For non-Japanese

Academic Year 2027
Graduate School of Engineering, The University of Tokyo
Department of Aeronautics and Astronautics

Guide to Entrance Examination

Master's Program
Doctoral Program

Inquiries
7-3-1 Hongo, Bukyo-ku, Tokyo, 113-8656
Department of Aeronautics and Astronautics, Graduate School of Engineering, the University of Tokyo
TEL: 03-5841-6610

Academic Year 2027
Graduate School of Engineering, the University of Tokyo
Department of Aeronautics and Astronautics
Master's program entrance examination guide

"Educational Policy of Department of Aeronautics and Astronautics/Purpose of research"

(1) Aeronautics and Astronautics, which has great potential for development as an industry, is a valuable source of undeveloped technology:
Aerospace is still an immature field in terms of technology and its utilization; therefore, it holds great promise for future development. The Department of Aeronautics and Astronautics pursuits the discipline's significance and possibilities that are outward as well as underlying. The program conducts research and provides education that can be utilized for the welfare and happiness of mankind.

(2) Advanced technology in the field of Aeronautics and Astronautics will be spun off to other fields:
By conducting research and providing education in the aerospace field, which requires an extremely high level of performance and leading-edge technology, we aim to create advanced technology, discover knowledge, and promote new developments in engineering that are applicable to many other fields.

(3) Aeronautics and Astronautics represent system integration technology:
In the world of aerospace, engineering, and science, which relate to many fields, are integrated. Technology that combines ideas is required, in particular to construct a system that aims to achieve one purpose. By taking advantage of the nature of this discipline, this program strives to conduct system integration and practical research while providing education focusing on space missions.

1. This guide aims to supplement the application guidelines for the master's program students in the Graduate School of Engineering, the University of Tokyo, for academic year 2027.

2. As described in the application guidelines, we plan to accept 37 students into the Department of Aeronautics and Astronautics in 2027.
   The examination for this major includes the official TOEFL® (TOEFL iBT, TOEFL iBT Home Edition) score, a written test (general education subject [mathematics], and specialized subjects) and an oral test. As a general rule, students are required to take the exam in all subjects, including the oral test

   Note In order to take the entrance examination for the Department of Aeronautics and Astronautics, it is necessary to submit the official TOEFL® (TOEFL iBT, TOEFL iBT Home Edition) score so that it will reach Graduate School of Engineering by Wednesday, August 12 2026. For details, refer to "AY 2027 Graduate School of Engineering Entrance Examinations Guidelines for Submission of TOEFL Scores"

3. An orientation on the graduate school entrance exam of Department of Aeronautics and Astronautics will be held online at 12:15 on Monday, April 13 2026. The details will be posted on the department's website.

4. The schedule of the examination is as follows. The test center for general education subject [mathematics] will be posted on the School of Engineering website until 10:00 am on Friday, August 28 2026. (Please refer to the examinees' instructions). The test center for specialized subjects and oral examination will also be posted at the entrance of the Department of Aeronautics

and Astronautics (Engineering Building 7) and the department's website at about the same time.

Month and Day	Time	Subject	Remarks
Monday, August 31 2026	8:30-11:30	Specialized subjects	Note 1)
	13:00-15:30	Mathematics	Note 2)
Tuesday, September 1 2026	Morning/ Afternoon	Oral examination	Note 3)

Note 1) In the written tests for the specialized subjects, examinee may freely choose three out of four subjects including fluid mechanics (fluid mechanics and high-speed aerodynamics), solid mechanics (mechanics of materials and structures), aerospace system engineering (flight mechanics and control),and propulsion engineering (mechanical dynamics, thermodynamics, and electromagnetism).

Note 2) In the written test for the general education subject [mathematics], examinees shall answer three out of six questions.

Note 3) The oral examination is conducted on topics related to the fields that examinees plan to research on after enrolling in graduate school and the topics related to their thesis in the undergraduate program. The examination time will be posted during the test period.

