BULLETIN AND HANDBOOK of STUDENT INFORMATION

2019

Hiroshima University

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1. University Policy

1 Founding Principle

A Single Unified University, Free and Pursuing Peace

2 The Five Guiding Principles

- Pursuit of Peace
- Creation of New Forms of Knowledge
- Nurturing of Well-Rounded Human Beings
- Collaboration with the Local, Regional, and International Community
- Continuous Self-Development

3 University Crest

The university crest is a stylized representation of a new life and a phoenix leaf. The phoenix is a sacred bird in Egyptian mythology that, after living for 500 years, set itself on fire within its nest and rose renewed from the ashes. The immortal bird is a symbol of Hiroshima University, which was reborn out of the ashes of Hiroshima City after it was laid to ruin by the atomic bomb.

4 Communication Mark

Hiroshima University created a new communication mark, which symbolizes “a university where people have a will to try, to grow, to act.” This mark is a motif incorporating the first letters of Hiroshima University, HU and “human.” It expresses a special quality that is active and common to all humanity. This design is intended to express the active and lively richness of human resources. This image represents an ideal of humanity which has both the will to try and the ability to take action, and also a person who is lively, cheerful, rich in energy, corresponding to the motto of “a free and peaceful university.”

2. Academic Calendar and School Hours

1 Academic Calendar

First Semester	Spring Holiday	April 1 to April 8
	Classes	April 9 to July 31
	Summer Holiday	August 1 to September 30
Second Semester	Classes	October 1 to December 23
	University Foundation Day	November 5 (has classes)
	Winter Holiday	December 24 to January 11
	Classes	January 8 to February 7
	End-of-Academic-Year Holiday	February 12 to March 31

[Note]

- Make-up lessons may be given on other dates during the corresponding semester.

2 Periods of Class Time in the Daytime

Class	1		2		3		4		5	
Period	1	2	3	4	5	6	7	8	9	10
Time	8:45 Ã 9:30	9:30 Ã 10:15	10:30 Ã 11:15	11:15 Ã 12:00	12:50 Ã 13:35	13:35 Ã 14:20	14:35 Ã 14:20	15:20 Ã 16:05	16:20 Ã 17:05	17:05 Ã 17:50

3 Periods of Class Time at Nighton Higashi-Senda Campus

Class	1		2	
Period	1	2	3	4
Time	18:00 Ã 18:45	18:45 Ã 19:30	19:40 Ã 20:25	20:25 Ã 21:10

3. Student ID and Password

1 Student ID Card and Password

Please always carry the student identification card (student ID card) because it proves that you are a student of Hiroshima University. The student ID card is a hybrid card having both an exact IC chip and a magnetic strip. It has electronic functions, and it is necessary when using the following services. In addition, in the use of services at the university, it is necessary to input the password, at the time of ID (student number) and student identification card distribution.

Student ID card will be required in the situation as follows:

- When receiving the student registration certificate, identification for Student Discount and certificate of health examination from an automatic certificate issuing machine

4. MOMIJI

1 What is MOMIJI ?

MOMIJI is a useful web-based portal site which offers various kinds of information for students. It consists of two parts: MOMIJI Top and MY MOMIJI.

(1) MOMIJI Top

MOMIJI Top provides general information regarding events, club activities, other procedures, etc. Emergent information for students also be provided. MOMIJI Top is open to the public and therefore it is available for anyone.

MOMIJI Top:

https://momiji.hiroshima-u.ac.jp/momiji-top/en/index.shtml

(2) MY MOMIJI

It is a personal portal site which offers various kinds of information including personal information and important notices from the university; student profile, registration, credits, academic achievement, teaching licensure portfolio, syllabus, examination information, class cancellation, etc. MY MOMIJI is restricted to the students of Hiroshima University and therefore it requires Student ID and password to login.

2 Main Functions of MY MOMIJI

- Portal site: Top page offers information about class cancellations, make-up classes, links to other pages (download sites, WebCT)
- Referring and changing student ID and personal information
- Registration and academic achievement record
- Questionnaires: Student evaluation of courses and questionnaires from the university
- Bulletin Board: Class cancellation, make-up lessons, classroom change, examination information. (Mail delivery service is also available.)
- Career guidance: Job hunting information and graduate school information

[Notes]

- Manuals are available from the Link page.
- There is a VPN service which can virtualize intra-net access. For more information contact our Information Media Center.
- For information on required credits, contact the Student Services Office of each graduate school.

[Inquiry]

- Phone and mail are available for any problems about MOMIJI
  Tel: 082-424-5609
  Mail: systemhelp@hiroshima-u.ac.jp

6. Information and Notices

1 Notices on MY MOMIJI

Hiroshima University provides important information on studying and living through My MOMIJI. Since most of the important messages from the university to students are posted on MY MOMIJI, please check MY MOMIJI at least once a day on your own responsibility.

Additional information on MOMIJI

[Notes]

- For security reasons all information is password-protected. Students need to be careful in managing passwords.
- Some information can be accessed through the mobile version of MY MOMIJI. (http://www.hiroshima-u.ac.jp/m/)

2 Notice Board

Each Graduate School provides important information on their own notice board. Some information differs depending on the school policy. All students are required to check the board on a daily basis.

The following information will be provided on a notice board:

- Period for class registration
- Information for new students
- Notification in the case of failure of MY MOMIJI web system
- Other information about class and student life

3 Homepage

Please be sure to check your graduate school website on a regular basis.

http://www.hiroshima-u.ac.jp/en/top/daigakuin/

4 Others

Important information will be notified by e-mail. When you are going to take classes in different graduate schools, you may have to refer to the appropriate graduate school notice board.

When you ask for long term completion or changing the period of long term completion, submit an application for long term completion or an application for changing long term completion to the Student Support Office of your graduate school. Those who have a job (a regular occupation) need to submit a certificate of employment.

As the regulations are different for each graduate course, inquire at the Student Support Office of your graduate school.

6 Change of Address

When your addresses (including residence, phone number) have changed, submit an application of address to the Student Support Office of your graduate course. If you don't submit it, you can't get emergency contact. We don't take responsibility for any disadvantages. You also need to submit the application when address of your family has changed. Students who don't submit the applications might not get Student Discount or any certificates.

7 Change of Name

When you need to change your name while you are a Hiroshima University student (including the case of using previous name before enrolling the university or changing your name mentioned in the application form before entering the university), you have to report by stated pattern. If you hope to use your previous name, you can use it.

[Inquiry]

- The Student Support Office of your graduate school
- Education office, Education Promotion Group (Students Plaza, 3F)
  Tel: 082-424-6156

8. Certificates and Procedures

1 Issuing of Certificates

(1) Issuing by Automatic Certificate Issuing Machine

The following certificates can be issued by an automatic certificate issuing machine:

- School Certificates [Japanese/English]
- Certificates of Expected Graduation/Completion [Japanese/English] *1
- Academic Transcripts [Japanese]
- JR Student Discount Certificates [Japanese]
- Health Certificates [Japanese] *2

*1: Certificates of Expected Graduation/Completion will be issued only to the second-year students. (Filling in a questionnaire about your career on MY MOMIJI is required.)

*2: Health Certificates will be issued only in the case that no medical problems are found by the periodical health examination of the year.

Places of Automatic Certificate Issuing Machine	Open Hours
ō Higashi-Hiroshima Campus - Near the Student Support Office of your graduate school	Mon.-Fri. 8:30-17:15
ō Kasumi Campus - Faculty of Medicine: Basement/Social Medicine Building, 1F - Faculty of Dentistry: Building C, 2F	Mon.-Fri. 8:30-21:30 Sat. 8:30-17:00
ō Higashi-Senda Campus - Faculty of Law/Economics (Evening Course): Higashi-Senda General School Building, 1F	Mon.-Fri. 8:30-21:30 Sat. 9:45-18:30

[Usage Notes]

- The machine will not operate on Sundays, holidays, and during the end-of-year holiday: Dec. 29 to Jan. 3.
- Student ID card and password are required for use.
- Please operate the machine following the instructions on the screen.
- If you get your student ID card reissued, the previous card will be expired.

(2) Issuing at the Student Support Office

Other certificates listed below cannot be issued by an automatic certificate issuing machine. Please apply to the Student Support Office of your graduate school:

- Commuter Certificate *3
- Certificates for the Social Volunteering Program *4

*3: Commuter Certificate is required when you purchase season tickets (train, bus, ship, etc.)
*4: Evidence of activities is required.

2 Commuter Ticket/Student Discount/Group Tour Discount

(1) Commuter Ticket

Commuter Ticket is issued only if it is used for commuting between your resident place and the nearest station to the university. You can purchase the ticket at issuing windows in each company. Purchasing of the ticket will require Commuter Certificate and student ID card. In order to get the certificate, please submit an application for Issuing Commuter Certificate to the Student Support Office.

(2) Student Discount

Student Discount is issued for the purpose of lessening the economic burden of students and to contribute to the promotion of academic training. It is not intended to be used freely for all travel by individual students.

When you use Student Discount, please pay attention to the following regulations:

- As a general rule, Student Discount can only be used for the purposes listed below:
  - Travelling between home and place of study
  - Traveling for the purpose of academic research, practical training or other curricular educational activities
  - Traveling for the purpose of extra-curricular educational activities permitted by the university
  - Taking exams for finding employment or going on to higher education
  - Taking part in events or inspection tours which are regarded as necessary by the university
  - Medical treatment required to continue studying
  - Accompanying parents
- Student Discount can be used for JR normal railway tickets when one-way distance is 101km and over.
- Student Discount is valid for 3 months from the issue date.
- Student Discount is limited to 20 times per year (up to 4 tickets per day).
- Student Discount is valid for the student himself/herself only. For proof of identity, carry your student ID card with you.

<In case of abuse>

Abuse of the Student Discount is a crime and unacceptable under any circumstances. In case of the abuse, not only will you be charged quite a heavy fine, but also the university itself will be punished by a suspension of authorization to issue certificates, so you mustn't abuse the Student Discount.

The cases regarded as the abuse of Student Discount are listed below:

- When you buy Student Discount with other person's name, or with the certificate already expired
- When you transfer or sell Student Discount
- When you use Student Discount without possessing your student ID card
- When you use Student Discount in other improper ways

(3) Group Tour Discount

Fares shall be discounted in case that more than seven students take a trip with a teacher (as a conductor) in the same schedule. In such case, please submit an application for Group Tour Discount to the Student Support Office. Note that if the group is registered in the university as an extracurricular activity; please apply for the discount to the General Student Support Center (Student Plaza, 3F).

<Discount rate>

- Train or Ship: students 50%, teachers 30%
- Bus: students and teachers 20%

Note that if more than seven students take a trip without any teachers, fares shall be discounted as a normal group.

<Discount rate>

- Train or Ship: 10~15%
- Bus: 10%

9. Tuition Fee Waiver Program

1 Tuition Payment

The tuition payment deadline is April 30th for the first semester (April through September), and October 31st for the second semester (October through next year March). With the payment slip delivered to financial sponsors from Hiroshima University, the payment procedure needs to be done at bank counters. If this procedure is not completed, a demand notice will be sent to the student and the financial sponsors. Please note that, if the payment procedure is not completed, the President may remove that student from the register according to the Hiroshima University General Provisions, Article 43.

