on the Examination location for “Information Physics and Computing” will be posted on the bulletin board at the main entrance to Bldg. No. 6 of the School of Engineering at 9:00 a.m. on the day of the Examination. For information on Examination locations for “Mathematical Informatics,” “Computer Science,” and “Information and Communication Engineering,” please refer to the Admission Guide for the department in question.

b) Oral Examination

Between 9:00 a.m. and 6:00 p.m. on Thursday and Friday, August 23 & 24, 2018.

Detailed schedules will be posted or distributed during the Examination period.
3. Guidance for Oral Examinations

<table>
<thead>
<tr>
<th>Date and Location</th>
<th>Time</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20, 2018 (Monday) School of Engineering Bldg. No. 6</td>
<td>After the completion of the Regular education subject, “mathematics,” examination</td>
<td>Guidance will be provided regarding all processes to be used during Oral Examinations.</td>
</tr>
</tbody>
</table>

C. Notes of Caution

1. Persons wishing to start school in September 2018 must contact the Department administration office in question before submitting an application.

2. Please carefully read the “Useful information for persons taking Entrance Examinations (Master’s and Doctoral Programs),” which is included in this Admission Guide.
II. Doctoral Program

A. Persons wishing to apply to the Doctoral Program should refer to the “2019 Admission Guide: Doctoral Program, Graduate School of Information Science and Technology,” and must contact the persons named below before submitting the application. Please call or write well in advance.

Contact:
Department of Information Physics and Computing, Graduate School of Information Science and Technology, The University of Tokyo
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656
Department of Information Physics and Computing Administration Office
+81 (0)3-5841-6889
office@office.keisu.u-tokyo.ac.jp

B. Preference Card

Indicate your preferences with regard to Faculty Advisors, etc., on the “Preference Card” (Doctoral Program) included with this Guide, and submit this card together with the application documents. Students admitted to the doctoral program carry out research under the guidance of a designated faculty member who serves as the student’s research and thesis advisor. Applicants must identify a faculty member with whom they propose to conduct their research and then contact the faculty member to arrange a face-to-face or online interview in which the applicant describes his or her academic achievements, research experience, research abilities, and research plans before submitting the application form. Applicants may not be allowed to take the examinations if they fail to complete this procedure.
C. Outline of past research results and Research Plan for Doctoral Program

Submit the following reports together with the other application documents:

1. Describe the content and results of past research as well as the positioning of that research in the field in question. Summary should be in either English or Japanese, on no more than two A4-sized pages.

2. Provide a concrete plan for research to be conducted after admission to the Doctoral Program and describe how this research will contribute to the field in question. Summary should be in either English or Japanese, on no more than two A4-sized pages.

The above items will be used as the basis for the Oral Examination and will be subject to scoring, so please ensure that these summaries are sufficiently created and appropriate in terms of length and content.

D. Examination Schedules

At the time of application, please select either the Summer Entrance Examination or the Winter Entrance Examination. Please note that the periods for acceptance of applications differ for the summer and winter Examinations.
1. Summer Examinations

(Primary Examinations)

<table>
<thead>
<tr>
<th>Examination Dates and Locations</th>
<th>Examination Times</th>
<th>Examination Subjects</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20, 2018 (Monday) 15:00 –, or August 21, 2018 (Tuesday) 10:00 – School of Engineering Bldg. No. 6</td>
<td>Detailed schedules will be posted at 10:00 on August 20.</td>
<td>Oral Examination I</td>
<td>Examinees will be required to answer questions related to the fundamentals of Information Physics and Computing and to the applicant’s research field.</td>
</tr>
<tr>
<td>August 22, 2018 (Wednesday) School of Engineering Bldg. No. 6</td>
<td>Detailed schedules will be posted at 17:00 on August 21.</td>
<td>Oral Examination II</td>
<td>Examinees will be required to answer questions on their research results and research plan submitted beforehand.</td>
</tr>
</tbody>
</table>

TOEFL scores will be used to determine English ability. No written English Examination will be administered. For details, refer to “2019 Guidelines for Submission of TOEFL Scores; Graduate School of Information Science and Technology, The University of Tokyo,” which is enclosed in the School Application Guidelines.

