### **Graduate School of Advanced Science and Engineering**

(Doctoral Course)

**Division of Advanced Science and Engineering** 

## Special Selection for International Students [For Students Living in Japan] Application Guidebook

**Mathematics Program** 

**Physics Program** 

**Earth and Planetary Systems Science Program** 

**Basic Chemistry Program** 

**Applied Chemistry Program** 

**Chemical Engineering Program** 

Electrical, Systems, and Control Engineering Program

**Mechanical Engineering Program** 

**Transportation and Environmental Systems Program** 

**Architecture Program** 

**Civil and Environmental Engineering Program** 

**Informatics and Data Science Program** 

**Quantum Matter Program** 

**June 2020** 



### Division of Advanced Science and Engineering of the Graduate School of Advanced Science and Engineering (Doctoral Course) Admission Policy

The Division of Advanced Science and Engineering of the Graduate School of Advanced Science and Engineering seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research;
- ② The will to take the leading role in professional occupations such as researchers and engineers in areas related to natural science, engineering, and information science;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring sophisticated knowledge and study skills for the academic areas related to natural science, engineering, and information science as well as a wide range of intelligence; and
- (4) Common sense as a member of society and ethics required for researchers and highly-professional engineers.

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### I Programs and Number of Students to be Admitted

The Division of Advanced Science and Engineering of Graduate School of Advanced Science and Engineering in Hiroshima University will accept applicants who are residing in Japan for admission to the Doctoral Course as indicated below for October 2020 admission.

### [October 2020 Admission]

Division	Program	Capacity	Admission Capacity	Contact Submission address for application documents
	Mathematics Program		Several students	Support Office for the fields of Science 739-8526 1-3-1 Kagamiyama, Higashi-Hiroshima Tel: 082-424-7309, 4468
	Physics Program			
	Earth and Planetary Systems Science Program			
	Basic Chemistry Program			
ivisi	Applied Chemistry Program			
on of	Chemical Engineering Program			
Adva	Electrical, Systems, and Control Engineering Program	128		
anced	Mechanical Engineering Program			Support Office for the fields of Engineering 739-8527
Division of Advanced Science and Engineering	Transportation and Environmental Systems Program			1-4-1 Kagamiyama, Higashi-Hiroshima Tel: 082-424-7518
and I	Architecture Program			
Engine	Civil and Environmental Engineering Program			
ering	Informatics and Data Science Program			
	Quantum Matter Program			Support Office for the fields of Science 739-8530 1-3-1 Kagamiyama, Higashi-Hiroshima Tel: 082-424-7008, 7009

(Caution)

This selection for October 2020 admission is not applied to the following programs:

Smart Innovation Program, Transdisciplinary Science and Engineering Program (Environmental and Natural Sciences) Transdisciplinary Science and Engineering Program (Development Sciences)

Consult with the faculty who is expected to be your advisor about your research theme before applying. For the information regarding faculties of the Graduate School of Advanced Science and Engineering, refer to the following web site.

URL https://www.hiroshima-u.ac.jp/en/adse/research

### **II** Outline of Entrance Examination

### 1. Schedule of the Entrance Examination

Application period	Date of the entrance examination	Examination subject	Examination result announcement
Friday, July 17, 2020 - Monday, July 27, 2020	A day between Monday, August 3, 2020 and Friday, August 28, 2020, specified by the head of the Program.	Oral examination	Friday, September 4, 2020 12:00 (tentative schedule)

### (Caution)

Specific schedule of the entrance examination will be notified by the head of the program to which you will apply.

### 2. Application Eligibility, Required Documents and Selection Process

Refer to the description of the application eligibility, required documents and selection process (examination subject, basic policy, and evaluation criteria) for each Program listed in the section "III Application Eligibility, Required Documents and Selection Process" in page 6.

### 3. Application Procedure

- (1) Your application will be accepted via internet during the application period.
  - Refer to the procedure described in the section "IV Application Procedure" (page 18 to 19).
- (2) Deliver or mail your application documents specified by the Program to the submission address for application documents listed in the previous section "I Programs and Number of Students to be Admitted" (page 4)

The contact desk is opened from 8:30 to 17:00 during the application period for the applicant who delivers the application documents.

In the case of submission via mail, the documents must be sent in a registered mail and reach us no later than 17:00, Monday, July 27. The documents that will be received after the date shall be accepted only when it is postmarked no later than Friday, July 24.

### 4. Result Announcement

We will send the acceptance certificate and the admission guide to the accepted applicants by mail. An announcement will also be made on the web site of Graduate School of Advanced Science and Engineering, Hiroshima University (https://www.hiroshima-u.ac.jp/adse). The announcement on the web site is made as part of information provision and does not grant admission officially in any way. Only mailing of the acceptance certificate should be regarded as an official announcement of admission. Please also note that an announcement will not be made through posting on the bulletin board on campus.

(We do not answer any inquiry via phone.)

# **III** Application Eligibility, Required Documents and Selection Process

Note that the application eligibility, required documents and selection process for the application vary for each program.

For the detail, refer to the page listed in the table below.