The Tuition Fee Waiver Program was established so that applicants who are unable to pay tuition fees or who experience hardship in doing so due to economic or other reasons can receive a waiver for either half or the whole amount of the fees after submitting an application. Applicants are ranked according to the need based on the household income, and waivers are granted accordingly within the budget so that, depending on necessity, the applicants may receive a waiver for all or half the tuition fees or no waiver at all.

2 Those Who May Apply for a Waiver

Those who meet one of the following criteria may apply for a tuition fee waiver:

- õ Those who meet a certain academic standard and are unable to pay their tuition fees due to economic reasons
- õ Those who are unable to pay their tuition fees due to one of the following circumstances arising within six months (or one year in the case of new students or for the first semestID i /P 8Tf 0.03of

3 Application Documents; Distribution, Application, Notification Period

Persons wishing to receive a waiver need to apply for each semester: both first and second terms. Read the Tuition Fee Waiver Application Guide carefully, obtain the necessary forms, and submit the required documents by the designated deadline. We will not accept any documents submitted later than the designated deadline. Documents sent to other places than the designated location will also not be accepted. Applications sent by mail or by proxy will not be accepted.

Period	First semester	Second semester	Application Consideration
Distribution period of The Tuition Fee Waiver Application Guide	From the end of January	The end of June	Distribution date will be notified on MOMIJI Top
Application Period	The beginning of February	The middle of July	Check the acceptance period through the Tuition Fee Waiver Application Guide
Notification Period	The beginning of July	The middle of December	Applicants will be notified individually using MOMIJI

[Note]

- The Tuition Fee Waiver Application Guide is available at the Student Services Group (located in Student Plaza, 3F) in the Education and International Office or the Student Support Office of your graduate school, etc.

[Inquiry]

- Student Services Group (Tuition Exemption)
  - Address: 3rd floor of the Student Plaza
    Education and International Office, Hiroshima University
    1-7-1 Kagamiyama, Higashi-Hiroshima City, 739-8514
  - Tel : 082-424-6163/ 082-424-6138
  - Mail: gkeizai-group@office.hiroshima-u.ac.jp

4 Tuition Payment on a Monthly Basis

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10. Scholarships for International Students

1 How to Apply

There are six application periods in each academic year for international students. The application periods are as follows:

Application period	Academic year of scholarship	Applying month
First Period	for next academic year	August to October
Second Period	for next academic year	February
Third Period	for next academic year	March
Fourth Period	for current academic year	April
Fifth Period	for current academic year	July
Sixth Period	for current academic year	October

2 Qualification

- Applicant must be an international student of Hiroshima University (including those who are accepted from the university.)
- Student cannot apply for more than one scholarship in each period (after receiving the result of a scholarship which applied for).
- Student to whom any of the following conditions apply will be at the lower end of the list.
  - One of his/her family members is Japanese-government-sponsored international student.
  - One of his/her family members is sponsored by his/her home country's government.
  - One of his/her family members works in Japan and receives an income.
  - One of his/her family members has a scholarship for an amount more than that of the Japanese government-sponsored scholarship.

3 Scholarship System

The following are the main type of scholarships that international students can receive. Students wanting more details are advised to inquire at the Student Support Office or Graduate School concerned.

(1) Japanese Government (MEXT) Scholarships

There are two different categories for Japanese Government Scholarship: recommendation by Japanese Embassy; or recommendation by Hiroshima University.

ó Recommendation by Japanese Embassy

- On behalf of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japanese Embassies abroad make announcements regarding applications for MEXT scholarships. They also conduct the preliminary screening of applicants based on documents received, written tests, and interviews. On the basis of recommendations by Japanese embassies, MEXT makes the final selection of scholarship recipients. For details, please check with the nearest Japanese Embassy.

ó Recommendation by Hiroshima University

- Students Wishing to Enter the University from Abroad

  The University recommends to MEXT a certain number of exceptional graduate students from universities abroad with which the University has an official student exchange agreement. MEXT makes the final selection.

- Self-supported Students already Enrolled in the University

  The University recommends international students already enrolled in Master's or Doctoral programs at its graduate school or in the last year of their undergraduate studies with exceptional records to MEXT for its scholarships; MEXT makes the final selection.

(2) Scholarships from Foundations

Apart from MEXT Scholarships, scholarships from several private foundations are also available. Of the 817 self-funded students, 214 receive scholarships (as of November 1, 2011). These scholarships are available only for students who are enrolled in Hiroshima University and are not applicable for students who are abroad or have not yet been admitted to Hiroshima University. The numbers of scholarships available are limited; we urge you to plan your finances well in advance.

The Japan Student Services Organization (JASSO) provides scholarship information, including scholarships you can apply for before coming to Japan. Please visit the following website for more details.

JASSO

http://www.jasso.go.jp/study_j/scholarships_e.html

11. Hiroshima University Library

Hiroshima University has five libraries in total. These are altogether one of the largest libraries in Japan. Hiroshima University houses about 3,390,000 books and about 50,000 journals in libraries on campuses and faculty libraries, and the 60% of them are in the possession of the Central Library on Higashi-Hiroshima campus. All of the information materials are under integrated control so that students of Hiroshima University can have access to them as academic and informative resources.

There are three libraries on Higashi-Hiroshima campus: Central Library, East Library, and West Library one each on Kasumi campus; Kasumi Library, and on Higashi-Senda campus; Higashi-Senda Library.

In order to make use of services at any of the libraries, student ID card is required.

1 Opening Hours

		Higashi-Hiroshima Campus			Hiroshima Campus	
		Central	East	West	Kasumi	Higashi-Senda
Semesters	Mon. - Fri.	8:30-22:00	8:30-21:00	8:30-21:00	8:30-22:00	8:30-22:00
	Sat.	10:00-20:00	10:00-17:00	10:00-17:00	9:45-20:00	12:00-22:00
	Sun.	10:00-20:00	closed	closed	9:45-20:00	closed
Vacations	Mon. - Fri.	8:30-22:00 (*1)	8:30-17:00	8:30-17:00	8:30-22:00	8:30-21:00
	Sat. & Sun.	10:00-20:00 (*2)	closed	closed	9:45-20:00 (closed in August & March)	13:00-19:00 (open only on Saturdays in August & September)

*1: Open 8:30-17:00 from August 1st to September 15th, December 24th to 26th, January 5th to 7th, and March 1st to 31th.

*2: Closed from August 1st to September 15th, December 24th to 26th, January 5th to 7th, and March 1st to 31th.

[Notes]

- On the first and the third Mondays, opening hours for Kasumi Library is 12:00-22:00.
- Opening hours may be changed during vacations.

2 Closed Days

The library is closed on National Holidays prescribed by law, from December 28th to January 4th, and monthly cleaning days. The Chief Librarian may decide to close libraries.

Graduate School of Engineering

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*Class Subjects and Requirement for Completion
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-System Cybernetics (Master's program)
-Information Engineering (Master's program)
-Chemical Engineering (Master's program)
-Applied Chemistry (Master's program)
-Civil and Environmental Engineering (Master's program)
-Transportation and Environmental Systems (Master's program)
-Architecture (Master's program)
-Common Subjects (Master's program)
-Interdisciplinary Programs (for students in the Master's Program)
-Special Course (Master's program and Doctoral Program)
-Phoenix Leader Education Program and TAOYALA Graduate Program)
-Doctoral Program
*Procedures for Course Registration, Research Plan Submission
*Assessment of Academic Performance
*Master's Thesis Review and Final Examination
*Acquisition of Doctorates
*An Outline of the Doctorate Conferral Procedure for Student Doctoral Candidates
*Doctoral Degree Application Procedures

Others

*Regulations of the Graduate School of Engineering, Hiroshima University
*Hiroshima University Degree Regulations (Graduate School of Engineering Regulations)

*You can check Hiroshima University Regulations in the following URL.
URL>8https://momiji.hiroshima-u.ac.jp/momiji-top/international/regulations.html
*The official text of each regulation is the Japanese version. As the English translation is provided only for reference, if there are any discrepancies between Japanese and English versions, the Japanese takes precedence.
In the event of any change in the regulations, the documents will be updated on an as-needed basis.

Objectives of Engineering and the Graduate School of Engineering: Founding Principles, Educational Purposes and Goals

- The Five Guiding Principles of Hiroshima University
  - c The Pursuit of Peace
  - d The Creation of New Forms of Knowledge
  - e The Nurturing of Well-Rounded Human Beings
  - f Collaboration with the Local, Regional, and International Community Continuous
  - g Self-Development

- Hiroshima University's Goals
  - c Being an educational and research institution of the highest standards that actively pursues outstanding education and research and that is ranked high on an international scale in terms of both education and research
  - d Carrying out priority projects for raising the levels of academic research, developing an environment for realizing research of the world's highest standards, and nurturing the "seeds" of research, leading next-generation scholarship and contributing to the creation of a new intellectual culture
  - e In post-graduate education and research, serving as a major center active in domestic and international networks of universities and research institutions, where excellent research and directly research-linked education are assured to produce quality doctorates globally operational researchers, as well as socially and globally operational high-level professionals through excellent practical education
  - f In undergraduate education, producing individuals equipped with both basic and applied abilities and abundant mental flexibility through educational programs firmly oriented toward the achievement of goals
  - g Fulfilling the University's mission of contribution to society, which is as important as education and research, by meeting a variety of societal needs through close partnerships with local communities
  - h Promoting the faculty's and student's global activities and establishing and improving systems of international exchange, collaboration, and cooperation while strengthening the University's global competitiveness
  - i Implementing on a university-wide basis plans and programs of university administration that are drawn up from a broad, university-wide perspective that involves centralized management of human resources, facilities, and funds
  - j Creating an environment that enables faculty members to fully demonstrate their potential under a system of fair competency and performance evaluation
  - k Completing a system of information mediated education and research and its support mechanism by realizing an information and communication environment that supports education, research, social contribution, and efficient organizational administration; conducting active PR activities by promoting information sharing between the faculty and the students and information disclosure to the general public

„ Objectives of Engineering

The objectives of engineering can be summed up as "inquiry into embodiment" through which engineers try to contribute to the peace, development, and continuation of humankind; in other words, searching into and realizing, based on scientific knowledge, concrete steps to meeting society's needs and finding solutions to its problems while seeking harmony with Nature.

„ Concept for the establishment of the Graduate School of Engineering

(1) To promote advanced and interdisciplinary studies and provide a forum for creation, accumulation and utilization of knowledge.
(2) In order to accomplish the "Purpose of Engineering," develop researchers who will creatively cope with the development of new basic technologies and highly advanced professional engineers who have the ability to set out and provide solutions to problems.
(3) To contribute to building an affluent society and further peace, development and continuation of human existence through advanced research activities and returning the results of research to society.