Persons who have completed or are expected to complete The University of Tokyo Graduate School Master's Program will not be required to submit TOEFL scores. Also persons who have completed or are expected to complete a Master’s Program of Graduate School of Information Science and Technology in The University of Tokyo will exempt Oral Examination I.

Examinees who are rejected in Oral Examination I cannot take Oral Examination II. The passing status of Oral Examination I will be posted with the schedules of Oral Examination II.
(Secondary Examinations)

As a rule, Secondary Examinations will be conducted during the period from late January to mid February, 2019. Applicants will be notified later regarding details of schedules and locations. Applicants should bring their Master’s thesis (or some equivalent material) to the Secondary Examinations. For persons wishing to start school in September and for persons already holding a master's degree at the time of application, the Secondary Examination will be conducted based on the schedule for the Oral Examinations II.

2. Winter Examinations

As a rule, primary and secondary Examinations will be conducted during the period from late January to mid February, 2019. Acceptance will be limited to a few students. Examination methods will be in accordance with those used for Summer Examinations. Applicants will be notified regarding details of schedules and locations after applications have been received.

E. Notes of Caution

1. Persons wishing to start school in September 2018 must contact the Department administration office in question before submitting an application.

2. Persons wishing to be included in the “Special Selection for Professionals” MUST contact the Administration Office described above before submitting the application. Additional documents will be needed for the “Special Selection for Professionals.”

3. Please carefully read the “Department of Information Physics and Computing, Graduate School of Information Science and Technology, The University of Tokyo: Useful information for persons taking Entrance Examinations (Master’s and Doctoral Programs),” which is included in the Admission Guide.
2019

Department of Information Physics and Computing,
Graduate School of Information Science and Technology,
The University of Tokyo

Useful information for persons taking Entrance Examinations
(Master’s and Doctoral Programs)

1. Examination dates and times

Please refer to the “Examination schedules” listed in this Guide.

2. Examination locations

By subway:

Marunouchi Line / Oedo Line: Get off at Hongo-sanchome Station
Chiyoda Line: Get off at Nezu Station
Namboku Line: Get off at Todaimae Station
Mita Line: Get off at Kasuga Station

(a) Specified Examination rooms are subject to change depending on the number of examinees. Please confirm all locations on the bulletin board at the main entrance to Bldg. No. 6 of the School of Engineering on the day of the Examination.

(b) Examinees should be in the designated Examination room no later than 15 minutes before the scheduled start of the Examination.

3. What to bring

(a) Examination admission card;

(b) Black pencils (mechanical pencils are OK);
This document is a translation from the official Japanese version.

(c) Erasers;

(d) Pencil sharpener (only the small, handheld, non-electric type is acceptable);

(e) Clock or watch (for showing time only; devices with other functions are not acceptable).

No writing implements or tools other than those noted above will be allowed during written Examinations.

Caution: During the Examination period, all mobile phones must be turned off. Mobile phones must also not be carried on the examinee’s person (on neck straps, in pockets, etc.).

4. Items to keep in mind during Examinations

(a) Examinees will not be allowed to leave the Examination room during the Examination period.

(b) Examination admission cards must be kept on the desktop throughout the entire Examination period.

(c) Examinees must write their examination admission number. Examinees must not write your name. Examinees must write each answer on the designated sheet. If there is not enough space, examinees may write on the back of the answer sheet.

(d) Examinees cannot take answer sheets or question booklets out of the Examination room.
Access Map to Examination Location
[Preference card (for Master’s Program)]

Department of Information Physics and Computing, Graduate School of Information Science and Technology, The University of Tokyo

<table>
<thead>
<tr>
<th>Program</th>
<th>Master’s Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examinee’s name</td>
<td>Examination admission number (leave blank)</td>
</tr>
<tr>
<td>Graduating university (only if applicable)</td>
<td>University / School / Department:</td>
</tr>
</tbody>
</table>

Phone number and e-mail where examinee can be contacted during the Examination period

Address:
Tel:                           Mobile phone: E-mail:

Preferred Faculty Advisor (in order of preference)
Fill in boxes with numbers indicating order of preference up to sixth choice. Fill in each box with an ‘X’ if not preferred. Note that your application will be rejected if you do not fall under the supervision of any of the Faculty Advisors you number or you keep empty.

