# 2025 Guide to the Doctoral Program Entrance Examination

# Department of Architecture, Graduate School of Engineering, The University of Tokyo

## 1. Eligibility

Applicants must meet the requirements for eligibility in the Guidelines for Applicants to the 2025 Doctoral Program of the Graduate School of Engineering, The University of Tokyo. There are no restrictions regarding past fields of specialization or when qualifications were attained. In addition, those who have been conferred a degree equivalent to a master's degree from a foreign graduate school must be enrolled as a research student for at least six months before admission to the doctoral program, as a general rule.

This is the only doctoral program entrance examination this year.

## 2. Prospective Supervisors, Application Forms, and Letters of recommendation

Graduate students pursue research under their supervisors. Therefore, applicants must select up to 2 prospective supervisors from the supervisor list on pages 4 - 5 and <u>fill their names in the box A in the exhibit 1</u>. The exhibit 1 - 7 must be uploaded with the other application documents at the time of application.

- Applicants must fill in a "o" in box B n the exhibit 1 for the selected group for the Specialized subject II and describe their research plan, reasons for selecting the lab, and self-assessment of research abilities in n the exhibit 2 – 7.
- (2) Score proof of English language test: The English language test for the entrance examination of the Department of Architecture will be based on the official scores of TOEFL (TOEFL iBT or TOEFL iBT Home Edition) submitted by the applicants. <u>The English language score must be uploaded and received by 8<sup>th</sup> Aug. 2024 (JST)</u>. The English test scores are only valid for examinations taken in October 2022 or later.
- (3) <u>Letters of recommendation</u>: Applicants who have completed or are expected to complete a graduate school other than the Graduate School of Engineering, the University of Tokyo must submit two letters of recommendation (free format; no more than one A4 sheet; one must be from applicants' graduate school faculty).
  - Two letters of recommendation must be uploaded with the other application documents at the time of application. If necessary, related documents may be attached.

## 3. Enrollment Capacity and Admission Period

The enrollment capacity for the 2025 doctoral program of the department of architecture is 16. <u>The number of students admitted to each professor is restricted to avoid unbalanced research environments within the department.</u> Successful applicants usually enter in April 2025. However, successful applicants who have graduated or are expected to graduate from university by September 2024 may enter in October 2024 if the Certificate of Eligibility (COE) is published. We recommend April 2025 enrollment due to the trend of delayed issuance of COE.

### 4. Selection Methods

Selection of students for admission shall be based on the first examination and the second examination described below.

#### This document is a translation from the authoritative Japanese version

### (1) First examination

#### (A) Written examination

Subject	Time limit	Content	
1. Foreign language *1		English (evaluation by TOEFL <sup>®</sup> )	
2. Specialized subjects *1			
Specialized subject II	3 or 4 hours	Applicants select a group out of four groups below and solve the problem related to the selected group. The selected group	
		must be described in the Box B of the Exhibit 1.	
		Group 1: Design (4 hours)	
		Group 2: Architectural Planning & Design, Architectural	
		History, and Building System & Construction (3 hours)	
		Group 3: Environmental Engineering (3 hours)	
		Group 4: Structures & Materials (3 hours)	

\*1 For those who have completed or are expected to complete the master's program of the Graduate School of Engineering, the University of Tokyo, the written examination will be omitted.

### (B) Oral examination

Interviews for about ten minutes per person shall be conducted. The language of the interviews will be Japanese or English. Applicants who do not take the oral examination will be disqualified.

### (2) Second examination

Applicants will make a presentation of their master thesis, research paper that can be replaced by master thesis, and so on.

If the applicant's master thesis is written in Japanese or English, the applicants must submit their master thesis.

If the master thesis is written in any other language, the applicants must submit one copy of their master thesis together with the summary of the thesis in Japanese or English (approximately 30 pages, in A4 format) to the office of the department of architecture by the deadline indicated in the next page.

In addition, applicants who continue from the master's program of this department and enter the doctoral program must follow the submitting guideline of this department.

(1) First examination						
Subject Date & time		Date & time	Items to bring	Important note		
	English			Submit TOEFL® score.		
(A) Written examination <sup>*1</sup>	Specialized subject II Group 1	Wednesday, August 28 9:00 - 13:00	Pencils, erasers, pencil sharpeners, compasses, T-squares, rulers, coloring devices, and set squares Others: visit the Department's website <sup>*2</sup> .			
(A) Writter	Specialized subject II Group 2 Group 3 Group 4	Wednesday, August 28 9:00 - 12:00	Pencils, erasers, pencil sharpeners, compasses, and set squares			
	Oral nination erviews)	Thursday, August 29 Afternoon		Details on the waiting place and time will be posted on the Department's website <sup>*2</sup> .		