„ Purposes of Education and Research at the Graduate School of Engineering

(1) Promoting advanced cutting-edge research and interdisciplinary research so as to contribute to society through research results in building an affluent society and assuring peace, development, and continuation of humankind
(2) Leading the students to understand the objectives of engineering, develop a keen sense of social responsibility, and become fully autonomous as engineers
(3) Leading the students to acquire basic knowledge required in engineering
(4) Training the students as highly specialized engineers with the ability to set research themes for themselves and effectively work them out
(5) Developing the student's ability to conduct advanced research and interdisciplinary research
(6) Developing the student's other abilities related to engineering so that they may lead in the future success and development of engineering

„ Goal for education and research at the Graduate School of Engineering

(1) Carrying out advanced and systematic education and research activities in each special field and interdisciplinary fields.
(2) Development of human resources who have knowledge and abilities required for being engaged in research and development.
(3) Development of a broad outlook, flexible adaptability and creativity and arousing desire for self-enlightenment and study.
(4) Research activities aiming at positive solutions for environmental problems, taking into consideration the finite nature of the earth.
(5) Contribution to international community through promotion of international joint research.
(6) Active reduction activities of research results to society.

Class Subjects and Requirement for Completion
Mechanical Systems Engineering(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
Core Subjects	v / d Û"I1=	1or2	2	>& d>'
	Applied Fluid Dynamics			
	[/ Š Û"I1=	1or2	2	>& d>'
	Advanced Solid Mechanics			
	D š d Û"I1=	1or2	2	
	Control System Design	1or2	2	
	µ " Š Û"I1=	1or2	2	>& d>'
	advanced Machinery Dynamics			
	o Â ¼ / Š Û"I1=	1or2	2	>& d>'
	Advanced Reactive Gas Dynamics			
	0¿0£ Û"I1=	1or2	2	
	Mechanical Engineering Design	1or2	2	
	+¬ Š © « ¸ Ò d Û"I1=	1or2	2	
	Advanced Autonomous Systems Engineering	1or2	2	

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
S6Û&£%Specialized Subjects	µ " © « ¸ Ò d Û1n'2 è A	1	1			>& d>'
	Mechanical Systems Engineering Research è					
	µ " © « ¸ Ò d Û1n'2 èB	1	1			>& d>'
	Mechanical Systems Engineering ResearchB è					
	µ " © « ¸ Ò d Û1n'2 é A	2	1			>& d>'
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	Advanced Thermal Engineering					
	Advanced in Composite Science and Engineering	1or2		2		
	Advanced Energy Plant	1or2		2		
	ú · d Û"I1=	1or2		2		>& d>'
	Advanced Engineering Vibrations					
	Nonlinear Control Theory	1or2		2		
	Advanced Manufacturing Management Systems	1or2		2		
	Advanced Microstructure of Materials	1or2		2		
	¦ q I Ø Û"I1=	1or2		2		
	Mechanical Behavior and Strength of Engineering Materials	1or2		2		
	Advanced Precision Machining	1or2		2		
	Advanced Quantum Materials Engineering	1or2		2		
	Special Lecture on Mechanical EngineeringB	1or2			2	
	Special Lecture on Mechanical Engineering B¡	1or2			2	
	Special Lecture on Mechanical Engineering B¢	1or2			2	
	Special Lecture on Mechanical Engineering IV	1or2			2	
	Special Lecture on Mechanical Engineering V	1or2			2	
	Special Lecture on Mechanical Engineering VI	1or2			2	
	X#. Û è	1or2			2	>& d>'Subject of System Cybernetics
	Mathematicsè					
	MathematicsB£	1or2			2	Subject of System Cybernetics

d The subject marked d( ) in Remarks column offers the class in English in addition to the same class in Japanese. The ov sublect is not recognized as credit.

FRequirement for CompletionFC

(1) Core Subjects: More than 8 credits.

(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) More than 8 credits are required from Compulsory but optional subjects of Specialized Subjects and Core Subjects [ex credits in (1)].

(5) Optional Subjects and Subjects offered in the other departments(Special Lecture is excluded).

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

*If the credits earned at International Partner Universities are acknowledged as the credits of Core Subjects or Specia Subjects of Mechanical Science and Engineering, Common Subjects or Subjects offered in the other departments(Special Lecture is excluded), they can be included in the above (1) to (5) subjects for Double Degree Program Students.

System Cybernetics(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
Core Subjects	X#. Û è Mathematicsè	1or2	2	>& d>'
	X#. Û é	1or2	2	
	Mathematicsê	1or2	2	
	© « ¸ Ò0£#ì"l1= Advanced Systems Planning	1or2	2	>& d>'
	© « ¸ Ò D š"l1= Advanced System Control	1or2	2	>& d>'
	&k © « ¸ Ò d Û"l1= Advanced Social Systems Engineering	1or2	2	>& d>'
	7Á Š(Õ)+ d Û"l1= Advanced Power System Engineering	1or2	2	>& d>'
	§ – Â ¿ ¸ • ¡ « d Û"l1= Advanced Cybernetics Engineering	1or2	2	>& d>'
	ß Î ¸ • ¡ «"l1= Advanced Robotics	1or2	2	>& d>'

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	© « ¸ Ò § – Â ¿ ¸ • ¡ «1n'2 è A Directed Study in System CyberneticsA è	1	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ «1n'2 è B Directed Study in System CyberneticsB è	1	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ «1n'2 é A Directed Study in System CyberneticsA é	2	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ «1n'2 éB Directed Study in System CyberneticséB	2	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ « - Ñ ¼ î èA Seminar in System CyberneticsèA	1	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ « - Ñ ¼ î èB Seminar in System CyberneticsèB	1	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ « - Ñ ¼ î éA Seminar in System CyberneticséA	2	1			>& d>'
	© « ¸ Ò § – Â ¿ ¸ • ¡ « - Ñ ¼ î éB Seminar in System CyberneticséB	2	1			>& d>'
	Applied Cybernetics	1or2		2		
	Á – Ã î Ä × î Ð å d Û"l1= Hyper Human Engineering	1or2		2		>& d>'
	Advanced Scheduling	1or2		2		
	Â#Ý X#."l1= Advanced Applied Mathematical Sciences	1or2		2		>& d>'
	& "á ¤ (‰&ì '"l1= Stochastic Differential Equations	1or2		2		>& d>'
	Advanced Signal Processing	1or2		2		
	Electric Power System Operation	1or2		2		
	Advanced Biosystems Engineering	1or2			2	
	Advanced Learning Systems	1or2		2		
	MathematicsB£	1or2		2		
	Ã á î š Þ ¡ º ß ½ ¡ «"l1= Advanced Power Electronics	1or2		2		>& d>'
	Software Reliability Engineering	1or2		2		Subject of Information Engineering
	Advanced Visual Information Processing	1or2			2	Subject of Information Engineering
	Fault-Tolerant Systems	1or2			2	Subject of Information Engineering
	Image Analysis and Synthesis Technology	1or2		2		Subject of Information Engineering
	Formal Language Theory	1or2		2		Subject of Information Engineering
	Special Lecture on System CybernBics	1or2			2	
	Special Lecture on System CybernBics	1or2			2	
	Special Lecture on System CybernBCs	1or2			2	
	Special Lecture on System CybernBEs	1or2			2	
	Special Lecture on System CybernBos	1or2			2	

d The subject marked d( ) in Remarks column offers the class in English in addition to the same class in Ja
The overlapped sublect is not recognized as credit.

FÆequirement for Completion(EÇcept student of TAOYAKA Program)

(1) Core Subjects: More than 8 credits.

(2)Specialized Subjects:SCompulsory: 8 credits [Research 4 subjects, Seminar 4 subjects].

F·F·F·F·F·F·F·F·F·F·FCompulsory but optional: More than 10 Credits

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) Optional Subjects and Subjects offered in the other departments(Special Lecture is excluded).

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

FÆequirement for Completion(FÇOnly for student of TAOYAKA Program)

(1) Core Subjects: More than 8 credits.

(2)Specialized Subjects:SCompulsory: 8 credits [Research 2 subjects, Seminar 2 subjects].

F·F·F·F·F·F·F·F·F·F·F·Compulsory but optional: More than 6 Credits

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) Optional Subjects , Subjects offered in the other departments(Special Lecture is excluded) and Subject
TAOYAKA Program.

Total: 30 credits are required.

Information Engineering(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
Core Subjects	Advanced Operating Systems	1or2	2	
	Software Reliability Engineering	1or2	2	
	Advanced Visual Information Processing	1or2	2	
	Detabase Engineering	1or2	2	
	Embedded Software	1or2	2	
	Embedded Hardware	1or2	2	
	Information Security	1or2	2	
	Machine Learning	1or2	2	

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
S6Ú&É%Specialized Subjects	_ d Û1n'2 èA	1	1			>& d>'
	Directed Study in Information Engineering èA					
	_ d Û1n'2 èB	1	1			>& d>'
	Directed Study in Information Engineering èB					
	_ d Û1n'2 éA	2	1			>& d>'
	Directed Study in Information Engineering éA					
	_ d Û1n'2 éB	2	1			>& d>'
	Directed Study in Information Engineering éB					
	_ d Û - Ñ ¼ î èA	1	1			>& d>'
	Seminar in Information Engineering èA					
	_ d Û - Ñ ¼ î èB	1	1			>& d>'
	Seminar in Information Engineering èB					
	_ d Û - Ñ ¼ î éA	2	1			>& d>'
	Seminar in Information Engineering éA					
	_ d Û - Ñ ¼ î éB	2	1			>& d>'
	Seminar in Information Engineering éB					
	Advanced Parallel Architectures and Algorithms	1or2		2		
	Fault-Tolerant Systems	1or2		2		
	Applied Mechano-informatics	1or2		2		
	Image Analysis and Synthesis Technology	1or2		2		
	Mobile Computing	1or2		2		
	Advanced Information Networks	1or2		2		
	Formal Language Theory	1or2		2		
	Advanced Information and Media Processing	1or2		2		
	Analysis in Mathematical Science	1or2		2		
	Data Management	1or2		2		
	Human Computer Interaction	1or2		2		
	Information retrieval	1or2		2		
	Artificial and Natural Intelligence	1or2		2		
	Â#Ý X#."l1=	1or2		2		>& d>'
	Advanced Applied Mathematical Sciences					Subject of System Cybernetics
	Á – Ã î Ä × î Ð å d Û"l1=	1or2		2		>& d>'
	Hyper Human Engineering					Subject of System Cybernetics
	Mathematics¡	1or2		2		Subject of System Cybernetics
	Mathematicsê	1or2		2		Subject of System Cybernetics
	Mathematics£	1or2		2		Subject of System Cybernetics
	Special Lecture on Information Engineering	1or2			2	
	Special Lecture on Information Engineering	1or2			2	
	Special Lecture on Information Engineering	1or2			2	
	Special Lecture on Information Engineering	1or2			2	

d The subject marked d( ) in Remarks column offers the class in English in addition to the same class in Jap
The overlapped sublect is not recognized as credit.

Requirement for Completion

(1) Core Subjects: More than 8 credits.

