2022 Academic Year

Procedure for admitting students to the Doctoral Program in the Graduate School of Systems Engineering, Wakayama University

1. Admission quota

Specialty	Cluster (Research Area)	Admission quota	Remarks
Systems Engineering	Communication Science	8	Secondary admissions will only be held when the admission quota has not been reached. Information on secondary admissions will be announced on the website of the Graduate School of Systems Engineering (https://www.wakayama-u.ac.jp/sys/grad_sys/), following the announcement of successful applicants.
	Advanced Informatics and Mechatronics		
	Intelligence Science		
	Design Science		
	System Intelligence		
	Physical Science and Engineering		
	Nanomaterials		
	Nanotechnology		
	Intelligent modeling		

2. Application qualifications

Qualified applicants must fall under any one of the following items at the time of their application.

(1) A person who has, or expects to obtain by March 2022, a Master's Degree or a professional degree (as prescribed in Degree Regulations, or Ordinance No. 9 of the Ministry of Education of 1953, Article 5-2, under the provisions of Article 104, paragraph 1 of the School Education Act; same shall apply hereinafter)

(2) A person who has been awarded, or expects to be awarded by March 2022, a degree equivalent to a Master's Degree or a professional degree overseas

(3) A person who has, while in Japan, completed a course of study in communication education conducted by an overseas school; he/she has been awarded, or expects to be awarded by March 2022, a degree equivalent to a Master's Degree or a professional degree

(4) A person who has completed a course that the Minister of Education, Culture, Sports, Science and Technology has specified separately; he/she has been awarded, or expects to be awarded by March 2022, a degree equivalent to a Master's Degree or a professional degree at an educational institution in Japan, which is positioned as a school with a course in a graduate school in a foreign country under the school educational system of that country

(5) A person who has completed a course at the United Nations University, which has been established under a decision by the General Assembly of the United Nations on December 11, 1972, based on the provisions of Article 1 paragraph 2 of the Act on Special Measures Incidental to Enforcement of the "Agreement Between the United Nations and Japan regarding the Headquarters of the United Nations University" (Law No. 72 of 1976); he/she has been awarded, or expects to be awarded by March 2022, a degree equivalent to a Master's Degree or a professional degree

(6) A person who has completed an educational course at a school in a foreign country, at an educational facility specified under Article 156, item (3) of the Enforcement Regulations of the School Education Act or the United Nations University; he/she has obtained qualification equivalent to an examination or a

review under the provisions of Article 16-2 of the Standards for Establishment of Graduate Schools, and has been confirmed to possess scholastic ability equal or superior to that possessed by a holder of a Master's Degree

(7) A person designated by the Minister of Education, Culture, Sports, Science and Technology (Notification No. 118 of the Minister of Education of 1989)

(8) A person who has been confirmed by a separate admission qualification review for this graduate faculty to have scholastic ability equal or superior to that possessed by a holder of a Master's Degree or a professional degree, and who will be 24 years old by March 2022

[Note1] For persons who wish to apply based on Application Qualifications (6), (7), or (8), an Application Qualification Review is performed in advance; such person is requested to complete procedures in accordance with [3. Concerning the Application Qualification Review] in the following page.

[Note2] A person "designated by the Minister of Education, Culture, Sports, Science and Technology," which is under Application Qualification (7), satisfies one of the following required conditions.

1. A person who has conducted research in a university and a research institute, among others, for at least two years after graduating from university, and has demonstrated that his/her scholastic ability is equal or superior to that possessed by a holder of a Master's Degree, through achievements of the said research in this graduate faculty

2. A person who has completed 16 years of school education overseas or in a foreign country, by completing a course of study in communication education offered by a school in a foreign country at a school in Japan, has conducted research in a university and a research institute for at least two years, and has demonstrated that his/her scholastic ability is equal or superior to that possessed by a holder of a Master's Degree

[Note3] For a person who, as a graduate of a university, junior college, higher technical college, higher vocational school, or other type of school, or one who has completed study at the Japanese branch of a foreign university, are not qualified for admission to a graduate school and wishes to apply under Application Qualification (8), an Admission Qualification Review (a separate review of scholastic ability in this graduate program) shall be conducted.