5. Instructors in the Department of Aeronautics and Astronautics

The academic staffs teaching in the Department of Aeronautics and Astronautics consist of full-time academic staffs, project associate staffs for this major (at Hongo campus) and academic staffs affiliated with the Department of Advanced Interdisciplinary Studies, the Graduate School of Frontier Sciences, Institute of Space and Astronautical Science in Japan Aerospace Exploration Agency. Currently (April 2026), there are 32 instructors in the Department of Aeronautics and Astronautics. Each academic staff's area of expertise is shown in the Appendix that follows. In the attached table, the staffs designated with an asterisk (*) are scheduled for retirement in March 2027, and the staffs designated with a double asterisk (**) are scheduled for retirement in March 2028. In principle, they cannot be selected as prospective academic supervisors.

Remarks

1) According to Article 11 of the University of Tokyo Graduate School Regulations, graduate students must work with instructors in the department of their respective majors as their primary advisors.
2) In the attached table, "Aero & Astro" in the column of affiliation refers to the full-time academic staffs and project associate staffs for this major (at Hongo campus); AIS refers to the Department of Advanced Interdisciplinary Studies; "Frontier Sci." refers to the Graduate School of Frontier Sciences; RCAST refers to the Research Center for Advanced Science and Technology; JAXA/ISAS refers to Japan Aerospace Exploration Agency/Institute of Space and Astronautical Science.

6. Japanese applicants who wish to enroll in October must submit a supervisor preference questionnaire (designated form, titled "指導教員希望調査票（修士課程 10 月入学希望者）") in accordance with the attached "2027 年度大学院工学系研究科航空宇宙工学専攻修士課程

入学試験における 10 月入学希望者に対する注意事項." There are restrictions on the faculty members who can accept applicants when assigning them to laboratories.

7. Applicants with non-Japanese nationality shall submit a Questionnaire for prospective primary advisors (designated form).

8. The primary advisors will be determined by the end of November 2026 after the department administers a survey on the successful candidates' preferences on the academic advisor in September 2026. Please be aware that international applicants who fall under any of the conditions set out in "The University of Tokyo Security Export Control Regulations" may not receive permission to be supervised by the candidates' preferred academic advisor.

9. Items to bring
   (1) A copy of the Examination Admission Card (printed on a sheet of paper)
   (2) Black pencils (or black mechanical pencils), erasers, a pencil sharpener (a desktop type is not allowed), mechanical pencil leads, and a watch (watches with functions other than time measurement are not allowed).

   *The bringing of ballpoint pens is not permitted.

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Graduate School of Engineering, the University of Tokyo
Department of Aeronautics and Astronautics
Doctoral program entrance examination guide

"Educational Policy of Department of Aeronautics and Astronautics/Purpose of research"

(1) Aeronautics and Astronautics, which has great potential for development as an industry, is a valuable source of undeveloped technology:
Aerospace is still an immature field in terms of technology and its utilization; therefore, it holds great promise for future development in the future. The Department of Aeronautics and Astronautics pursuits the discipline's significance and possibilities that are outward and underlying. The program conducts research and provides education that can be utilized for the welfare and happiness of mankind.

(2) Advanced technology in the field of Aeronautics and Astronautics will be spun off to other fields:
By conducting research and providing education in the aerospace field, which requires an extremely high level of performance and leading-edge technology, we aim to create advanced technology, discover knowledge, and promote new developments in engineering that can be applied to many other fields.

(3) Aeronautics and Astronautics represent system integration technology:
In the world of aerospace, engineering, and science, which relate to many fields, are integrated. Technology that combines ideas is required, in particular to construct a system that aims to achieve one purpose. By taking advantage of the nature of the discipline, this program strives to conduct system integration and practical research while providing education focusing on space missions.

1. This guide aims to supplement the application guidelines for the doctoral program students in the Graduate School of Engineering, the University of Tokyo, for academic year 2027.

2. As described in the application guidelines, we plan to accept 18 students into the Department of Aeronautics and Astronautics in 2027. Selection is based on the first exam and the second exam. The first examination for this major includes the official TOEFL® (TOEFL iBT, TOEFL iBT Home Edition) score, a written test (general education subjects [mathematics]), and an oral test. As a general rule, students are required to take the exam in all subjects, including the oral test. In addition, regarding the third point in the application guidelines, "application schedule B" will be not conducted.