Program	Category	Page(s) to be referred
Mathematics Program		
Physics Program		
Earth and Planetary Systems Science Program	Science Programs	Pages 7 to 10
Basic Chemistry Program		
Applied Chemistry Program		
Chemical Engineering Program		
Electrical, Systems, and Control Engineering Program	Engineering Programs &	
Mechanical Engineering Program		
Transportation and Environmental Systems Program	Informatics and Data Science Program	Pages 11 to 15
Architecture Program		
Civil and Environmental Engineering Program Informatics and Data Science		
Program Program		
Quantum Matter Program		Pages 16 to 18

### **Science Programs**

# (Mathematics / Physics / Earth and Planetary Systems Science / Basic Chemistry)

### 1. Admission Policy

### [Mathematics Program]

The Mathematics Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① A strong questing mind for the mathematical truth and an ambition to take a role as a leading researcher in specialized and/or cross-disciplinary research of mathematics;
- ② The will to take the leading role in professional occupations such as researchers, educators, and highly-professional engineers in mathematics areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to mathematics as well as a wide range of intelligence; and
- (4) Common sense as a member of society and ethics required for researchers.

### [Physics Program]

The Physics Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① The will to work in the frontier field in areas of physics based on the point of view of researchers in the internationally top level;
- ② The will to take the leading role in professional occupations such as researchers, educators, and highly-professional engineers in areas related to physics based on the basic knowledge of cutting edge physics;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to physics as well as a wide range of intelligence; and
- ④ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Earth and Planetary Systems Science Program]

The Earth and Planetary Systems Science Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for acquiring advanced expertise and research techniques related to the earth and planetary systems science to take the leading role in advanced and prominent research activities;
- ② The will to take the leading role in professional occupations such as researchers educators, and highly-professional engineers in earth and planetary science areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring knowledge and study skills for the academic areas related to mathematics as well as a wide range of intelligence, in addition to a strong curiosity about not only the earth and planetary systems science but also for the other areas; and
- ④ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Basic Chemistry Program]

The Basic Chemistry Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research:
- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in basic chemistry areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to basic chemistry as well as a wide range of intelligence; and

① Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### 2. Application Eligibility

A person who is of a non-Japanese nationality, live in Japan at the time of application for admission, and falls under any of the following items or who is likely to fall by the date of admission;

- (1) A person who has a master's degree or a professional degree;
- (2) A person who was awarded a degree equivalent to a master's degree or a professional degree in a country other than Japan;
- (3) A person who studied class subjects provided by a foreign school as a correspondence course in Japan and earned a degree equivalent to a master's degree or a professional degree;
- (4) A person who passed through an education course provided by a foreign education institution which is established within the school education system in the concerned foreign country and is approved by the Minister of Education, Culture, Sports, Science and Technology and earned a degree equivalent to a master's degree or a professional degree;
- (5) A person who passed through an education course of the United Nations University and earned a degree equivalent to a master's degree;
- (6) A person who passed through an education course of a national school, an education institute defined in the item (4) above, or the United Nations University, got through the examination and qualification defined in the item 2 of Article 16 of the Graduate School Establishment Standards, and approved as a person who have academic capabilities equivalent or superior to those of master's degree holders;
- (7) A person who is designated by the Minister of Education, Culture, Sports, Science and Technology (Notification of the Ministry of Education, Culture, Sports, Science and Technology, No. 118 of September 1, 1989);
  - (a)A person who has been engaged in research activities in a university or research institute for two years or more and whom this Graduate School approved to have academic capabilities equivalent or superior to those of master's degree holders according to the result of the concerned research activities; or
  - (b) Graduated from a university or passed through a 16-year education course in a foreign school and then has been engaged in research activities in a university or research institute for 2 years or more; and
  - (c) Has a research result such as a publication, academic paper, academic lecture, academic report, or patent that the Graduate School of Advanced Science and Engineering approve to be equivalent to a master's thesis.
- (8) A person who is approved to have academic capabilities equivalent or superior to those of master's degree or professional degree holders according to the result of the admission qualification examination that is separately conducted and is 24 years or older at the time of the admission.

### (Caution)

- (1) The applicant who meets or is expected to meet either of the item (1) to (6) above must have the qualification by September 30, 2020.
- (2) The applicant who falls under the category of the item (7) or (8) above must refer to the next section "3. Prerequisites for Application."

### 3. Prerequisites for Application

(1) Preliminary Evaluation

The applicant who falls under the category of the item (7) or (8) must undergo a preliminary evaluation of application eligibility. The concerned applicant must follow the following procedure.

a) Application Period

Monday, July 6, 2020 - Friday, July 10, 2020 no later than 17:00

(In the case of submission via mail, the documents must be sent in a registered mail. Indicate the phrase "Application Form for Preliminary Evaluation is enclosed." in red on the front surface of the envelope.)

b) Application Documents

Download the specified forms (a, b, f, g, h, i and j) from the web site of the Graduate School of Advanced Science and Engineering.

	Document Name	Note
a	a Application Form for Use the specified form to prepare.	