## 5. Examination Schedule

### (1) First examination

Note: Entering the examination room 30 minutes after the beginning of the specialized subjects is prohibited under any circumstances.

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\*1 For those who have completed or are expected to complete the master's program of the Graduate School of Engineering, the University of Tokyo, this examination will be omitted. \*2 https://arch.t.u-tokyo.ac.jp/

(2) Second examination	(2)	Second	examination
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Subject	Target applicant	Date & time	Venue	Important note
$\hat{f}$ the master thesis $^{*1}$	All applicants wishing to enter in April 2025	Monday, January 27 in 2025 Tuesday, January 28 in 2025 (Tentative)	Lecture room 11 and 12 in Engineering Building 1	Detailed information of the presentation and board of review will be announced later. The master thesis, research paper that can be replaced by master thesis, and so on must be submitted to the office of the department of architecture, no later than 4 pm, Tuesday 14th January 2025
Presentation and review of the master thesis $^{*1}$	Applicants who wish to enter in October 2024 and expect to complete the master's course of this department in September 2024 *2	Monday morning on July 29th in 2024 Tuesday morning on July 30 <sup>th</sup> in 2024	Lecture room 15 in Engineering Building 1	Detailed information of the presentation and board of review will be announced later. The master thesis, research paper that can be replaced by master thesis, and so on must be submitted to the office of the
Pre	Applicants who wish to enter in October 2024 and do not fall under the above fields *2	Thursday morning on August 29th in 2024	Lecture room 15 in Engineering Building 1	department of architecture, no later than 4 pm, Monday 22th July 2024

\*1 Those who have completed or are expected to complete the master's program of other than the department of architecture, Graduate School of Engineering, the University of Tokyo must prepare about 20 copies of the dissertation summary, which has no limit to the number of pages and is in Japanese or English, for distribution on the day of the presentation.

\*2 The applicants must have obtained or are expected to obtain a Master's degree by September 2024.

### 6. Notes

- (1) Applicants should carefully read the Notice for Examination ~The 2025 Master's / Doctoral Program, Graduate School of Engineering, the University of Tokyo~ shown in the Department's website (https://arch.t.u-tokyo.ac.jp/).
- (2) Perform the identity verification at the time of the test using the photograph on the admission card. Failure to confirm your identity may result in disqualification.
- (3) Other related information, such as examination venue, will be posted on the department's Web site (https://arch.t.u-tokyo.ac.jp/), so please check there from time to time.

For Doctoral Program

# List of academic supervisors and their research fields at the Department of Architecture

(Faculty member's names are in Japanese syllabary order)

Faculty member's name	Affiliation*	Research division	Research field
Professor Yasunori AKASHI	А	Environment	Building Energy System, Thermal Environment, Operation and Management, Commissioning
Associate professor Tatsuya ASAI	IIS	Structure & Material	Seismic Engineering, Tsunami Resilient Design, Reinforced Concrete Structure
Project professor Yasushi IKEDA <sup>%2</sup>	А	Design	Architectural Informatics, Architectural Design
Associate professor Tatsuya ITOI	А	Structure & Material	Resilience engineering, risk-informed and performance- based design, earthquake engineering
Professor Kotaro IMAI	IIS	Planning	Architectural Planning and Design, Urban Analysis
Professor Jun IYAMA	А	Structure & Material	Steel Structure, Corrosion Mechanics, Seismic Wave Analysis, Fail-safe structural system
Professor Yumiko IWAFUNE	IIS	Environment	Energy system analysis
Associate professor Satoshi UNNO	А	History	Japanese architectural history, Conservation of cultural properties
Professor Ryozo OOKA	IIS	Environment	Building and urban environmental engineering, Sustainable engineering
Professor Toshio OTSUKI	А	Planning	Architectural Planning, Residential Area Planning, Housing Studies, Housing Policy, Disaster Recovery Design
Associate professor Yusuke OBUCHI <sup>Ω</sup>	А	Design	Digital Fabrication, Design Thinking, Urban Ecology, Communication and Media
Professor Koichi KATO	А	History	History of Western Architecture
Professor Kenichi KAWAGUCHI <sup>**2</sup>	IIS	Structure & Material	Spatial Structure Engineering, Structural Engineering
Associate professor Yoshiyuki KAWAZOE	IIS	Design	Architectural Design, Theory of Scenery
Associate professor Hideki KIKUMOTO	IIS	Environment	Urban & Building Environment, Environmental Control Engineering
Professor Koichi KUSUNOKI	ERI	Structure & Material	Earthquake Engineering, Structural Health Monitoring, Reinforced Concrete Structure
Project Associate professor Tsuyoshi KOYAMA <sup>**</sup>	А	Structure & Material	Computational Mechanics, Hydro Resistant Structures
Professor Mikio KOSHIHARA	IIS	System & Construction	Wood Engineering, Building Construction
Associate professor Tomoyuki GONDO	А	System & Construction	Building System, Construction Management
Project Associate professor Tsuyoshi SAITO	А	Structure & Material	Cement Chemistry, Circular Building Materials, Chemical Analysis
Professor Shinichi SAKAMOTO	IIS	Environment	Applied Acoustic Engineering (Architectural Acoustics and Noise Control)
Professor Tetsuya SAKUMA	А	Environment	Sound Environment, Architectural Acoustics, Noise Control, Living Environment