(2)Specialized Subjects: Compulsory: 8 credits [Research 4 subjects, Seminar 4 subjects].
Compulsory but optional: More than 6 Credits

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) Optional Subjects, Subjects offered in the other departments and other graduate school(Special Lecture

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

Chemical Engineering(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
Core Subjects	¹/® í3z3æ"@ ö"I1=	1or2	2	>& d>'
	Advanced Equilibrium and Transport Properties			
	¤(• Ê d Û1=	1or2	2	>& d>'
	Fine Particle Technology			
	"@2A&ã ·"I1=	1or2	2	>& d>'
	Advanced Mass Transfer			
	!Õ d Û"I1=	1or2	2	>& d>'
	Advanced Heat Transfer Engineering			
	v ·0Ž Ò1=	1or2	2	>& d>'
	Fluid Dynamics Analysis			
	#" C ì Û d Û"I1=	1or2	2	>& d>'
	Advanced Environmental Chemistry Engineering			

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
S6Û&É½Specialized Subjects	ì Û d Û1n'2 èA	1	1			>& d>'
	Chemical Engineering ResearchA è					
	ì Û d Û1n'2 èB	1	1			>& d>'
	Chemical Engineering ResearchB è					
	ì Û d Û1n'2 éA	2	1			>& d>'
	Chemical Engineering ResearchA é					
	ì Û d Û1n'2 éB	2	1			>& d>'
	Chemical Engineering ResearchB é					
	ì Û d Û - Ñ ¼ î èA	1	1			>& d>'
	Chemical Engineering SeminarA è					
	ì Û d Û - Ñ ¼ î èB	1	1			>& d>'
	Chemical Engineering SeminarB è					
	ì Û d Û - Ñ ¼ î éA	2	1			>& d>'
	Chemical Engineering SeminarA é					
	ì Û d Û - Ñ ¼ î é B	2	1			>& d>'
	Chemical Engineering SeminarB é					
	0• y ì Û1=	1or2			2	>& d>' Subject of Applied Chemistry
	Advanced Catalysis Chemistry					
	Â#Ý!" µ ì Û1=	1or2			2	>& d>' Subject of Applied Chemistry
	Advanced Applied Inorganic Chemistry					
	w µ ¦ q ì Û1=	1or2			2	>& d>' Subject of Applied Chemistry
	Organic Materials Chemistry					
	9× (Ê œ B ì Û1=	1or2			2	>& d>' Subject of Applied Chemistry
	Advanced Synthetic Polymer Chemistry					
	(Ò ì Û1=	1or2			2	>& d>' Subject of Applied Chemistry
	Advanced Analytical Chemistry					
	2x (Ê ì Û1=	1or2			2	>& d>' Subject of Applied Chemistry
	Supramolecular Chemistry					
	¯ Ç º Ð ¸ Ü " Ý É ß - µ © å ¢"I1=	1or2			2	>& d>'
	Advanced Soft Materials Processing					
	¢ Ü î å É ß - « d Û1=	1or2			2	>& d>'
	Green Process Engineering					
	!Õ v / É ß - « d Û"I1=	1or2			2	>& d>'
	Thermal Fluid Process Engineering					
	Complex Fluid Dynamics	1or2			2	
	Advanced Surface Control Engineering	1or2			2	
	Special Lecture on Chemical EngineeringB	1or2			1	
	Special Lecture on Chemical EngineeringB	1or2			1	

d The subject marked d( ) in Remarks column offers the class in English in addition to the same class in Ja
The overlapped sublect is not recognized as credit.

FRequirement for CompletionÇ

(1) Core Subjects: More than 8 credits.

(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) More than 12 credits are required from Compulsory but optional subjects of Specialized Subjects , Core Subjects [except the credits in (1)] and Optional Subjects.

(5) Subjects offered in the other departments(Special Lecture is excluded) and other graduate school(Spec is excluded)

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

Applied Chemistry(Master's program)

0• y ì Û1=
Advanced Catalysis Chemistry
Â#Ý!“ µ ì Û1=
Advanced Applied Inorganic Chemistry

Civil and Environmental Engineering(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
Core Subjects	…% d Ü"l1=	1or2	2	>& d>'
	Advanced Geotechnical Engineering			
	¥ å ¡ Ü î º S4 "l1=	1or2	2	>& d>'
	Advanced Structural Concrete			
	S4 Š Ü"l1=	1or2	2	>& d>'
	Advanced Structural Engineering			
	Infrastructure and Regional Planning	1or2	2	
	Advanced Environmental Systems Engineering	1or2	2	
	Environmental Fluid Mechanics	1or2	2	
	#" C – ² d Ü"l1=	1or2	2	>& d>'
	Advanced Environmental Protection Engineering			
	¼1ß Ü"l1=	1or2	2	>& d>'
	Advanced Meteorology			
	" Ê#" C d Ü"l1=	1or2	2	>& d>'
	Advanced Environmental Coastal Engineering			
	Management of Natural Disasters	1or2	2	
	Advanced Technical English Writing for Civil and Environmental Engineering	1or2	2	

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	&k ö% #" C d Ü1n'2 è A	1	1			>& d>'
	Civil and Environmental Engineering Research A					
	&k ö% #" C d Ü1n'2 è B	1	1			>& d>'
	Civil and Environmental Engineering Research B					
	&k ö% #" C d Ü1n'2 é A	2	1			>& d>'
	Civil and Environmental Engineering Research A					
	&k ö% #" C d Ü1n'2 é B	2	1			>& d>'
	Civil and Environmental Engineering Research B					
	&k ö% #" C d Ü - Ñ ¼ î è A	1	1			>& d>'
	Civil and Environmental Engineering Seminar A					
	&k ö% #" C d Ü - Ñ ¼ î è B	1	1			>& d>'
	Civil and Environmental Engineering Seminar B					
	&k ö% #" C d Ü - Ñ ¼ î é A	2	1			>& d>'
	Civil and Environmental Engineering Seminar A					
	&k ö% #" C d Ü - Ñ ¼ î é B	2	1			>& d>'
	Civil and Environmental Engineering Seminar B					
	S4 ¦ q Ü"l1=	1or2			2	>& d>'
	Advanced Structural Materials					
	Transportation Engineering	1or2			2	
	Regional and Urban Engineering	1or2			2	
	Advanced River Engineering	1or2			2	
	Ä#Ý ¼1ß d Ü	1or2			2	>& d>'
	Advanced Meteorological Engineering					
	#" C Ü « ¡ Ð š d Ü"l1=	1or2			2	>& d>'
	Environmental risk management					
	Special Exercises in Civil and Environmental Engineering I	1or2			1	
	Special Exercises in Civil and Environmental Engineering II	1or2			1	
	Special Exercises in Civil and Environmental Engineering III	1or2			1	
	Special Exercises in Civil and Environmental Engineering IV	1or2			1	
	Special Lecture on Civil and Environmental Engineering I	1or2			1	
	Special Lecture on Civil and Environmental Engineering II	1or2			1	
	Special Lecture on Civil and Environmental Engineering III	1or2			1	
	Special Lecture on Civil and Environmental Engineering IV	1or2			1	

d The subject marked d( ) in Remarks column offers the class in English in addition to the same class in Japanese. The overlapped sublect is not recognized as credit.

Requirement for Completion (Except Student of Phoenix Leader Education Program, Double Degree Program National Central University (NCU) and Japanese Grant Aid for Human Resource Development Scholarship P (JDS))

(1) Core Subjects: 8 credits.
(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].
(3) Common Subjects: More than 2 credits of subject of 'MOT'.
(4) More than 10 credits are required from Core Subjects [except the credits in (1)] , Optional Subjects and S offered in the other departments(Special Lecture is excluded).
(5) Subjects offered in the other graduate school(Special Lecture is excluded)

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

FAE quirement for Completion(ONly for Student of Phoenix Leader Education Program)

(1) Core Subjects: 8 credits.(You can include 4 credits of 'Introduction to Environmental Radiation' , 'Historica Review of Radiation Casualty' , 'Radiation Physics' and 'Measurement and Detection of Radiation'.)
(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].
(3) Common Subjects: More than 2 credits of subject of 'MOT'.
(4) More than 10 credits are required from Core Subjects [except the credits in (1)] ,Optional Subjects and Su offered in the other departments(Special Lecture is excluded.)(You can include 8 credits of Subjects of Phoer Education Program in Graduate School of Engineering.)
(5) Subjects offered in the other graduate school(Special Lecture is excluded)

Total: 30 credits are required.

FAE quirement for Completion(ONly for Student of Double Degree Program with NCU)

(1) Core Subjects: 8 credits.(You can include within 4 credits from Subjects of NCU written in appended Tabl
(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].
(3) Common Subjects: More than 2 credits of subject of 'MOT'.
(4) More than 10 credits are required from Core Subjects [except the credits in (1)] ,Optional Subjects and Su offered in the other departments(Special Lecture is excluded.)(You can include within 6 credits from Subjects written in appended Table-2.)
(5) Subjects offered in the other graduate school(Special Lecture is excluded)

Total: 30 credits are required.

FAE quirement for Completion(ONly for Students of Japanese Grant Aid for Human Resource Development Scholarship)

(1)Core Subjects: 8 credits (You can include 4 credits totally from 2 credits of Environmental Management ar Economic Development and Policy and from 2 credits of Developing Designing Ability, Graduate Writing I, and Graduate Writing II offered at IDEC.)
(2)Compulsory Specialized Subjects: 8 credits [Research 4 subjects and Seminar 4 subjects]
(3)Common Subjects: More than 2 credits of subject of MOT.
(4)More than 10 credits are required from Core Subjects [except the credits in (1)], Optional Subjects, Subjec in the other department of Engineering and in the Division of Development Science of IDEC (Special Lecture excluded.)
(5)Subjects offered in the other graduate school (Special Lecture is excluded.)

Total: 30 credits are required.

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&É% (	&É% ¡	Ž 4 \'g p ¸ ± Û _ > E • ") X	È å ± Û @1 M • ") X
¥ " &É %	Experimental Soil Mechanics	3	2
	Groundwater and Seepage	3	2
	Structural Dynamics	3	2
	Finite Element	3	2
	Physical & Chemical Properties of Cement	3	2
	Instrumentation for Material Research	3	2
	Environmental Fluid Mechanics	3	2
	Fluid Dynamics	3	2
	Transportation Engineering.	3	2
	Transportation Planning & Networks	3	2
	Satellite Geodesy and Navigation	3	2
	Digital Photogrammetry	3	2
	Geographical Information Systems	3	2
	Data Mining in Engineering	3	2
	Environment and Disaster Monitoring Practice	3	2
	Spatio-Temporal Environmental Data Analysis and Visualization	3	2

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&É% (	&É% ¡	Ž 4 \'g p ¸ ± Û _ > E • ") X	È å ± Û @1 M • ") X
S 6Û &É %	Applied Soil Mechanics I	3	3
	Soil Dynamics	3	3
	Slopeland Engineering	3	3
	Soil Improvement	3	3
	Moderate Soil Mechanics	3	3
	Rock Mechanics	3	3
	) L Q L W H (O H P H Q W 0 H W K R G é	3	3
	Continuum Mechanics	3	3
	Bridge Engineering	3	3
	Elasticity	3	3
	Plasticity	3	3
	Plastic Analysis and Design for Steel	3	3
	Structure Design in Tall Building	3	3
	Vector Mechanics of Structures and Solids	3	3
	Asphalt Concrete Mix Design	3	3
	Green Building Industry Sustainable Development	3	3
	Pavement Design of Highway	3	3
	Behavior of Hardened Concrete	3	3
	Water Resources Systems Engineering	3	3
	Soil and Water Conservation Engineering	3	3
	Optimum Design and Management	3	3
	Computer Algorithms in Transportation	3	3
	Traffic Control	3	3
	Spatial Data Analysis and Applications	3	3
	Geographical Information Systems	3	3
	Aerial Photogrammetry	3	3
	Practical Programing for Image Analysis	3	3
	LabView Software System Design	3	3
	Traffic Flow Theory	3	3
	Mathematical Planning	3	3
	Technical Writing for Engineers	1	1
	Engineering Computations and Software Applications	3	3
	Earthquake Disaster Reduction	2	2
	Geotechnical Earthquake Engineering	2	2
	Management Systems in Pavement Maintain	3	3
	Digital Terrain and City Modeling	3	3
	Mobile Application Design and Implementation for Smart Disaster Mitigation	3	3
	Advanced Strength of Materials	3	3
	Advanced Soil Mechanics	3	3
	Advanced Reinforced Concrete	3	3
	Foundation Design	3	3
	Insurance Quality in Civil Materials	3	3
	Research Methods	3	3
	Application of Artificial Intelligent in Civil Engineering	3	3
	Cloud-based Geographic Information System	3	3
	Structural Stability	3	3
	Engineering Database	3	3
	Advanced Foundation Engineering	3	3
	Centrifuge modeling technique and data analysis	3	3
	Geotechnical reliability and risk assessment	3	3
	Internet of Things and Smart Structural Health Monitoring	3	3
	Plastic Analysis and Design for Steel	3	3
	System Analysis and Design for Engineering	3	3
	Land Hydrological Processes	3	3
	Applied Numerical Methods	3	3
	Scientific Computing	3	3