	Preliminary Evaluation	
b	Record of Application Eligibility Evaluation	Use the specified form to prepare.
c	Academic transcripts	Issued by the president of the university or the dean of the faculty from which the applicant has graduated.
d	Graduation certificate	Issued by the president of the university or the dean of the faculty from which the applicant has graduated.
e	Research Achievements	Use the specified form to prepare.
f	List of Research Achievements	Use the specified form to prepare.
g	Reasons for Application	Use the specified form to prepare.
h	Research Plan	Use the specified form to prepare.
i	Return Envelope	Use standard envelop (12cm×23.5cm in size) and fill out your address; affix a 374-yen stamp to the front.

(Caution) It is required to attach the English or Japanese translation to the application document written in the other language.

- (2) The evaluation results will be notified to the applicant by Tuesday, July 14, 2020.
- (3) The applicant who has successfully passed a preliminary evaluation must submit the application documents (except the ones which have been already submitted in a preliminary evaluation) specified for each program. Refer to the page listed in the section "4. Application Documents ".

### 4. Application Documents

After making the application via internet, submit all the documents listed below at once during the application period to the address indicated in the "Submission Address for Application Documents" (pages 5).

No	Document Name	Note		
1	Academic transcripts of	Issued by the president of the university (the dean of the faculty) from		
1	the undergraduate school	which the applicant graduated.		
2	Academic transcripts of	Issued by the president of the un	iversity (the dean of the graduate	
	the graduate school	school) from which the applicant g		
			versity or the dean of the graduate	
		school which you have graduated.		
			or is expected to graduate from the	
			oshima University (Master Course)	
		need not submit this document.		
			or is expected to graduate from a	
			in Taiwan, Hong Kong, and Macao)	
_	Graduation certificate or certificate of expected graduation	is required to obtain and submit the Graduate	Prospective Graduate	
3		・教育部学历证书电子注册备案表*	・教育部学籍在线验证报告*	
		・毕业证书	・毕业预定证书	
		・学士(硕士)学位证书		
		* Obtain the document for which the	ne Web authentication will be valid	
		as of Tuesday, August 11, 2020	via the authentication system of the	
		Ministry Education of China (中	国高等教育学历证书查询).	
		http://www.chsi.com.cn/xlcx/bg	ys.jsp	
	M Tri :	Copy of Master's thesis		
1	Master's Thesis or	Applicants scheduled to com	plete the master's program: a	
4	Summary of Master's		(in free format printed on about	
	Thesis	two A4-size sheets)		
		Use standard envelope (12cm×23.5	cm in size) and fill out your address	
5	Return envelope		p to the front (for sending the	
		Examination Card).	_	

- (Caution 1) It is required to attach the English or Japanese translation to the application document written in the other language.
- (Caution 2) The applicant who has successfully passed a preliminary evaluation of application eligibility need not submit the document No. 1, 2 and 3 above.

### **5. Selection Process**

### (1) Basic Policy

### oMathematics Program

The academic aptitude of an applicant is evaluated by a presentation of his/her master's dissertation and an oral examination. The academic aptitude examination evaluates whether the applicant is inspired to carry out research after admission, and whether he/she has acquired the basic academic abilities necessary for carrying out research in the field he/she will specialize in. If the applicant has published an academic paper, the content of the paper is also evaluated at the time when his/her academic transcript is evaluated. Admission to the course is determined based on a comprehensive review of the result of the academic aptitude examination and these evaluations.

### OPhysics Program

To confirm whether an applicant has acquired specialized knowledge and linguistic ability in the master's program and to evaluate whether the applicant can engage in academic activities in accordance with the Curriculum Policy of the course, an academic aptitude examination (oral) is given to the applicant. Whether the applicant has the qualities necessary for the Doctoral Program is determined based on the academic transcript of the applicant.

### oEarth and Planetary Systems Science Program

To evaluate whether an applicant can engage in academic activities in accordance with the Curriculum Policy of the course, an oral examination is given to the applicant. The result of the oral examination is evaluated by a grade-based score. Admission to the course is determined by comprehensively evaluating the result of the examination and the academic transcript of the applicant.

### OBasic Chemistry Program

The admission of a foreign applicant is determined by comprehensively evaluating the result of the academic aptitude examination (oral) and the academic transcript of the applicant. The academic aptitude of an applicant is evaluated by a presentation of his/her master's dissertation and an oral examination.

### (2) Evaluation criteria

As for the evaluation criteria for the oral examination and document examination, four-level evaluation (A, B, C, D) is performed.

### (3) Date and Time of the oral examination

Oral examination will be held during the period described in "1. Schedule of the Entrance Examination" in "II. Outline of Entrance Examination" (page 7). Specific schedule of the oral examination will be notified by the head of the program to which you will apply.