3. Concerning the Application Qualification Review

For a person who wishes to apply based on Application Qualifications (6), (7), or (8), an Application Qualification Review will be conducted before he/she applies. Thus, such persons are requested to submit the concerned documents by a designated submission deadline under the following procedure.

To submit the documents, please make sure to obtain approval of the academic supervisor of the desired cluster. Personnel information obtained from the following submitted documents will not be used for any purpose other than those related to admission to this university.

(1) Documents to be submitted

Documents to be submitted	Remarks
① Request for an Application Qualification Review	Format as specified by this Graduate School. It shall be stamped with the seal of approval of the academic supervisor the desired cluster.
② Graduation (completion) certificate	It is a certificate prepared by the latest school attended.
③ Transcripts	They are prepared and sealed by the last school attended.
④ Explanation of a learning situation	Please list items, as instructed below, showing that your learning situation is equal to or higher than the completion of the Master's Course at a graduate school.

		(The list is provided in an A4 paper with an affixed seal. Format details are optional.) ・ Numbering: numbered serially starting with number 1 ・ Each item of a learning situation – one of the following Academic essay, presentation to an academic conference, patent, published work, technology development, project participation, etc. ・ Item name and reference information For an essay: name of the item and paper title; academic journal name, volume, volume number, number of pages, name of publisher, year of publication, and collaborators, etc.(as reference information); and any information that can be used to specify the item studied in corresponding detail (as other information) ・ Item details --- about 200 characters
⑤	Documents regarding Application Qualification (6)	Only persons who wish to apply under Application Qualification (6) Prepared (and signed) by the president of the applicant's university, with a format including the following matters and attached documents [Sample format] As the representative of ---- University, I have confirmed and report that ---------, who is a student of this university passed the (name of examination) and has scholastic ability equal to or greater than that of a person who has earned a Master's Degree. I have enclosed the following attached documents concerning the said examination. (In the case of a foreign language, a Japanese translation is attached.) [Examples of attached documents] [1] Qualifying standards of the said examination (In the case of a foreign language, a Japanese translation is attached.) [2] Documents indicating the relationship between passing the said examination and conditions for granting the Master's Degree at the said university (In the case of a foreign language, a Japanese translation is attached.) [3] Documents indicating the relationship between the treatment of the person who passed the said examination with that of a person with the Master's degree of another university who has been admitted and allotted to a class at an appropriate level in the said university in a program that awards the PhD in the said university (In the case of a foreign language, a Japanese translation is attached.)

[Note1]   In addition to the above, the applicant may be asked for documents needed for the examination.

[Note2]   In case the above-submitted documents are written in a foreign language other than English, please attach a Japanese or English translation. If a document concerning ⑤Admission Qualification [6] is written in a foreign language, please attach a Japanese translation.

(2) Submission deadlines

    Primary admissions: Documents must arrive by 5:00 PM on June 11 (Fri.), 2021

    Secondary admissions: Documents must arrive by 5:00 PM on October 28(Thu.), 2021

- Documents will be accepted between 9:00 AM and 5:00 PM
- To submit by postal service, please use a square No. 2 size envelope, and mail it as registered express mail so that it definitely arrives before the submission deadline. The university will not accept the documents if they arrive after the submission deadline.

(3) Review method

The review will be conducted using the submitted documents.

(4) Notification of the review results

The review results will be sent by post by the following dates.

Primary admissions: About June 25 (Fri.), 2021

Secondary admissions: About November 12 (Fri.), 2021

(5) Recipient and inquiries

Systems Engineering Unit, Teaching and Learning Division, Wakayama University

930 Sakaedani, Wakayama City, 640-8510

TEL   073 - 457- 8021

4. Application Procedure

(1) Application Documents, etc.

Personal information learned from the following submitted documents, among others, will not be used for any purpose other than those related to admission to this university.