Transportation and Environmental Systems(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
	S4 0£ D š"I1=	1or2	2	>& d>'
	Advanced Instrumentation and Control for Structures			
	¦ q Š Û"I1=	1or2	2	>& d>'
	Advanced Strength of Material			
	w7H0[(ò 2"I1=	1or2	2	>& d>'
	Advanced Finite Element Method			
	#" C © Ñ × Þ î © Ù å"I1=	1or2	2	>& d>'
	Simulation of Environmental Mechanics			
	• V3z3æ µ þ0£#ì"I1=	1or2	2	>& d>'
	Initial Design of Marine Vehicles			
	3z3æ µ þ*•'5 í*•+ß ö+ "I1=	1or2	2	>& d>'
	Airworthiness and Seakeeping for the Vehicles			
	© « ¸ Ò0£#ì Û"I1=	1or2	2	>& d>'
	System Planning			

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
S6Û&É%Specialized Subjects	3z3æ í#" C © « ¸ Ò1n'2 èA	1	1			>& d>'
	Transportation and Environmental Systems Research A					
	3z3æ í#" C © « ¸ Ò1n'2 èB	1	1			>& d>'
	Transportation and Environmental Systems Research B					
	3z3æ í#" C © « ¸ Ò1n'2 éA	2	1			>& d>'
	Transportation and Environmental Systems Research A é					
	3z3æ í#" C © « ¸ Ò1n'2 éB	2	1			>& d>'
	Transportation and Environmental Systems Research B é					
	3z3æ í#" C © « ¸ Ò - Ñ ¼ î èA	1	1			>& d>'
	Transportation and Environmental Systems Seminar A è					
	3z3æ í#" C © « ¸ Ò - Ñ ¼ î èB	1	1			>& d>'
	Transportation and Environmental Systems Seminar B è					
	3z3æ í#" C © « ¸ Ò - Ñ ¼ î éA	2	1			>& d>'
	Transportation and Environmental Systems Seminar A é					
	3z3æ í#" C © « ¸ Ò - Ñ ¼ î éB	2	1			>& d>'
	Transportation and Environmental Systems Seminar B é					
	0£'ì%Ú o Š Û"I1=	1or2			2	>& d>'
	Computational Fracture Mecahnics					
	S4 0£ D š"I1=	1or2			2	>& d>'
	Advanced Instrumentation and Control for Structures					
	#" C š ¿ Ý î"I1=	1or2			2	>& d>'
	Energy and Environmental Engineering					
	0£'ì • R v / Š Û"I1=	1or2			2	>& d>'
	Computed Marine Hydrodynamics					
	3z3æ µ þ ï)ª í D š"I1=	1or2			2	>& d>'
	Maneuvering and Control of Vehicles					
	q4:0¿0£"I1=	1or2			2	>& d>'
	Advanced Optimal Design					
	Ü Ô î º - å © å ¢"I1=	1or2			2	>& d>'
	Advanced Remote Sensing Engineering					
	Transportation and Environmental Systems Internship	1or2			1	
	Special Lecture on Transportation and Environmental Systems B	1or2			1	
	Special Lecture on Transportation and Environmental Systems B¡	1or2			1	
	Special Lecture on Transportation and Environmental Systems B¢	1or2			1	
	Special Lecture on Transportation and Environmental Systems B£	1or2			1	

d The subject marked d() in Remarks column offers the class in English in addition to the same class in Japa
The overlapped sublect is not recognized as credit.

FÆequirement for CompletionÇ

(1) Core Subjects: More than 8 credits.

(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) More than 8 credits are required from Optinal Subjects ,Core Subjects [except the credits in (1)] and Subje
offered in the other departments(Special Lecture is excluded).

(5) Subjects offered in the other graduate school(Special Lecture is excluded)

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

Architecture(Master's program)

Segment	Class Subject	Grade	Credit	Remarks
Core Subjects	(#" C0¿ Ü"I1= Advanced Architectural Environment and Building Service	1or2	2	>& d>'
	(0¿0£ Ü"I1= Advanced Architectural Project	1or2	2	>& d>'
	4" w#" C0£#ì"I1= Advanced Urban Environmental Planning	1or2	2	>& d>'
	5ð S4 0¿0£ 2"I1= Advanced Design of Steel Structures	1or2	2	>& d>'
	5r'½ ¥ å ¡ Ü î º S4 "I1= Advanced Reinforced Concrete Structures	1or2	2	>& d>'
	("@ ö+ 0¿0£ 2"I1= Advanced Performance Design of Buildings	1or2	2	>& d>'
	(S d 2"I1= Structure and Construction Techniques of Buildings	1or2	2	>& d>'
	(S4 "@ ú ·"I1= Dynamics of Building-Structure	1or2	2	>& d>'
	(û#ì í0£#ì"I1= Advanced Architectural Planning and Programming	1or2	2	>& d>'
	('56ë#.1="I1= Advanced Lecture for Architectural Theory of Space	1or2	2	>& d>'
	Œ2A S4 "I1= Advanced Timber Structures	1or2	2	>& d>'

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
	(Û1n'2 è A Directed Study in Architecture A	1	1			>& d>'
	(Û1n'2 èB Directed Study in Architecture B	1	1			>& d>'
	(Û1n'2 éA Directed Study in Architecture A	2	1			>& d>'
	(Û1n'2 éB Directed Study in Architecture B	2	1			>& d>'
	(Û - Ñ ¼ î è A Seminar in Architecture A	1	1			>& d>'
	(Û - Ñ ¼ î è B Seminar in Architecture B	1	1			>& d>'
	(Û - Ñ ¼ î éA Seminar in Architecture A	2	1			>& d>'
	(Û - Ñ ¼ î éB Seminar in Architecture B	2	1			>& d>'
	Çõë#" C d Û"I1= Advanced Human Environmental Engineering	1or2			2	>& d>'
	#" C í (0¿0£ è Environmental & Architectural Design	1or2			2	>& d>'
	#" C í (0¿0£ é Environmental & Architectural Design	1or2			1	>& d>'
	ö&O …% 75!O"I1= Advanced Ground Disaster Prevention	1or2			2	>& d>'
	(4" w …7È d Û"I1= Advanced Theory of Earthquake Engineering	1or2			2	>& d>'
	§ « ¸ • ¼ È Ý ("I1= Advanced Theory for Sustainable Architecture	1or2			2	>& d>'
	("@0¿0£,´5 ‡*f Practice of Loads on Buildings	1or2			1	>& d>'
	5r'½ ¥ å ¡ Ü î º S4 0¿0£ 2 ‡*f Practice of Structural Design for Reinforced Concrete Structure	1or2			1	>& d>'
	5ð S4 0¿0£ 2 ‡*f Practice of Structural Design for Steel Structures	1or2			1	>& d>'
	Architectural Design Internship	1or2			4	GNOT subject to requirement for completion GWhole year subject
	Special Lecture on Architecture	1or2			1	
	Special Lecture on Architecture	1or2			1	
	Special Lecture on Architecture	1or2			1	
	Special Lecture on Architecture	1or2			1	
	Special Lecture on Architecture	1or2			1	
	Special Lecture on Architecture	1or2			1	

d The subject marked d( ) in Remarks column offers the class in English in addition to the same class in Japa
The overlapped sublect is not recognized as credit.

FRequirement for CompletionF

(1) Core Subjects: More than 8 credits.

(2) Compulsory Specialized Subjects: 8 credits [Research 4 subjects, Seminar 4 subjects].

(3) Common Subjects: More than 2 credits of subject of 'MOT'.

(4) More than 8 credits are required from Optional Subjects[except 'Architectural Design Internship'] ,Core Su
[except the credits in (1)] .

(5) Subjects offered in the other departments and other graduate school(Special Lecture is excluded)

Total: 30 credits are required.

*Interdisciplinary Program Student should get the program's Subjects more than 8 credits.
These Subjects are able to be included in the credits for (4).

Common Subjects(Master's program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Common Subjects	Pre Academic English B	1or2			2	
	Advanced English	1or2			2	
	International Joint Research	1or2			1	
	International Joint Research	1or2			1	
	International Internship	1or2			1	
	PBL for Technology Transfer	1or2			2	
	MOT and Venture Business(MOT-1)	1or2			2	Acquire 2 credits from the following subjects.
	Technology Strategy for Management(MOT-2)	1or2			2	
	Intellectual Property, Finance and Accounting(MOT-3)	1or2			2	
	Technology Transfer(MOT-4)	1or2			2	
	MOT and Venture Business(MOT-E1)	1or2			2	
	Technology Transfer(MOT-E2)	1or2			2	
	Special Topics in Synchrotron Radiation ScienceB	1or2			2	Graduate School of Science
	Special Topics in Synchrotron Radiation ScienceB	1or2			2	Graduate School of Science
	PBL for International Reseach on Engineering Field (Basic)	1or2			2	
	¹ - Ñ ¼ î	1or2			2	
	Sustainability Materials Science	1or2			2	Institute for Advanced Materials Research

* Above mentioned subjects are not corresponded to "Subjects offered in the other departments".

Common Subjects(Docter's program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Common Subjects	PBL for International Reseach on Engineering Field (Advanced)	1HZ3			2	

		Compulsory Compulsory	but optional	Optional
!Õ d Û"l1=				
Advanced Thermal Engineering				
!Þ!• d Û"l1=	1or2			2
Combustion	1or2			2
Advanced Energy Plant	1or2			2
Advanced Biomass Resources	1or2			2
Advanced Biofuel Engineering	1or2			2
¢ Ü î å É ß - « d Û1=				
Green Process Engineering				

		Compulsory Compulsory	but optional	Optional
Control System Design	1or2			2
Á – Ã î Ä × î Ð å d Û"l1=				

General Urban Disaster Reduction (program open to students in the Departments of Civil and Environmental Engineering and Architecture)

Educational objectives:

Japan suffers from 13.4% of the total damage (in monetary value) caused by natural disasters in the world. In the next 30 years, major earthquakes are predicted in the Tokai and Tonankai regions in Japan. At the same time, the threat of flooding in urban centers is growing due to global climate c experience of Kobe Port, which lost its previous position as one of the world's major ports following the earthquake, points to the urgency and im disaster reduction in urban centers, where population, properties, and production facilities are concentrated. On the other hand, the number of l infrastructural facilities that support urban life and are older than 50 years will remarkably increase in the next 50 years, and their low levels of anti-disaster functionality and resistance is a cause of much societal concern.