# **Engineering Programs & Informatics and Data Science Program**

(Applied Chemistry / Chemical Engineering / Electrical, Systems, and Control Engineering / Mechanical Engineering / Transportation and Environmental Systems / Architecture / Civil and Environmental Engineering / Informatics and Data Science)

### 1. Admission Policy

### [Applied Chemistry Program]

The Applied Chemistry Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research;
- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in applied chemistry areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to applied chemistry as well as a wide range of intelligence; and
- 4 Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Chemical Engineering Program]

The Chemical Engineering Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research:
- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in chemical engineering areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the chemical engineering as well as a wide range of intelligence; and
- ① Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Electrical, Systems, and Control Engineering Program]

The Electrical, Systems, and Control Engineering Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research:
- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in areas related to electrical engineering and systems engineering that constitutes the core of the electrical, systems, and control engineering;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the electrical, systems, and control engineering as well as a wide range of intelligence; and
- ④ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Mechanical Engineering Program]

The Mechanical Engineering Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary

research:

- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in mechanical engineering areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the mechanical engineering as well as a wide range of intelligence; and
- 4 Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Transportation and Environmental Systems Program]

The Transportation and Environmental Systems Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research;
- ② The will to take the leading role in professional occupations such as researchers and engineers in areas of the transportation system engineering or the environmental system engineering;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the transportation system engineering and the environmental system engineering as well as a wide range of intelligence; and
- ④ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Architecture Program]

The Architecture Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research;
- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in architecture areas;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to architecture as well as a wide range of intelligence; and
- ④ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Civil and Environmental Engineering Program]

The Civil and Environmental Engineering Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research;
- ② The will to take the leading role as a high-level engineer or researcher in areas of civil and environmental engineering including disaster prevention and mitigation engineering;
- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the civil and environmental engineering as well as a wide range of intelligence; and
- 4 Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### [Informatics and Data Science Program]

The Informatics and Data Science Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① An ambition for taking the leading role in advanced and prominent academic and inter-disciplinary research;
- ② The will to take the leading role in professional occupations such as researchers and highly-professional engineers in the informatics and data science;

- ③ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the informatics and data science as well as a wide range of intelligence; and
- ④ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### 2. Application Eligibility

The applicant is required to be a person who do not have Japanese nationality, resides outside Japan, meets or is expected to meet either of the following qualifications before the date of admission:

- (1) A person who has a master's degree or a professional degree;
- (2) A person who was awarded a degree equivalent to a master's degree or a professional degree in a country other than Japan;
- (3) A person who studied class subjects provided by a foreign school as a correspondence course in Japan and earned a degree equivalent to a master's degree or a professional degree;
- (4) A person who passed through an education course provided by a foreign education institution which is established within the school education system in the concerned foreign country and is approved by the Minister of Education, Culture, Sports, Science and Technology and earned a degree equivalent to a master's degree or a professional degree;
- (5) A person who passed through an education course of the United Nations University and earned a degree equivalent to a master's degree;
- (6) A person who passed through an education course of a national school, an education institute defined in the item (4) above, or the United Nations University, got through the examination and qualification defined in the item 2 of Article 16 of the Graduate School Establishment Standards, and approved as a person who have academic capabilities equivalent or superior to those of master's degree holders;
- (7) A person who is designated by the Minister of Education, Culture, Sports, Science and Technology (Notification of the Ministry of Education, Culture, Sports, Science and Technology, No. 118 of September 1, 1989);
  - (a)A person who has been engaged in research activities in a university or research institute for two years or more and whom this Graduate School approved to have academic capabilities equivalent or superior to those of master's degree holders according to the result of the concerned research activities; or
  - (b) Graduated from a university or passed through a 16-year education course in a foreign school and then has been engaged in research activities in a university or research institute for 2 years or more; and
  - (c) Has a research result such as a publication, academic paper, academic lecture, academic report, or patent that the Graduate School of Advanced Science and Engineering approve to be equivalent to a master's thesis.
- (8) A person who is approved to have academic capabilities equivalent or superior to those of master's degree or professional degree holders according to the result of the admission qualification examination that is separately conducted and is 24 years or older at the time of the admission.

#### (Caution)

- (1) The applicant who meets or is expected to meet either of the item (1) to (6) above before the date of admission must have the qualification by September 30, 2020.
- (2) The applicant who falls under the category of the item (7) or (8) above must refer to the next section "3. Examination of Application Eligibility and Evaluation."

### 3. Prerequisites for Application

(1) Preliminary Evaluation

The applicant who falls under the category of the item (7) or (8) above is required the preliminary evaluation for application eligibility and to carry out the procedure as follows;

(a)Application Period

From Monday, July 6, 2020 to Friday, July 10, 2020 (the deadline is 5 pm.)

(In the case of submission via mail, the documents must be sent in a registered mail with "Application Form for Preliminary Evaluation" in red on the envelop surface.)

(b) Documents to be submitted

Download the specified forms (1, 2, 4, 5 and 6) from the web site of the Graduate School of Advanced

Science and Engineering.

No	Document name	No	te
1	Application Form for Preliminary Evaluation	Use the specified form to prepare.	
2	Record of Application Eligibility Evaluation	Use the specified form to prepare.	
3	Academic transcripts of the last school	Issued by the president of the las graduated.	t school from which the applicant
4	Research Achievements	Use the specified form to prepare.	
5	List of Research Achievements		a publication, report, patent, utility py or abstract for all items of the esearch Achievements.
6	Reference for Educational Background	university in China (excluding that is required to obtain and submit the Graduate	or is expected to graduate from a in Taiwan, Hong Kong, and Macao) e following document:  Prospective graduate  · 教育部学籍在线验证报告 *  · 毕业预定证书  he Web authentication will be valid at the authentication system of the 国高等教育学历证书查询).
7	Return Envelope	Use standard envelop (12cm×23.5cm in size) and fill out your address; affix a 374-yen stamp to the front.	