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Faculty member's name	Affiliation*	Research division	Research field	
Associate professor Seitaro TAJIRI	А	Structure & Material	Earthquake engineering, Reinforced concrete structure	
Professor Tomohiro TACHI	С	Structure & Material	Structural Geometry, Computational Design	
Project Associate Professor Keiichiro TANIGUCHI <sup>**</sup>	А	Environment	Building Environmental Engineering, Building Environmental Simulation	
Project professor Keisuke TOYODA	IIS	Design	Digital Spatial Description / Common Ground	
Professor Yoshiaki NAKANO <sup>%2</sup>	IIS	Structure & Material	Reinforced Concrete and Masonry Buildings, Seismic Capacity Evaluation and Retrofit, Tsunami-Resistant Buildings/Facilities, Urban Disaster Mitigation	
Professor Takafumi NOGUCHI <sup>**2</sup>	А	Structure & Material	Building materials, Resource recycling, Carbon neutral, Durability design, Maintenance, Fire prevention	
Associate professor Kengo HAYASHI	IIS	History	Asian Architectural and Urban History, Urban Sustainability Studies	
Professor Kaori FUJITA	А	System & Construction	Timber Structure, Traditional Building Construction	
Associate professor Kentaro HONMA	IIS	Planning	Architectural Planning and Design, Mathematical Engineering of Spatial Design	
Associate professor Yudai HONMA	IIS	Planning	Architecture and Urban Planning, Traffic Engineering, Social System, Mathematical Optimization	
Associate professor Yusuke MAIDA	ERI	Structure & Material	Earthquake engineering, Reinforced concrete structure, Damage control system	
Associate professor Masayuki MAE	А	Environment	Environmental Control Engineering, Energy System	
Associate professor Yuji MATSUDA	А	Planning	Architectural Planning and Design, Medical and Welfare Facilities' Planning, Universal Design	
Professor Ippei MARUYAMA	А	Structure & Material	Building material engineering, Materials for extreme conditions, Aging management of concrete structures, Preservation of historical buildings	
Associate professor Hiroe MIYAKE	ERI	Structure & Material	Earthquake Engineering & Engineering Seismology, Strong Ground Motion, Earthquake Disaster	
Project Lecturer Shohei MIYATA	А	Environment	Smart Building Systems, HVAC and Energy Systems for the Built Environment	
Associate professor Motoki YASUHARA	А	Design	Architectural Design	
Professor Satoshi YAMADA	А	Structure & Material	Steel Structure, Earthquake Engineering, Base Isolated Structure, Passive Control Structure	
Professor Yurika YOKOYAMA	С	Planning	Architectural Planning Research, Human-environment Studies, Design Studies	
Associate professor Hideki YOSHIOKA	А	Structure & Material	Fire Engineering for Buildings, Urban Fire Safety.	

 \* A: The Department of Architecture, Graduate School of Engineering ERI: Earthquake Research Institute IIS: Institute of Industrial Science

- C: Graduate School of Arts and Sciences
- $^{\Omega}$  Only for Architecture and Urban Design Course (G30-UDA) students.
- \* Retirement is scheduled on March 2026.

<sup>\*\*2</sup> Retirement is scheduled on March 2027.