Submitted documents	Remarks
Application for admission	On the form designated by this graduate school, please print clearly the requested information. Please make sure to state the cluster you wish to enter. To pay the review fee, please paste a bank-transfer received certificate (Voucher C) or a handling statement issued by a financial institution or convenience store to the designated box. (* the bank-transfer received certificate, or Voucher C). A handling statement is not necessary for applicants who are predicted to complete the former doctoral program (Masters Course) in this postgraduate school in 2021 academic year.
Exam admission ticket photo card	On the form designated by this graduate school, please print clearly the requested information.
Written explanation of past studies	Please give an outline of the studies you conducted in your Master's course in your graduate school (or equivalent activities) in about 2,000 characters (printed on A4). Details of the format are optional.
Written research plan	Please give an outline of the research you plan to conduct in the doctoral program after entering this graduate school in about 2,000 characters. Refer to Educational and Research Fields in the Faculty of Systems Engineering Graduate School (This plan is printed on A4. Details of the format are optional).
Master's Course (former doctoral program) completion certificate or Completion prediction certificate	Persons applying under Application Qualifications (1), (2), (3), (4), or (5). Prepared and sealed by the president of your university or dean of your graduate school.

Graduate school academic transcripts	Persons applying under Application Qualifications (1), (2), (3), (4), or (5). Prepared and sealed by the president of your university or dean of your graduate school.	
Notice of results of Application Qualification Review	Persons applying under Application Qualifications (6), (7), or (8). Returned after confirmation.	
Degree conferment certificate	This document is submitted in cases in which a degree was conferred under the provisions of Article 104, paragraph 4 of the School Education Act.	
Resident card (alien registration card) or copy of passport	This is submitted only by citizens of foreign countries. Foreigners who have been issued a Resident Card (or alien registration card) are requested to submit copies of the front and back of their card. Foreigners who have not been issued a Resident Card (or alien registration card) are requested to submit copies of their passport (the page showing their nationality, name, and their resident status and length of residency.	
Review fee (JPY 30,000)	Please pay this fee by one of the following payment methods. ※This is not necessary for applicants who are predicted to complete the former doctoral program (Masters Course) in this postgraduate school in 2021 academic year.	
	Financial institution	Please forward the fee by submitting the enclosed bank transfer request at the counter of a financial institution.
	Convenience store	Please pay during the following payment periods. Please make sure to check the following website for the payment method. 【Payment period】 Primary admissions: from July 1 (Thu.) to 3:00 PM on July 21 (Wed.), 2021 Secondary admissions: from November 1 (Mon.) to 3:00 PM on November 22 (Mon.), 2021 【Payment method etc.】 https://e-shiharai.net/
Address seal	On the form designated by this graduate school, please enter clearly your address, name, and postal code.	
Envelope used to send the exam admission ticket	On the envelope designated by this graduate school, please enter clearly your address, name, and postal code and affix it with a JPY-374 postage stamp.	

(2) Precautions when applying

[1] If submitted documents are incomplete, in principle, the application will not be accepted.

[2] After the receipt of an application, no revision of any items entered in the application will be permitted.

[3] No submitted documents received will be returned.

[4] If an applicant has made a false statement in a submitted document, even after the applicant's admission has been decided, the admission will be cancelled.

[5] After receiving an application, a request may be made for required documents by this graduate school in addition to the documents that must be submitted as stipulated in (1).

[6] If any document that has been submitted is written in a foreign language other than English, please attach a Japanese or English translation of this document.

(3) Deadline of submission and receipt of the documents to be submitted

Applicants are requested to gather all the above-stipulated documents, and then submit them by the following application deadline.

Primary admission: Documents must arrive between July 19 (Mon.) and 5:00 PM on July 21 (Wed.), 2021.

Secondary admission: Documents must arrive between November 18 (Thu.) and 5:00 PM on November 22 (Mon.), 2021.

・ Documents will be accepted between 9:00 AM and 5:00 PM at the reception counter.