### (Caution)

- (1) It is required to attach the English or Japanese translation to the application document written in the other language.
- (2) The result of the examination will be notified to the applicant by Tuesday, July 14, 2020.
- (3) The applicant who has successfully passed a preliminary evaluation should submit the following application documents (except the documents submitted for Examination of Application Eligibility and Evaluation) during the application period.

### 4. Application Documents

After making the application via internet, submit all the documents listed below at once during the application period to the address indicated in the "Submission address for application documents" in the page 4. Download the specified forms (4, 5, 6, 7, 8 and 9) from the web site of the Graduate School of Advanced Science and Engineering.

No	Document name	Note
1	Academic transcripts of the undergraduate school	Issued by the president of the university (the dean of the faculty) from which the applicant graduated.
2	Academic transcripts of the graduate school	Issued by the president of the university (the dean of the graduate school) from which the applicant graduated.
3	Graduation certificate or certificate of expected graduation	Issued by the president of the university (the head of the graduate school) from which the applicant graduated.  It is required for the applicant who falls under the category of the item (2) to (6).
4	Letter of Recommendation	Use the specified form to prepare.  Issued the last advisor or the head of the institution to which the applicant belongs.
5	Research Plan	Use the specified form to prepare.

6	Summary of Master's Thesis	an abstract of the master's thesis.	righ the master's course must submit. The applicant who has not passed resent the intermediate report of the
7	Research Achievements	Use the specified form to prepare.	
8	List of Research Achievements	Use the specified form to prepare.	
9	Reference for Educational Background	Use the specified form to prepare.  Only for the applicant graduated from a foreign university. Use the specified form to prepare. The applicant who has graduated or is expected to graduate from a university in China (excluding that in Taiwan, Hong Kong, and Macao) is required to obtain and submit the following document:  Graduate  Prospective graduate  * 教育部学历证书电子注册备案表*  * 毕业证书  * 学士(硕士)学位证书  * Obtain the document for which the Web authentication will be valid at Tuesday, August 11, 2020 via the authentication system of the Ministry Education of China (中国高等教育学历证书查询).http://www.chsi.com.cn/xlcx/bgys.jsp	
10	Copy of Residence Card	If your address is written on the back side of the card, make a two-sided copy.	
11	Return Envelope		cm in size) and fill out your address p to the front (for sending the

### (Caution)

- (1) It is required to attach the English or Japanese translation to the application document written in the other language.
- (2) The applicant who has successfully passed a preliminary evaluation need not submit the documents No.1, 2 and 3 above.

### 5. Selection Process

(1) Basic Policy

The selection will be made on the basis of the evaluation of academic ability (Oral Examination (including the presentation of Master's Thesis)) and Academic Transcripts totally.

- (2) Evaluation Criteria
  - The evaluation criteria for Oral Examination and Documents Screening is 4-grade evaluation (A, B, C and D).
- (3) Date of Oral Examination
  - Oral Examination will be held at each program during the application period in 1. Schedule of the Entrance Examination, II Outline of Entrance Examination (page 5).
  - In addition, the date and place will be notified to each applicant from the program concerned.

### **Quantum Matter Program**

### 1. Admission Policy

### [Quantum Matter Program]

The Quantum Matter Program seeks students who have the following aspirations and motivation and have the basic academic abilities necessary for it:

- ① The will to acquire sophisticated research ability and expertise to obtain the doctor degree and being engaged in advanced professional occupations such as researchers and engineers in area of the basic materials science, condensed material physics, material science and engineering, and electronic engineering;
- ② An ambition for unveiling new findings in physics and applying them in an engineering field and/or development of a integrated system regardless of the experience and background before entering the university;
- ③ A wish to build up new businesses as well as exploring scientific facts and applying scientific findings from the academic point of view;
- ④ A zeal for establishing the "science for sustainable development" from a multifaceted perspective and for solving regional and international issues by acquiring wide range of academic knowledge and study skills for the academic areas related to the basic materials science, condensed material physics, material science and engineering, and electronic engineering as well as a wide range of intelligence; and
- ⑤ Common sense as a member of society and ethics required for researchers and highly-professional engineers.

### 2. Application Eligibility

The applicant is required to be a person who do not have Japanese nationality, resides outside Japan, and meets or is expected to meet either of the following qualifications before the date of admission:

- (1) A person who has a master's degree;
- (2) A person who has been engaged in research activities in a university or research institute for two years or more and whom this Graduate School approved to have academic capabilities equivalent or superior to those of master's degree holders according to the result of the conserned research activities; or
- (3) A person who is approved to have academic capatilities equivalent or superior to those of master's degree or professional degree holders according to the result of the admission qualification examination that is separately conducted and is 24 years or older at the time of the admission.