Hongo Campus Yayoi Campus Komaba II Campus Komaba I Campus A 研究の指導を希望する教員を「令和 7(2025)年度東京大学大学院工学系研究科建築学専攻博士後期課程入学 志願者案内」4 頁の表から最大で2 名選択し、以下の欄に教員名を記入すること。

Applicants must select up to two prospective academic supervisors from the table on pages 4 & 5 of "2025 Guide to the Doctoral Program Entrance Examination Department of Architecture, Graduate School of Engineering, The University of Tokyo" and write their names in the following table.

	第一希望 1st choice	第二希望 2nd choice
教員名		
Academic supervisor's name		

B希望する群に $\bigcirc$ を記入すること。 Fill in a " $\bigcirc$ " for the desired group.

専門課題II	第1群	第2群	第3群	第4群
Special Subject				

(建築学専攻) (Department of Architecture)

この別紙の枚数は厳守すること。

The number of sheets should not be changed.

## 【研究計画】【Research Plan】

#### (1) 研究の背景(Background of the research)

「博士課程学生として取り組む研究の背景について、当該分野の状況や課題等の背景、並びに本研究計画の着想に至った経緯も含めて記入してください。既往文献を用いて研究課題がどのように重要で新規性があるかを明快にしてください。必要に応じて適宜概念図を用いるなどして、わかりやすく記入してください。なお、本項目は1頁に収めてください。

Please provide the background of the research you will undertake as a doctoral student, including the competitive research situations and challenges in the related field and how you came up with the idea for this research plan. Please clearly the importance and significance of the research topic with a critical review on the existing literature. Please provide a clear description of the research theme by using conceptual diagrams, if necessary. Please limit this section to one page.

## 【研究計画】(続き)【Research Plan(Continued)】

#### (2) 研究目的と実施内容 (Research Objectives, Plan, and Actions)

前述の研究の背景を受けて,目的と実施する内容を明確に記載してください。1)研究目的,研究方法,研究内容,2)作業仮説とその重要性, 独創性,3)全体目標のうちどこまでを明らかにするのか,4)研究目的達成時にどういった影響を研究分野および社会に及ぼすかの見通し, を記載してください。所属予定の研究室において先行研究がある場合には,受験者が果たす役割,境界条件がわかるように記載してください。研究方法は3年間のタイムスケジュールも記載してください。本項目は2頁以内に記載してください。

Based on the aforementioned research background, 1) clarify the research objective and goals, research theme, and describe the research methods used to achieve this theme in detail, 2) describe the research working hypothesis, the uniqueness, originality, and research significance about your research compared to previous research, 3) clarify the goals of your doctoral coarse research, and 4) what impact you expect on the research field and society when you achieve your research goals. If there is previous research in the laboratory to which the candidate will belong, please describe your roles. Please also include a three-year schedule. Please limit this section to two pages.

#### (3) 受入研究室の選定理由 (Reasons for Selection of Lab)

採用後の受入研究室を選定した理由について、次の項目を含めて1頁以内で記入してください。

① 受入研究室を知ることとなったきっかけ、及び、採用後の研究実施についての打合せ状況

② 申請の研究課題を遂行するうえで、当該受入研究室で研究することのメリット、新たな発展・展開

Please provide the reasons for selecting the host laboratory, including the following items within one page.

(1) How you came to know about the host laboratory and the status of meetings regarding the implementation of the research after your employment.

(2) Advantages of conducting research at the host laboratory for the proposed research project, and new developments/developments.

# 以下の点に該当する場合は、チェックボックスを黒、あるいは↓を記載ください。

回 修士の研究室と同じ研究室を志望している。I am applying for the same laboratory as that for my master's degree.

#### 【研究遂行力の自己分析】Self-assessment of research abilities

本申請書記載の研究計画を含め、当該分野における(1)「研究に関する自身の強み」及び(2)「今後研究者として更なる発展のため必要と 考えている要素」のそれぞれについて、これまで携わった研究活動における経験などを踏まえ、具体的に2頁以内で記入してください。

現在までに公開された論文、受賞歴、調査プロジェクト経験などアピールできる点も記載ください。

Please provide specific information on (1) your "research strengths" and (2) "elements you consider necessary for further development as a researcher" in the relevant field, including the proposed research plan in this application, based on your research experiences or comparable experiences you have within 2 pages.

Please also include any appealing points such as published papers to date, awards received, research project experience, etc.