・ To submit by post, please use the envelope specified by this graduate school, and mail it as registered express mail so that it definitely arrives before the submission deadline. We will not accept the documents if they arrive after the submission deadline.

Recipient of submitted documents

Systems Engineering Unit, Teaching and Learning Division, Wakayama University
930 Sakaedani, Wakayama City, 640-8510

5. Selection method

Successful applicants are decided based on the review of the submitted documents, such as the Written Explanation on Past Studies and Written Research Plan, and the results of the interview (oral examination).

(1) Interview (Oral Examination)

Interviews are held individually, with the questions focused on specialized fields related to the applicant's submitted Written Explanation of Past Studies and Written Research Plan.

Dates: Primary admissions: August 28 (Sat.), 2021

Secondary admissions: December 4 (Sat.), 2021

Applicants are notified separately of the assembly time.

Place: Bldg. North1(Faculty of Systems Engineering), Wakayama University

(2) Sending the exam admission tickets

The exam admission tickets will be sent a week before the exam.

(3) Examination regulations

・ Information on, among others, interview room will be announced on the day of the examination.

・ If an applicant arrives after the assembly time, we will assume that this applicant has decided not to take the exam.

・ Please prepare so that you can take the examination even in circumstances, such as a disruption of transportation systems on that day.

・ The assembly time for the examination of each person being examined will be indicated on the exam admission tickets.

・ Applicants are requested to arrange individually for a lodging or a hotel to take the exam.

6. Announcement of the successful applicants

Primary admissions: 10:00 AM, September 9 (Thu.), 2021

Secondary admissions: 10:00 AM, December 10 (Fri.), 2021

● The results will be displayed in the entrance hall of the Faculty of Systems Engineering, Wakayama University.

● Letters will be sent to the successful applicants, informing them that they have qualified for admission.

- We will not answer phone inquiries on the results of the examination.
- Examination numbers of the successful applicants will be listed on the webpage of this graduate school. (https://www.wakayama-u.ac.jp/sys/grad_sys/) (period listed: from 12:00 PM on the announcement day to 5:00 PM a week later)

※ This is conducted as part of the provision of information by this faculty; the official announcement methods are the abovementioned display and notifications of admission mailed to the successful applicants. Please also understand that the results may not be accessible depending on the state of communication circuits and equipment.

7. Admission period
The admission period is April 2022.

8. Admission procedure
The admission procedure is outlined below. Required documents for the admission procedure will be sent to the successful applicants in the first 10 days of February 2022.

Persons who have already graduated: By February 15 (Tue.), 2022 (planned)

Persons expecting completion: By March 27 (Sun.), 2022 (planned)

- A successful applicant who has not yet completed the admission procedures in the admission period will be considered to have decided not to be admitted.

9. Admission fee and tuition
(1) Admission fee: JPY 282,000
(2) Tuition: JPY 267,900 (for first semester) (annual fee: JPY 535,800)
   - ・ The amount shown above is the fee for 2021 academic year. The amount to be paid for the 2022 academic year will be announced separately as soon as it has been decided.
   - ・ A person admitted may, if he/she wishes to do so, pay the tuition for the second semester at the same time as that for the first semester.

10 Other matters
- The numbers of applicants, of persons taking the examination, who successfully passed the examination, and of admitted persons will be listed on the website. (However, the number of admitted persons will be listed after it is confirmed next academic year).
- Personal information learned through this selection process will not be used for any purpose other than those related to admission to this university.
- If you wish to be sent an application handbook by mail, please access the website to submit a request, or inquire directly at the location indicated below.