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Interdisciplinary Subjects	Advanced River Engineering	1or2			2	
	¼1ß Û"l1=	1or2			2	(d)
	Advanced Meteorolgy					
	Geotechnical Earthquake Engineering	1or2			2	
	S4 ¦ q Û"l1=	1or2			2	(d)
	Advanced Structural Materials					
	)T â'ö#. d Û"l1=	1or2			2	(d)
	Maintenance of Steel Structure					
	Soft Ground Engineering	1or2			2	
	(S4 "@ ú ·"l1=	1or2			2	(d)
	Dynamics of Building-Structure					
	ö&O …% 75!O"l1=	1or2			2	(d)
	Advanced Ground Disaster Prevention					
	(4" w …7È d Û"l1=	1or2			2	(d)
	Advanced Theory of Earthquake Engineering					

d The subject marked(d) in Remarks column offers the class in English in addition to the same class in Japanese. The overlapped sublect is not r as credit.

Biosphere Environmental Systems (program open to students in the Departments of Transportation and Environmental Systems and Civil and Envi

Educational objectives:

Global warming and other global environmental problems which have become aggravated in recent years occur due to interactions of human activities, fluid systems, and ecosystems. This Program aims at training the students so that they may be able to tackle global environmental problems, which manifest themselves as such complex systems, by mobilizing their expertise from a broad academic perspective, ultimately contributing to humankind's sustainable development. To this end, the educational and research focal points of the Program are the measurement and dynamics of global environmental changes, and analysis, assessment, and generation based on chemistry, biology, and ecology.

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Interdisciplinary Subjects	¢ Ü î å É ß - « d Û1=	1or2			2	(d)
	Green Process Engineering					
	Advanced Environmental Chemistry Engineering	1or2			2	
	Advanced River Engineering	1or2			2	
	#" C – ² d Û"l1=	1or2			2	(d)
	Advanced Environmental Protection Engineering					
	¼1ß Û"l1=	1or2			2	(d)
	Advanced Meteorology					
	" Ê#" C d Û"l1=	1or2			2	(d)
	Advanced Environmental Coastal Engineering					
	#" C Ü « ¡ D š d Û"l1=	1or2			2	(d)
	Environmental risk management					
	#" C š ¿ Ý î"l1=	1or2			2	(d)
	Energy and Environmental Engineering					
	Environmental Analytical Chemistry of Atmosphere and Hydrosphere	1or2			1	Graduate School of Biosphere Science
	Practicum in Environmental Analytical Chemistry of Atmosphere and Hydrosphere	1or2			1	Graduate School of Biosphere Science
	Introduction to Aquatic Environmental Ecology	1or2			1	Graduate School of Biosphere Science
	Advance in Aquatic Environmental Ecology	1or2			1	Graduate School of Biosphere Science
	Numerical Model Analysis of Marine Ecosystem (Fundamental Course)	1or2			1	Graduate School of Biosphere Science
	Numerical Model Analysis of Marine Ecosystem (Applied Course)	1or2			1	Graduate School of Biosphere Science
	Management of Coastal Marine Environment (Introduction)	1or2			1	Graduate School of Biosphere Science
	Management of Coastal Marine Environment	1or2			1	Graduate School of Biosphere Science

d The subject marked(d) in Remarks column offers the class in English in addition to the same class in Japanese. The overlapped sublect is not r as credit.

Special Couse(Master's Program)

		Compulsory	Compulsory but optional	Optional
Japanese-Style Business Management and Manufacturing	1	2		
Japanese-Style Manufacturing PBL	2	2		
ÐCore Subject of belonged Departmentñ	>+			
Technology Transfer(MOT-E2)	2	2		
Internship	2	1		
PBL for Technology Transfer	3	2		
ÐSpecialized Subjects of belonged Departmentñ	>+			
Introductory Business Japanese	1	2		
Advanced Business Japanese	2	2		
MOT and Venture Business(MOT-1)	2		2	
MOT and Venture Business(MOT-E1)	2		2	
Technology Strategy for Management(MOT-2)	2		2	
Intellectual Property, Finance and Accounting(MOT-3)	3		2	
ÐOther Common Subjectsñ	>+			

Total: 35 credits are required and receive your supervisor's research guidance.

Special Couse(Master's Program) of Advanced Glocal Engineers

		Compulsory	Compulsory but optional	Optional
Technology Transfer(MOT-4)	1		2	
Technology Transfer(MOT-E2)	1		2	
Study on Glocal Engineers	1	2		
internship	1			1
PBL for Technology Transfer	4			2
Technology Strategy for Management	4			2

Requirement for Completion

F(1)F·To fulfill the requirements of your own departmd

F(2)FBasic Subjects: More than 4 credits.

F(3)FLanguage and Culture.

F(4)FPractice Subjects.

Special Couse(Doctral Program)

		Compulsory	Compulsory but optional	Optional
Technology Transfer(MOT-E2)	2	2		
Internship	2 í 3	1		
PBL for Technology Transfer	3	2		
Study on Technology TransfererSial				

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Class Subjects and Requirement for Completion

Mechanical Systems Engineering(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Mechanical Systems Engineering Research ê	1	2			
	Mechanical Systems Engineering Research ë	2	2			
	Mechanical Systems Engineering Research ì	3	2			

Requirement for Completion

You should get the credits of 'Mechanical Systems Engineering Research III, IV and V' and receive your supervisor's re guidance.

Mechanical Science and Engineering(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Mechanical Science Research ê	1	2			
	Mechanical Science Research ë	2	2			
	Mechanical Science Research ì	3	2			

Requirement for Completion

You should get the credits of 'Mechanical Science Research III, IV and V' and receive your supervisor's research guidan

System Cybernetics(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Directed Study in System Cybernetics ê	1	2			
	Directed Study in System Cybernetics ë	2	2			
	Directed Study in System Cybernetics ì	3	2			

Requirement for Completion

You should get the credits of 'Directed Study in System Cybernetics III, IV and V' and receive your supervisor's researc guidance.

Information Engineering(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Directed Study in Information Engineering ê	1	2			
	Directed Study in Information Engineering ë	2	2			
	Directed Study in Information Engineering ì	3	2			

Requirement for Completion

You should get the credits of 'Directed Study in Information Engineering III, IV and V' and receive your supervisor's rese guidance.

Chemical Engineering(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory	Optional	
Specialized Subjects	Chemical Engineering Research ê	1	2			
	Chemical Engineering Research ë	2	2			
	Chemical Engineering Research ì	3	2			

Requirement for Completion

You should get the credits of 'Chemical Engineering Research III, IV and V' and receive your supervisor's research guic

Applied Chemistry(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Directed Study in Applied Chemistry ê	1	2			
	Directed Study in Applied Chemistry ë	2	2			
	Directed Study in Applied Chemistry ì	3	2			

Requirement for Completion

You should get the credits of 'Directed Study in Applied Chemistry III, IV and V' and receive your supervisor's research

Civil and Environmental Engineering(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Civil and Environmental Engineering Research ê	1	2			
	Civil and Environmental Engineering Research ë	2	2			
	Civil and Environmental Engineering Research ì	3	2			

Requirement for Completion

You should get the credits of 'Civil and Environmental Engineering Research III, IV and V' and receive your supervisor's guidance.

Transportation and Environmental Systems(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Transportation and Environmental Systems Research ê	1	2			
	Transportation and Environmental Systems Research ë	2	2			
	Transportation and Environmental Systems Research ì	3	2			

Requirement for Completion

You should get the credits of 'Transportation and Environmental Systems Research III, IV and V' and receive your supe research guidance.

Architecture(Doctoral Program)

Segment	Class Subject	Grade	Credit			Remarks
			Compulsory	Compulsory but optional	Optional	
Specialized Subjects	Directed Study in Architecture ê	1	2			
	Directed Study in Architecture ë	2	2			
	Directed Study in Architecture ì	3	2			

Requirement for Completion

You should get the credits of 'Directed Study in Architecture III, IV and V' and receive your supervisor's research guidar

Procedures for Course Registration, Research Plan Submission, etc. at Hiroshima University Graduate School of Engineering

{ Students are required to complete the course registration procedure as described below in accordance with Article 11 of the Regulations of the Graduate School of Engineering, Hiroshima University. Note that without course registration procedure correctly completed, you will not be allowed to attend classes, even as auditors, or not be able to obtain credits for the coursework.

1. Course registration
   a) Copies of the timetable of classes for the first and second semesters are distributed at the beginning of the first semester; you are responsible for keeping your copy for your use, especially for course registration at the beginning of the second semester.
   b) Details of the course registration procedure are posted on My Momiji and on the bulletin board in the Student Support Office of the Graduate School of Engineering before the beginning of each semester; make sure to check updates
   c) You are required to register, during the registration period, for all the courses you wish to take.
   d) You may add or cancel courses strictly only during the confirmation/revision period.

2. Important notes
   a) If you have forgotten your password, which is required for course registration, you may reset your password in the Student Support Office of the Graduate School of Engineering.
   b) For course registration, you are required to register for all the courses you wish to take.
   c) The registration of lectures and seminars must be completed in the first semester if you are enrolled in April and in the second semester if you are enrolled in October.

{ Students are required to submit their research plans and other relevant documents (prescribed forms are provided) upon receiving guidance and advice from their academic advisors in compliance with the provisions of Articles 7 and 11 of the Regulations of the Graduate School of Engineering, Hiroshima University
The prescribed forms will be distributed to you upon enrollment; you are responsible for keeping them appropriately for your use.

1. Students in the Master's Program
   a) Research plans
      To be submitted: By the last day of May of Year 1 (last day of November for students enrolled in October)
      By the last day of April of Year 2 (last day of October for students enrolled in October)

2. Students in the Doctoral Program
   a) Research plans
      To be submitted: By the last day of May of Year 1 (last day of November for students enrolled in October)
      By the last day of April of Year 2 and 3 (last day of October for students enrolled in October)
   b) Research achievement reports
      To be submitted: By the last day of April of Year 2 and 3 (last day of October for students enrolled in October)

Hiroshima University Graduate School of Engineering Assessment of Academic Performance

{ In compliance with the provisions of Article 30 of the Hiroshima University Graduate School Regulations, the student's academic performance in courses (or subjects) shall be assessed as follows:

1. Academic performance shall be assessed on a scale of five levels: "Excellent," "Superior," "Good," "Fair," and "Poor." The first four shall be passing grades, while "Poor" shall be a failing grade.
2. In case of doubts about the assessment of academic performance, the concerned party may:
   a) Consult the instructor in charge of the course in question;
   b) If the doubts remain even after consultation with the instructor concerned, contact the Student Support Office of the Graduate School of Engineering (in charge of graduate school curricula) within one week from the start of the courses in the subsequent semester.