   Note In order to take the entrance examination for the Department of Aeronautics and Astronautics, it is necessary to submit the official TOEFL® (TOEFL iBT, TOEFL iBT Home Edition) score so that it will reach Graduate School of Engineering by Wednesday, August 12 2026. For details, refer to "AY 2027 Graduate School of Engineering Entrance Examinations Guidelines for Submission of TOEFL Scores".

3. An orientation on the graduate school entrance exam of Department of Aeronautics and Astronautics will be held online at 12:15 on Monday, April 13 2026. The details will be posted on the department's website.

4. The schedule of the first examination is as follows.
   The test center for general education subject [mathematics] will be posted on the School of Engineering website by 10:00 am on Friday, August 28 2026. (Please refer to the examinees'

instructions). The test center for oral examination will also be posted at the entrance of the Department of Aeronautics and Astronautics (Engineering Building 7) and the department's website at about the same time.

Month and Day	Time	Subject	Remarks
Monday, August 31 2026	13:00-15:30	Mathematics	Note 1) Note 2)
Wednesday, September 2 2026	Afternoon	Oral examination	Note 3) Note 4)

Note 1) In the written test for the general education subject [mathematics], examinees shall answer three out of six questions.

Note 2) Students who have completed the master's program in the Graduate School of Engineering, the University of Tokyo, or in the Department of Advanced Energy, Graduate School of Frontier Sciences, the University of Tokyo, or who are expected to complete either of them, are exempted from submitting the official TOEFL® score and taking the written tests for general studies (mathematics) on the first examination.

Note 3) The specialized topics on the first exam will be divided into the following four groups. Only an oral examination will be conducted. The group assignments are determined according to each student's choice of academic advisor on their application forms.

A. Aerodynamics
B. Structure and Materials
C. Control and Flight Dynamics
D. Engines and Propulsion

Note 4) The oral examination for the science specialization on the first exam will be conducted on topics related to the examinees' fields of specialization. The examinees should prepare a summary (2–4 A4-sized pages) of their research area in the master's program and use it as supplementary information. Moreover, if an examinee who has already completed the master's program has conducted further research after completing the master's program, the examinee should bring his/her master's thesis, together with aforementioned summary which also includes the overview of his/her research conducted after the completion of the master's program. The test site, time, and number of copies of necessary materials will be posted in the lobby of Engineering Building 7 and the department's website on Friday, August 28 2026. The examinees should refer to this information.

5. The second examination is scheduled to be held between late-January 2026 and mid-February 2026. It will be an oral examination concerning the areas of specialization. The test site, time, and other details will be announced around the end of January 2027.
   For those wishing to enroll in October 2026, an oral examination combining the first and second examinations will be held on Wednesday, September 2, 2026.

6. Instructors in the Department of Aeronautics and Astronautics

The academic staffs teaching in the Department of Aeronautics and Astronautics consist of full-time academic staffs, project associate staffs for this major (at Hongo campus) and academic staffs

affiliated with the Department of Advanced Interdisciplinary Studies, the Graduate School of Frontier Sciences, and Institute of Space and Astronautical Science in Japan Aerospace Exploration Agency. Currently (April 2026), there are 32 instructors in the Department of Aeronautics and Astronautics. Each academic staff's area of expertise is shown in the Appendix that follows. In the attached table, the staffs designated with an asterisk (*) are scheduled for retirement in March 2027, and the staffs designated with a double asterisk (**) are scheduled for retirement in March 2028. In principle, they cannot be selected as prospective academic supervisors.

Remarks:

1) According to Article 11 of the University of Tokyo Graduate School Regulations, graduate students must select their primary advisors who belong to the department of students' majors.
2) In the attached table, "Aerospace" in the column of affiliation refers to the full-time academic staffs and project associate staffs for this major (at Hongo Campus); AIS refers to the Department of Advanced Interdisciplinary Studies; "Frontier Sci." refers to the Graduate School of Frontier Sciences; RCAST refers to the Research Center for Advanced Science and Technology; JAXA/ISAS refers to Japan Aerospace Exploration Agency/Institute of Space and Astronautical Science.
3) Examinees shall get a hold of the primary advisors before application.
4) Please be aware that international applicants who fall under any of the conditions set out in "The University of Tokyo Security Export Control Regulations" may not receive permission to be supervised by the candidates' preferred academic advisor. Non-Japanese examinees shall submit a questionnaire on the primary advisors.