◇To request an application handbook or submit an inquiry◇

Systems Engineering Unit, Teaching and Learning Division, Wakayama University

930 Sakaedani, Wakayama City, 640-8510

TEL. 073-457-8021 (Direct line)

E-mail: sysgakumu@ml.wakayama-u.ac.jp

Website: https://www.wakayama-u.ac.jp/sys/grad_sys/

［Website］

Guide to the Doctoral Program in the Graduate School of Systems Engineering

1. Outline of the graduate school

To respond to the present rapid advancement and development of individual fields of science and technology by directing these toward the creation of a more desirable social environment, it is necessary to clarify the latent relationships between individual technologies to improve and apply their synergy effects. System engineering is undoubtedly the academic discipline that pursues this technological capability. Its final goals must be the overall clarification of challenges, consisting of more complex factors and their surrounding circumstances to set goals and purposes appropriately and develop people's ability to identify partial problems and reintegrate individual solutions to these problems. The Doctoral Programs offered by this Graduate School is intended to attain the top rank in system engineering to contribute to the improvement of the social environment and help make Japan a leader of world technology.

The Graduate School offers doctoral programs divided into a former 2-year and a latter 3-year. To train personnel to be able to resolve problems from varied perspectives and who will be in actual demand in the industry, system engineering is offered as a single major in the program. Nine clusters that tackle the latest cross-discipline challenges are established for the students to put the principles of system engineering into practice, and are offered as working units of dynamic educational research that can equip students to respond nimbly to the rapid change of the social environment.

2. The curriculum and its characteristics

The doctoral program in this Graduate School features a highly practical curriculum instead of an educational research guidance intended to write research papers.

In principle, educational research guidance is an open educational research system closely linked to exchanging views with cooperating researchers during joint research with, among others, corporations, research institutes, consortiums, and task forces of academic associations, or with other universities, particularly foreign universities, intended to develop students' practical ability to constantly and accurately grasp the latest needs and technology trends in society and the industrial world, and to play key roles in tackling technological challenges in the face of these needs and trends.

Our approach demands verification of the applicability of research instead of considering publication to be the ultimate goal. In addition to aiming for practical systems, analyzing necessities, clarifying goals, and developing design, realization, and applied technologies, we provide educational research that is conscious of links between various aspects of technology and society, including estimating cost, planning resources allotment, controlling risk, marketing strategies, and service development strategies.

3. Course registration procedure and research guidance in the doctoral program

(1) List of available courses and registration methods

• Special Study of System Engineering I (2 credits)

According to their major, students take part in exercises to master techniques for developing and integrating research goals and challenges and methods of composing technical documents, and presentation and discussion of technologies by surveying and examining examples of R&D inside and outside of Japan.

• Special Study of System Engineering II (2 credits)

According to their major, students take part in exercises to master problems on characteristic of system engineering, such as the complex interaction between technologies, correlation of technology and the changing social environment, and methods of overcoming these problems, by searching for innovative and positive research trends inside and outside of Japan and analyzing their impact on related fields.

• Special Research on System Engineering (6 credits)

A course corresponding to research guidance

The above three courses worth a total of 10 credits are completed as compulsory courses.

(2) Research guidance

The course nurtures the students' ability to search for R&D challenges with superior novelty and usefulness according to each of their major, discover suitable resolution methods, and conduct actual development work. By also exchanging views with the supervising faculty members during joint research, the latter is involved in performing evaluations appropriately from various perspectives, including practicality. It also trains students to adjust the orientation of R&D.

Rather than putting too much priority on research reports, it demands a level that permits students to express their basic ideas about R&D in academic papers for concerned academic societies.

(3) Conditions for completion

It is necessary to be registered for at least three years in the doctoral program, earn the stipulated credits, receive the required research guidance, pass a review of a Doctoral thesis, and pass an examination given by the Postgraduate School of Wakayama University. However, for persons who have been confirmed to have achieved superior research results, the registration period may be shortened.

(4) Degree granted

The Degree of Doctor of Engineering

4. Admission policies

The Postgraduate Graduate School doctoral program demands that to achieve the goal of obtaining the PhD degree, students offer and verify novel and useful technical and academic proposals in their respective specialties. Therefore, to be admitted to the doctoral program in the Postgraduate School, students must grasp trends in each special field and, at the same time, related fields, as they possess a range of expertise in a number of specific fields.

5. Support for students in the doctoral program

For more details, visit the website of this graduate school

(https://www.wakayama-u.ac.jp/sys/grad_sys/admission/index.html).