Master's Thesis Review and Final Examination

1. Thesis Review
   (1) Notification of Master's Thesis Title
   Students who plan to complete a Master's Program shall submit their Thesis Titles to the Dean of the Graduate School (Head of the Department) via their academic advisors by the date prescribed by the respective Departments.
   (2) Submission of the Master's Thesis
   Closing date: as prescribed by each Department (for all students, regardless of the timing of their program completion)
   Number of copies: 1
   To be submitted to: Dean of Graduate School (Head of the Department)
   (3) Thesis Screening Committee
   (a) The head of each Department shall select candidate members of a Thesis Screening Committee for each thesis (the student's academic advisor and one or more teaching faculty members related to the subject of the thesis; if only one committee member is selected for the latter category, this member cannot be from the same laboratory as the academic advisor) and notify their names to the Dean of the Graduate School (Student Support Office of the Graduate School of Engineering) no later than February 1 (or July 1 for students who expect to complete the Program in September).
   (b) The Thesis Screening Committee composition (with the student's academic advisor as principal reviewer) shall be finalized by the Graduate School Board of Representatives.
   (c) The Thesis Screening Committee shall review the thesis to determine whether it is accepted or not.
2. Final Examination
   (1) Each Department shall subject the students whose thesis has been accepted to a final examination and make a pass/fail decision.
   (2) The final examination shall be completed no later than the last day of February (or the last day of August for students who expect to complete the Program in September).
3. Final Results
   (1) The head of each Department shall submit a written report of the final results of the thesis reviews and final examinations to the Dean of the Graduate School (Student Support Office of the Graduate School of Engineering) no later than the last day of February (or the last day of August for students who expect to complete the Program in September).
   (2) The Dean of the Graduate School shall advise the Faculty Meeting of the Graduate School to discuss the course completion of thesis authors by referring to the results, and the Faculty Meeting shall comply.
4. Other matters
   Matters that cannot be settled in accordance with the present guidelines shall be referred to the Faculty Meeting of the Graduate School so that a decision may be made in each case.

Acquisition of Doctorates

September 8, 2011
January 21, 2016
Approved by the Graduate School Council of the Graduate School of Engineering

1. Requirements for doctorate conferment
   (1) Doctoral candidates must demonstrate a high level of scholarship in an area of specialization related to the Graduate School.
   (2) Doctoral candidates must demonstrate research competency that is sufficient to contribute to the development of an area of specialization related to the Graduate School

   (Student doctoral candidates)
   Must be enrolled in the Graduate School for a prescribed number of academic years to obtain the required number of credits for coursework and receive instruction in research, submit a doctoral dissertation, and pass the review of the dissertation and the final examination.

   (Non-student doctoral candidates)
   Must submit a doctoral dissertation and pass the review of the dissertation and the final examination.

   In addition, the candidates' doctoral dissertations or the principal sections of the dissertations must have been published, or be scheduled to be published in a refereed publication.
   Student doctoral candidates whose research achievements are recognized by the Graduate School Council as exceptionally outstanding may be enrolled in the Graduate School for a period of at least one year (for early program completion).

2. Other requirements for application for doctorate conferment

Department	Student doctoral candidates	Non-student doctoral candidates
Mechanical Systems Engineering	Researcher/specialist track At least 3 (A)s, or 2 (A)s and at least 1 (B) In either case, the candidate must be the principal author of at least 1 (A).	At least 5 (A)s (of which the candidate is the principal author of at least 2)
Mechanical Science and Engineering	Researcher/specialist track: At least 3 (A)s, or 2 (A)s and at least 1 (B) In either case, the candidate must be the principal author of at least 1 (A).	At least 5 (A)s (of which the candidate is the principal author of at least 2)
System Cybernetics	Researcher/specialist track: At least 2 (A)s and at least 1 (B), in principle	At least 5 (A)s and at least 1 (B), in principle
Information Engineering	Researcher/specialist track: At least 2 (A)s and at least 1 (B) of which the candidate is the principal author, in principle	At least 4 (A)s (of which the candidate is the principal author of at least 1) and at least 1 (B) of which the candidate is the principal author, in principle
Chemical Engineering	Researcher/specialist track: At least 3 (A)s, or 2 (A)s and at least 1 (B) In either case, the candidate must be the principal author of at least 1 (A).	At least 5 (A)s (of which the candidate is the principal author of at least 2)
Applied Chemistry	Researcher/specialist track: At least 3 (A)s (of which the candidate is the principal author of at least 1)	At least 5 (A)s (of which the candidate is the principal author of at least 1), in principle
Civil and Environmental Engineering	Researcher/specialist track: At least two research papers of the category (A), all of which the first author is the candidate, including at least one journal paper with SCI.	At least 3 (A)s (of which the candidate is the principal author of at least 1)
Transportation and Environmental Systems	Researcher/specialist track: At least 2 (A)s (of which the candidate is the principal author of at least 1), or 1 (A) of which the candidate is the principal author at least 1 (B) of which the candidate is the principal author	At least 3 (A)s (of which the candidate is the principal author of at least 1)
Architecture	Researcher/specialist track: At least 2 (A)s (of which the candidate is the principal author of at least 1)	At least 3 (A)s (of which the candidate is the principal author of at least 1)

* The symbol (A) denotes an academic paper published (or scheduled to be published) in a refereed publication of a related scientific society and the like.
* The symbol (B) denotes an academic paper read (or scheduled to be read) at an international scientific conference.

An Outline of the Doctorate Conferral Procedure for Student Doctoral Candidates

Step	Outline
Preliminary review	(Documents required for preliminary review) 1. Candidates for doctorates

Presentation of dissertation	The Review Committee shall select a date for the presentation of dissertation as soon as it is received and submit a prescribed posting request form to the Graduate School office in charge of student doctoral candidates. Posting shall be undertaken by the same Graduate School office and the Department offices. (Places of posting: Student Support Office and relevant Department bulletin boards)
Review Committee	(Review Committee) 1. The Review Committee, which inspects the dissertation and examines the candidate, shall be established by the Graduate School Board of Representatives, based on recommendations made by the Department to which the head academic advisor belongs. 2. Each Review Committee shall consist of at least three faculty members of the Graduate School of Engineering, of whom at least two must be professors of the Graduate School of Engineering. However, the Review Committee may also include members of other Hiroshima University graduate school faculties, postgraduate faculties of other universities, research institutions and the like when deemed necessary by the Graduate School Board of Representatives. 3. The Review Committee shall establish a chair, to which a faculty member of the Graduate School of Engineering shall be appointed. (Graduate School of Engineering Regulations on Academic Degrees, Article 5)
Examination	(Examination) Doctoral candidates shall be subjected to examination in subjects mainly related to the theme of their dissertations. (Hiroshima University Degree Regulations, Article 6, Paragrap
Review period	1. The review of dissertation and a written or oral examination shall be terminated within 12 months of the reception of the dissertation. 2. Under special circumstances, the period of the review of dissertation may be extended by a period not exceeding twelve months, with consent from the Faculty Meeting.
Report by Review Committee	Upon completing the review of dissertation and the examination, the Review Committee shall promptly report to the concerned Faculty Meeting in writing, using the prescribed forms as listed below, on the content of the dissertation, and the review and examination results: Summary of Review of Dissertation (Form No. 5), Summary of Examination Results (Form No. 6) (Hiroshima University Degree Regulations, Article 8)
Perusal of dissertations	Dissertations submitted as part of requirements for the conferral of academic degrees may be made available for perusal at request.
Review of degree conferral	1. The Faculty Meeting shall distribute copies of the submitted Reports on the Review of Dissertation to the professors concerned at least seven days prior to the meeting of Faculty Meeting (which is held in April, May, July, September, November, January, and March). 2. In the absence of formal objection from the professors, the Faculty Meeting need not deliberate on the Reports on the Review of Dissertation at the meeting. 3. The decision on the conferral of an academic degree requires the attendance of two-thirds of the members of the Faculty Meeting (excluding those on overseas assignment or in long-term convalescence), as well as a consensus of at least two-thirds of the members in attendance. (Hiroshima University Degree Regulations, Article 9, Paragraph 2)
Report to University President	The Dean of the Graduate School shall report to the President of Hiroshima University of the decisions made regarding academic degrees with the following documents: (1) Report on degree conferral: 1 copy (2) Curriculum vitae: 1 copy (3) List of publications: 1 copy (4) Summary of dissertation: 1 copy (5) Summary of review of dissertation: 1 copy (6) Summary of examination results: 1 copy (7) Dissertation: 2 copies
Dates of degree conferral	1. Successful candidates completing the Doctoral Program in three years (excluding those opting for early program completion): Day of the degree conferral ceremony in September or March 2. Successful candidates completing the Doctoral Program in a period exceeding three years: Day of the decision on degree conferral 3. Successful candidates opting for early program completion (at least one year and within three years) of the Doctoral Program: Day of the decision on degree conferral, or day of the degree conferral ceremony in September or March

Doctoral Degree Application Procedures

1. Documents to be submitted and the number of copies required

(1) Student doctoral candidates

a. Application for Review of Dissertation (form provided) ..... 1 copy
b. List of publications (form provided) ..... 3 copies
c. Dissertation ..... 1 copy
d. Reference papers (if any) ..... 2 sets of copies
e. Summary of the papers ..... 3 copies
f. Curriculum vitae (form provided) ..... 3 copies
g. Reception of degree application form (form provided) ..... 1 copy
h. Summary of Dissertation ..... 1 copy
i. Doctoral candidate survey (form provided) ..... 1 copy
j. Statement of confirmation regarding submission and publication of the Dissertation (application form) ..... 1 copy
k. Electronic versions (PDF files) of the Dissertation and its summary ..... 1 set
l. Letter of consent (form provided) ..... 1 copy

(2) Non-student doctoral candidates

a. Application for Degree Conferral (form provided) ..... 1 copy
b. List of publications (form provided) ..... 3 copies
c. Dissertation ..... 1 copy
d. Reference papers (if any) ..... 2 sets of copies
e. Summary of the papers ..... 3 copies
f. Curriculum vitae (form provided) ..... 3 copies
g. Certificate of graduation from the last educational institution attended or a copy of diploma ..... 1 copy
(Certificate of postgraduate program completion or copy of certificate of academic degree)
h. Certificate of the length of the candidate's research experience (signed by the academic advisor or equivalent person) ..... 1 copy
i. Reception of degree application (form provided) ..... 1 copy
j. Summary of Dissertation ..... 1 copy
k. Doctoral candidate survey (form provided) ..... 1 copy
l. Certificate of acquisition of credits in a postgraduate program ..... 1 copy
m. Dissertation review fee ..... Fifty-seven thousand (57,000) yen
n. Statement of confirmation regarding submission and publication of the Dissertation (application form) ..... 1 copy
o. Electronic versions (PDF files) of the Dissertation and its summary ..... 1 set
p. Letter of consent (form provided) ..... 1 copy

2. Notes about document (form) completion

(1) Entries may be handwritten (fountain or ballpoint pen), typed, or electronically created.

(2) A single identical personal seal (hanko) must be used by each candidate.

3. Application for Review of Dissertation or for Degree Conferral

Use Form No. 1 or No. 2.

4. List of publications

(1) Form

Use Form No. 3.

(2) Dissertation

(A) Title

a. Give the title (and the subtitle if applicable) as it appears on the submitted dissertation.

b. Give a Japanese translation in parentheses if the original title is in a language other than Japanese, and an English translation if in Japanese.

c. If the dissertation is composed of several papers each with a different title, give a collective title without specifying the individual titles.