#### (Caution)

The applicant who falls under the category of the item (2) or (3) above is required to submit documents for qualification during the period from Monday, July 6, 2020 to Friday, July 10, 2020.

Please contact with the person in charge in the address indicated in the column of "Contact" in Page 4 for more information.

### 3. Application Documents

After making the application via internet, submit all the documents listed below at once during the application period to the address indicated in the "Submission address for application documents" in the page 4. Download the specified forms (5, 6, 7 and 8) from the web site of the Graduate School of Advanced Science and Engineering.

No	Document name	Note
1	Academic transcripts (issued by all universities and graduate schools attended)	Issued by the president of the university (the head of the graduate school) from which the applicant has graduated.
2	Graduation certificate or certificate of expected graduation	Issued by the president of the university (the head of the graduate school) from which the applicant has graduated.  (If you have completed a Master's course, please make sure that the certificate includes information about your degree.)  The applicant who has graduated or is expected to graduate from a

			university in China (excluding that in Taiwan, Hong Kong, and Macao)		
			is required to obtain and submit the following document:		
			Graduate Prospective graduate		
			・教育部学历证书电子注册备案表 * · 教育部学籍在线验证报告 *		
			・毕业・学・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		
			・学士(硕士)学位证书		
			* Obtain the document for which the Web authentication will be valid at Friday, June 5, 2020 via the authentication system of the Ministry		
			Education of China (中国高等教育学历证书查询).		
			http://www.chsi.com.cn/xlcx/bgys.jsp		
	3	One copy of the master's thesis	The applicant who fall under the application eligibility category of the item (1)		
	4	Intermediate report for the research results obtained after graduating from the university	Select a format arbitrarily to prepare the document.  The applicant who fall under the application eligibility category of the item (2) or (3)		
	5	Research Plan	Use the specified form to prepare. (600 words or longer)		
	6	Research Achievements	Use the specified form to prepare.		
	7	List of Research Achievements	Use the specified form to prepare.		
	8	Letter of Recommendation	Use the specified form to prepare.  It is required to be prepared by the faculty who is expected to be the advisor of the applicant.		
	9	Score certificate of an English language ability examination	Score certificate of a language ability examination such as TOEFL and TOEIC		
1	0	Certificate of the Graduate Record Examinations (GRE) (voluntarily submitted)	Submit the certificate of GRE, if any.		
1	1	A copy of residence card	If applicant's address is written on the back side of the card, please make a both sided copy.		
1	12	Return Envelope	Use standard envelope (12cm×23.5cm in size) and fill out your address and name; affix a 94-yen stamp to the front (for sending the Examination Card)		

### (Caution)

It is required to attach the English or Japanese translation to the application document written in the other language.

### 4. Oral Examination

The oral examination will be given for areas listed below:

- (1) Reason for application
- (2) Research area and research plan for the Doctoral Course
- (3) Master's thesis
- (4) Basic knowledge in the area in which the applicant wants to conduct the research activities

### IV Application procedure

### (1) Application method

Apply via internet and submit the application documents.

- ① Input the information regarding the application on the web site.
- ② Pay the entrance examination fee of 30,000 yen.
- ③ Deliver or mail the application documents.

### (Caution)

The application via internet will not be completed when only the input of the information on the web site and the payment of the entrance examination fee are done. It is required to deliver or mail the application documents to be received before the deadline. The application will not be accepted when the applicant only sends the application documents.

### (2) Application period

The applicant must complete all the processes  $\bigcirc$ ,  $\bigcirc$ , and  $\bigcirc$  described under the above item (1) during the application period.

### Friday, July 17, 2020 - Monday, July 27, 2020 no later than 17:00 JST

In the case of ③(submission via mail), the documents must be sent in a registered mail and reach us no later than Monday, July 27. The documents that will be received after the date shall be accepted only when it is postmarked no later than Friday, July 24.

### (3) Application via internet

◆ Inquiry regarding the system

### Online application help desk (only Japanese language available)

Opened: 10:00 - 18:00 (closed in Saturday, Sunday, and national holidays from April to the end of July)

Tel: +81-50-3786-5124

### **UCARO Office (only Japanese language available)**

Opened: 10:00 - 18:00 (closed in the period from December 30 to January 3)

Tel: +81-50-3786-5524

○ About unclear points regarding the entrance examination, ask the inquiry contact indicated under the section "I Programs and Number of Students to be Admitted" (pages 5 - 6).

Opened: 8:30 - 17:00 (closed in Saturday, Sunday, and national holidays)

\* Please note that it is required to include the area code to dial if you call from the following areas, even when you call from an area of the same area code as that of the inquiry contact.

(Areas in Hiroshima City, Fuchu Town, Kaita Town, and Saka Town)

Complete the following 8 steps during the application period.

### **Step 1: Access the Online Application System.**

Access the following web page:

Hiroshima University's Admission Information https://www.hiroshima-u.ac.jp/en/nyugaku



### Step 2: Select the item "Registration for UCARO" on the login screen of UCARO.

Account registration for UCARO (free for charge) is required for application.