7. Items to bring

(1) A copy of the Examination Admission Card (printed on a sheet of paper)
(2) Black pencils (or black mechanical pencils), erasers, a pencil sharpener (a desktop type is not allowed), mechanical pencil leads, and a watch (watches with functions other than time measurement are not allowed).

*The bringing of ballpoint pens is not permitted.

April, 2026

List of Academic Staff

Affiliation	Title	Name	Area of expertise
Aero & Astro	Professor	Mituhiro TSUE*	Combustion, Propulsion System
Aero & Astro	Professor	Akira IWASAKI**	Earth Observation, Space Environment Utilization
Aero & Astro	Professor	Kimiya KOMURASAKI	Electric and Advanced Space Propulsion, Electromagnetic Energy System
Aero & Astro	Professor	Katsuhiro NISHINARI	Nonlinear Dynamics
Aero & Astro	Professor	Susumu TERAMOTO	Aerodynamics of Internal Flow
Aero & Astro	Professor	Takeshi TSUCHIYA	Flight Mechanics, System Optimization
Aero & Astro	Professor	Takehiro HIMENO	Aerospace Propulsion
Aero & Astro	Professor	Taro IMAMURA	Aircraft Aerodynamic, Computational Fluid Dynamics, Computational Aeroacoustics
Aero & Astro	Professor	Tomohiro YOKOZEKI	Mechanics of Materials and Structures, Composite Structures
Aero & Astro	Professor	Shinji NAKAYA	Thermal Reactive Flows, Aerospace Propulsion, Combustion
Aero & Astro	Professor	Hiroyuki KOIZUMI	Electric Propulsion
Aero & Astro	Associate Professor	Ryu FUNASE	Guidance, Navigation and Control of Spacecraft, Deep Space Exploration System
Aero & Astro	Associate Professor	Shu MINAKUCHI	Advanced Composites, Smart Structures
Aero & Astro	Associate Professor	Daichi YANAGISAWA	Application of Fluid Dynamics and Cellular Automaton
Aero & Astro	Associate Professor	Rei YAMASHITA	High-speed Aerodynamics・Computational Fluid Dynamics・Sonic Boom
Aero & Astro	Associate Professor	Ryo HIGUCHI	Mechanics of Composite Materials, Computational Mechanics
Aero & Astro	Associate Professor	Satoshi IKARI	Astrodynamics, Spacecraft Formation Flying, Spacecraft Systems Engineering
Aero & Astro	Associate Professor	Takahiro FUJIKAWA	Flight Mechanics and Control, Optimization, Future Space Transportation System
Aero & Astro	Lecturer	Masahito AKAMINE	Experimental Fluid Dynamics, Aeroacoustics
Aero & Astro	Project Associate Professor	Lu Xin	Computational Mechanics、Numerical Structural Simulation

Frontier Sci.	Professor	Koji UENISHI	Mechanics of Materials, Impact Engineering
Frontier Sci.	Professor	Takeharu SAKAI	Hypersonic and High-temperature Gas Dynamics, Computational Fluid Dynamics
AIS	Professor	Takehisa YAIRI	Artificial Intelligence and Machine Learning for Space Systems
AIS	Lecturer	Naoya TAKEISHI	Machine Learning, Dynamical System
RCAST	Professor	Eri ITOH	Air Traffic Management, Air Transport System
ISAS/JAXA	Professor	Kenji MINESUGI**	Space Vehicle Structures
ISAS/JAXA	Professor	Hiroyuki OGAWA	Thermal-Fluids Engineering
ISAS/JAXA	Professor	Kazutaka NISHIYAMA	Electric Propulsion
ISAS/JAXA	Professor	Satoshi NONAKA	Aerodynamics of Launch Vehicle Space Transportation System
ISAS/JAXA	Professor	Hiroaki KOBAYASHI	Air-Breathing Engine, Hypersonic Propulsion
ISAS/JAXA	Professor	Akira OYAMA	High Speed Fluid Dynamics, Design Engineering
ISAS/JAXA	Professor	Yuichi TSUDA	Spacecraft system, Orbital Dynamics, Astrodynamics