Prof. Hiroshi Saruwatari
Shoichi Koyama (Lecturer)
Associate Prof. Ayumu Matani
Prof. Takaaki Nara
Prof. Hiroyuki Shinoda
Associate Prof. Yasutoshi Makino
Associate Prof. Koji Tsumura
Taku Seno (Lecturer)
Prof. Hiroshi Saito

Prof. Hiroshi Nakamura
Associate Prof. Masaaki Kondo
Masashi Ikeuchi (Lecturer)
Prof. Masahiko Inami
Atsushi Hiyama (Lecturer)
Associate Prof. Takahiro Shinagawa
Prof. Hiroki Ueda
Prof. Hiroshi Saito
Prof. Kunio Kashino

Specialized subjects to be tested on the Examination (Please circle the appropriate responses)

Information Physics and Computing / Mathematical Informatics / Computer Science / Information and Communication Engineering

Preferred start date (Please circle the appropriate response)  September 2018  /  April 2019

Preferred field (Please describe in detail)

◆ Submit this form together with your application.
◆ If you wish to start in September 2018, confirm with the administration office for the Department BEFORE filling out this form.
[Preference card (for Doctoral Program)]

Department of Information Physics and Computing, Graduate School of Information Science and Technology, The University of Tokyo

<table>
<thead>
<tr>
<th>Program</th>
<th>Doctoral Program</th>
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</thead>
<tbody>
<tr>
<td>Examinee’s name</td>
<td>Examination admission number (leave blank)</td>
</tr>
<tr>
<td>Graduating university or graduate school</td>
<td>University:__________</td>
</tr>
<tr>
<td></td>
<td>School: ______________</td>
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<tr>
<td></td>
<td>Department: ______________</td>
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<td></td>
<td>Graduate School: ___________</td>
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<tr>
<td></td>
<td>School: ______________</td>
</tr>
<tr>
<td></td>
<td>Department: ______________</td>
</tr>
<tr>
<td>E-mail and phone number where examinee can be contacted during the Examination period</td>
<td>Address:</td>
</tr>
<tr>
<td></td>
<td>Tel:                  Mobile phone:</td>
</tr>
<tr>
<td></td>
<td>E-mail:</td>
</tr>
<tr>
<td>Preferred Faculty Advisor and the interview date</td>
<td>Advisor:</td>
</tr>
<tr>
<td></td>
<td>Interview Date:</td>
</tr>
<tr>
<td>Application Category</td>
<td>SUMMER Entrance Examination / WINTER Entrance Examination</td>
</tr>
<tr>
<td></td>
<td>Circle “Professionals” if you wish to apply based on the Special Selection for Professionals.</td>
</tr>
<tr>
<td></td>
<td>Professionals</td>
</tr>
<tr>
<td>Preferred time of entry</td>
<td>September 2018 / April 2019</td>
</tr>
<tr>
<td>(Please circle the appropriate response)</td>
<td></td>
</tr>
</tbody>
</table>

Outline of past research results and Research Plan for Doctoral Program

Submit the following reports together with the other application documents.

1. Describe the content and results of past research as well as the positioning of that research in the field in question. Summary should be in either English or Japanese, on no more than two A4-sized pages.
2. Provide a concrete plan for research to be conducted after admission to the Doctoral Program and describe how this research will contribute to the field in question. Summary should be in either English or Japanese, on no more than two A4-sized pages.

The above items will be used as the basis for the Oral Examination and will be subject to scoring, so please ensure that these summaries are sufficiently created and appropriate in terms of length and content.

◆ Submit this form together with your application.
◆ Please note that the periods for acceptance of applications differ for the summer and winter Examinations. Application documents that arrive outside of the applicable period for acceptance of applications shall be deemed invalid.
◆ If you wish to start in September 2018, confirm with the administration office for the Department BEFORE filling out this form.