Hiroshima University uses the system of UCARO for checking the applicant's number and processing a part of admission procedure for the applicant who will pass the entrance examination.

## Step 3: Input your account information (applicable to the admission examination category for which it is required).

The applicant who applies to the category for which the entrance examination fee is exempted must ask the inquiry contact indicated under the section "I Programs and Number of Students to be Admitted" (pages 5 - 6) to obtain over the 8 digits of alphanumeric characters and input them.

### Step 4: Input the information regarding the application in the Internet Application System.

Follow the instruction shown on the screen to input your name, address, etc.

### Step 5: Upload your photograph.

Follow the instruction shown on the screen to upload the digital data of your photograph (File format: JPEG). It is not allowed to submit the photograph via mail.

### Step 6: Pay the entrance examination fee of 30,000 yen.

Select either of the following payment method on the "Input Payment Information" screen:

- 1. Credit card: VISA, MasterCard, JCB, AMERICAN EXPRESS, Diners Club
- 2. Convenience store: 7-ELEVEN, Lauson, MINISTOP, FamilyMart, Daily Yamazaki, and Seicomart
- 3. ATM of a financial institution [Pay-easy]
- 4. Net banking

(Caution)

- The applicant has to pay the charge for use of the Internet Application System (650 yen per application) in addition to the entrance examination fee.
- The applicant who will be expect to complete the master's course in Hiroshima University and the applicant who has MEXT Scholarship are exempted from the application fee.
- The entrance examination fee once paid will not be returned for any reason after the application is accepted.

In either case of the following items (1) and (2), the entrance examination fee once paid will be returned after deducting the transfer fee. We will mail the form of the "Refund Claim" for refund of the examination fee. Fill in the required information such as the "application number," "name in kana letters," "name," "phone number," "address," "payee account information," and "reason of refund claim," imprint your seal on the form, and mail the form to the inquiry contact indicated in the section "I Programs and Number of Students to be Admitted" (pages 5 - 6) before Friday, February 26, 2021.

The charge for use of the Internet Application System will not be repaid for any case.

- (1) The applicant does not submit the application documents or the application documents are not received.
- (2) The payment of the examination fee is duplicated.

### Step 7: Complete the registration of the application information.

Write down the application number of 6 digits that is shown on the screen.

### **Step 8: Deliver or mail the application documents.**

For the submission address, refer to the inquiry contact described in the section "I Programs and Number of Students to be Admitted" (pages 5 - 6).

The contact desk is opened from 8:30 to 17:00 during the application period for the applicant who delivers the application documents. The contact desk is closed in Saturday, Sunday, and national holidays.

In the case of submission via mail, the documents must be sent in a registered mail and reach us no later than Monday, July 27. The documents that will be received after the date shall be accepted only when it is postmarked no later than Friday, July 24.

Indicate the phrase "Application documents for ooo Program of Graduate School of Advanced Science and Engineering are enclosed." in red on the front surface of the envelope.

### (4) Application documents

Required application documents vary for each Program.

Refer to the section of the program to which the applicant intends to apply in the section "III Application Eligibility, Required Documents and Selection Process" (Pages 6).

### (5) Submission address for application documents

Refer to the inquiry contact described in the section "I Programs and Number of Students to be Admitted" (Page 4).

### V Miscellaneous

### 1. Instruction for Application

(1) Consult with the faculty who is expected to be your advisor about your research theme before applying. For the information regarding faculties of the Graduate School of Advanced Science and Engineering, refer to the following web site.

URL https://www.hiroshima-u.ac.jp/en/adse/research

This consultation is held to allow the Graduate School to obtain information beforehand. It will not affect the result of the selection.

- (2) The application document with a defect might be rejected. After the application documents are accepted, they shall not be returned and it is not allowed to amend the information described in them for any reason.
- (3) For the certificates, it is required to submit the original or a copy with the original certification. Any copy will not be accepted as the certificate without the original certification.
- (4) The admission approval shall be withdrawn when it is found that the submitted documents contain any false indication.
- (5) The applicant who is expected to graduate his/her school when he/she applies to our University shall be considered not to be eligible for admission when he/she cannot graduate from the school before the admission date.

## 2. Consultation with the applicant who needs special consideration for the entrance examination and/or education in the Graduate School

The applicant who needs special consideration for the entrance examination and/or education in the Graduate School is required to submit the application form in which the following information is described (the format can be arbitrarily selected) to the inquiry contact described in the section "I Programs and Number of Students to be Admitted" (Page 4) to arrange a consultation.

- A. Period for the consultation: Monday, July 6 Friday, July 10, 2020
- B. Information to be described in the application
  - ① Name & address of the applicant (the phone number must be included.)
  - ② Name of the university from which the applicant graduated, Program for which the applicant will apply, and the name of faculty who is expected to be the applicant's mentor
  - ③ Type and severity of the disorder (submit a medical certificate issued by a doctor if the applicant is in treatment)
  - ④ Measures that the applicant asks our University to take for the examination
  - ⑤ Measures that the applicant asks our University to take for the education in it
  - ⑤ Specific measures that were taken in the university from which the applicant graduated
  - 7 Conditions of the daily life

### 3. Handling of Personal Information

The personal information obtained via the admission selection process (name, birth date, gender, and the other personal information) is used for the selection of entrants, notification to the successful applicants, and admission procedure. After the successful applicant enrolls, Hiroshima University will manage the information for student support (e.g. application for scholarship and tuition exemption) and investigation & research activities (e.g. improvement of the entrance examination system, investigation and analysis on the trend of student's choice). We do not use the information for the other purpose and provide the other person than our concerned faculties and staffs.

### 4. Admission Procedure

(1) Documents for admission procedure

The documents will be sent after the selection result is announced.

A part of the admission procedure is processed in UCARO system.

(2) Fee

A: Enrollment fee: 282,000 yen B: Tuition (per year): 535,800 yen

① The enrollment fee once paid will not be returned for any reason.

② The amounts listed above are as of April 2020. When the amount is revised at the time of admission or during the student is in the university, it is required to pay the revised amount.

### 5. Application for Publication of Examination Results

(1) The information regarding the result of the entrance examination for this Graduate School listed below is disclosed only to the person who applies to the examination (hereinafter referred to as the "applicant for disclosure").

Item	Disclosed information
Examination	Evaluation of oral examination and submitted documents (evaluation level)
score	

- (2) The examination result (personal information) will be disclosed by delivering it on the inquiry contact or sending it via mail.
- (3) The applicant for disclosure is required to enter the required information in the form of "Application for Entrance Examination Result Disclosure" which can be downloaded from the web site of the Graduate School of Advanced Science and Engineering and directly send or mail it to the student support office of the Program to which the applicant applied.

Also, it is required to present the admission ticket to allow to identify the applicant.

- (4) The Application for Entrance Examination Result Disclosure will be accepted during the period from October 1, 2020 to November 30, 2020.
- (5) The result of the disclosure application shall be notified within 30 days after the Application for Entrance Examination Result Disclosure is received.

#### 6. Others

- (1) Smoking has been prohibited entirely in all HU campuses from January, 2020.
- (2) Hiroshima University has established the university's Rules on Security Export Control in accordance with the Foreign Exchange and Foreign Trade Act, and conducts strict examinations for acceptance of international students, etc. Therefore, please be advised that International applicants may be unable to receive their desired education or conduct their desired research due to the restriction by the above regulations.

### Special Measure of Exemption from the Entrance Examination Fee for the Applicant

Hiroshima University has decided to implement a special measure of exemption from the fee for the entrance examinations in the 2020 academic year, to alleviate the economic burden on and to secure educational opportunities for applicants affected by the disasters.

The applicant who wishes to be exempted from the entrance examination fee must contact in advance "Contact & Submission address for Application Documents" listed in the section "I Programs and Number of Students to be Admitted" (pages 5 - 6).

### 1 Examinations to which the Special Measure is Applied

The entrance examinations held in the 2020 academic year (including selections of re-admission, transfers, and mid-course entry admission).

### 2 Special Measure

Exemption from the entrance examination fees

\*Fees for the entrance examination result disclosure will be covered as well.

### 3 Disasters to which the Special Measure is Applied

- (1) The 2016 Kumamoto Earthquake
- (2) The Heavy Rain Event of July 2018
- (3) Any disasters covered by the Disaster Relief Act after August 28, 2019

### 4 The Applicant Eligible for Exemption

The applicant who was affected by the disaster specified in the section 3 in the areas covered by the Disaster Relief Act, and who falls under either of the following conditions.

- (1) The house in which the family's chief provider bearing the applicant's school expenses resides was completely destroyed, largely destroyed, or half-destroyed.
- (2) The family's chief provider bearing the applicant's school expenses died or was listed as missing in the disaster

(Caution) For details of the areas covered by the Disaster Relief Act, refer to the following web site. http://www.bousai.go.jp/taisaku/kyuujo/kyuujo\_tekiyou.html

### 5 Application

The applicant must contact in advance "Contact & Submission address for Application Documents" listed in the section "I Programs and Number of Students to be Admitted" (pages 5 - 6), and subsequently submit the specified application documents for exemption along with other required documents for admission.

In this case, do not pay the entrance examination fee at the time of application.

### 6 Application Documents

(1) Application form for exemption from the entrance examination fee (Download the form from the following web site)

https://www.hiroshima-u.ac.jp/nyushi/news/1058

- (2) Disaster victim certificate (a copy is acceptable) (For the applicant who falls under the condition of item (1) of the section 4 above)
- (3) Document that proves the death or missing status of the family's chief provider (a copy is acceptable) (For the applicant who falls under the condition of item (2) of the section 4 above)

### 7 Application Process (Internet Application)

Refer to the PDF file available from the following web site. https://www.hiroshima-u.ac.jp/system/files/142664/menjo\_r3.pdf

### 8 Contact

Refer to "Contact & Submission address for Application Documents" listed in the section "I Programs and Number of Students to be Admitted" (pages 5 - 6).