(B) Publication and timing

a. Dissertations for which Hiroshima University confers doctorates are published in Hiroshima University's academic information repository.

b. For the publication as per the paragraph above, dissertations are usually published in their entirety. Regarding dissertations which have been published in their entirety but with minor modifications or omissions in such a manner as not to directly alter the research content when such publication was permitted, the dates of publication and the names of the journals in which the dissertations were published (as well as the volumes, numbers and pages of the journals) or places of publication must be indicated.

c. Components of a dissertation may be separately published in units of division (volumes, chapters, etc.) or in sub-themes of the research content; in this case, the mode and the date of each publication must be indicated.

d. Dissertations may be considered as published when other papers with identical content are published by the same authors; in this case, the mode and the date of each publication must be indicated.
For unpublished papers, the scheduled mode and date of publication must be indicated.

(3) Reference papers

a. Indicate the title, author(s), and mode and date of publication of a paper or single-authored by the doctoral candidate that deals with a subject that is different from that of the Dissertation and is particularly important as reference, if any.

b. Make a list of reference papers, if there are two or more of them.

c. Enter “

8. Curriculum vitae

(1) Form

Use Form No. 4

(2) Registry address (nationality)

Candidates of Japanese nationality must enter their prefecture name only; candidates of other nationalities must enter their country name.

(3) Current address

(A) Enter the address as it appears on your residence certificate (jumin-hyo).

(B) Enter also the building name, apartment number, etc. for assured communication.

(C) Candidates who plan to stay overseas for an extended period of time following the submission of the Dissertation must also enter their overseas address.

(4) Name

If your name is written in Chinese ideograms (kanji), indicate its reading in kana.

(5) Academic background

(A) Enter chronologically the educational institutions attended, starting with graduation from secondary school.

(B) If you withdrew from a doctoral program after completing the coursework, attach a certificate of acquisition of credits in a postgraduate program.

(C) Indicate the change of name of a school during your enrollment, if any.

(D) Enter only the educational programs you pursued at institutions of formal education; years spent at an educational institution as a research fellow, etc. must be entered under "Research background".

(6) Professional career

List chronologically all the posts of full-time employment you assumed, with each employer's name and job title. It is desirable that part-time posts are also listed if they are related to education and research.

(7) Research background

(A) List chronologically the research activities undertaken that are noteworthy in connection with the envisaged academic degree.

(B) Information on noteworthy academic research activities expected in this column includes the following (examples):

a. Research projects (including joint projects) related to your doctoral research theme
b. Training programs (including those pursued as a research fellow at a university)
c. Academic surveys and investigations
d. Publications and presentations (books, papers, etc.)
e. Activities involving scholarships and grants
f. Activities involving academic societies
g. Others that may be of significance in connection with the envisaged academic degree

(C) Entries entered under "Academic background" or "Professional career" should not be double-entered under "Research background".

9. Reception of degree application.

Use the prescribed form.

10. Summary of Dissertation

A summary of the Dissertation must be about 1,600 words (one A4 page).

11. Doctoral candidate survey

The Doctoral candidate survey (Form) must bear the candidate's academic advisor's seal to indicate confirmation.

12. Statement of confirmation regarding submission and publication of the Dissertation (application form)

Use the prescribed form.

13. Electronic versions of the dissertation and its summary
    They must be submitted in PDF files (PDF/A ISO19005 recommended).

14. Letter of consent
    Use the prescribed form. A letter of consent must be signed by all the authors or by the representative of the co-authors. However, no letter of consent is required under special circumstances where it is extremely difficult to obtain a written statement.

15. Other matters
    Candidates who are currently salaried company employees or are otherwise employed must indicate their office address and telephone number (business card may be attached)

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Title of your Doctoral Dissertation

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Title of your Doctoral Dissertation

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ØDon't write the title of the paper which you have just submitted and will submit. However, you can write the title of any paper which has been determined to be accepted or any paper in press, indicating accordingly.
ØIf you write the published date in era name, add the dominical year in parentheses below

学位論文の表紙について

About Front cover of Your Doctoral Thesis

※　最終的に提出する学位論文の表紙は，次のことに留意して作成すること。

Pay attention to the followings when making your final doctoral thesis.

（1）表紙には学位論文題目，学位取得年月及び氏名を記載し，背表紙には学位論文題目及び氏名を記載すること。

Front cover must have the thesis title, the year and month of acquisition and your name. Spine must have the thesis title and your name.

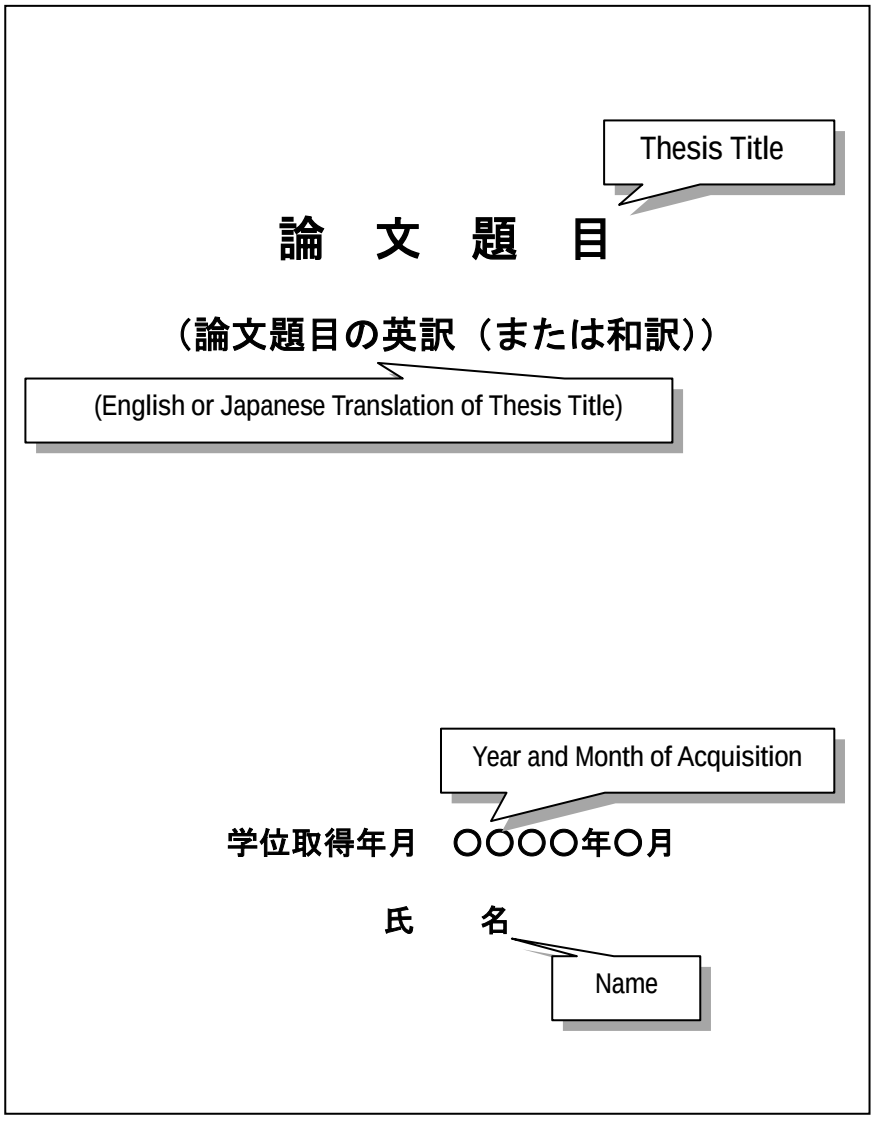
（2）学位論文題目は，学位申請時に届け出たものと全く同一の表記を記載すること。

（和題・英題ともに記載し，英題の大文字小文字の別も学位申請時の届け出と同一にすること。）

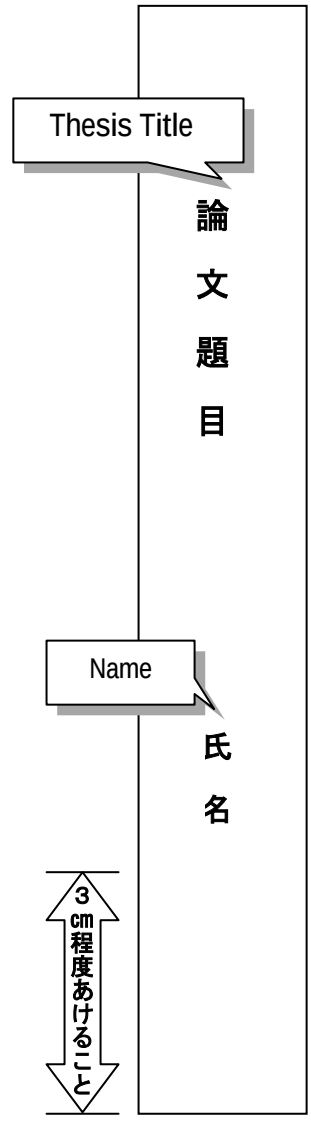
The thesis title on the front cover and spine must be just all the same as the title which you applied.

(English and Japanese title must be printed on the cover. The titles must be all the same as the title which you applied including the difference between small letters and big letters of English title.)

（表紙） Front cover



（背表紙） Spine



By-laws of the Graduate School of Engineering, Hiroshima University

April 1, 2004
Approved by the Dean of the Graduate School

(Purpose)

Article 1 The purpose of these By-laws is to stipulate necessary matters regarding research and education at the Graduate School of Engineering, Hiroshima University ("Graduate School") not stipulated in the Hiroshima University Graduate School Regulations (Regulations No. 2, January 15, 2008, "Hiroshima University Regulations").

(Purposes of Education and Research)

Article 2 The purposes of education, research, and human resource development at the Graduate School and its respective Departments shall be as indicated in the table below.

	Master's Program	Doctoral Program
Graduate School	Purposes of human resource development: (1) Leading the students to understand the objectives of engineering, develop a sense of social responsibility, and become autonomous as engineers (2) Leading the students to acquire advanced knowledge required in engineering (3) Training the students as highly specialized engineers with the ability to set research themes for themselves and effectively work them out (4) Developing the student's ability to conduct advanced research/interdisciplinary research (5) Developing the student's other abilities related to engineering Purposes of education and research Promoting advanced research/interdisciplinary research so as to contribute to society through research results in building an affluent society and assuring peace, development, and continuation of humankind	Purposes of human resource development: (1) Leading the students to deeply understand the objectives of engineering, develop a keen sense of social responsibility, and become fully autonomous as engineers (2) Leading the students to acquire advanced expert knowledge required in engineering (3) Training the students as highly specialized engineers with superb ability to set research themes for themselves and effectively work them out (4) Developing the student's ability to conduct advanced cutting-edge research/interdisciplinary research (5) Developing the student's other advanced abilities related to engineering so that they may lead future succession and development of engineering Purposes of education and research Promoting advanced cutting-edge research/interdisciplinary research so as to contribute to society through research results in building an affluent society and assuring peace, development, and continuation of humankind
Dept. of Mechanical System Engineering	Training the students as specialized engineers and researchers who, in response to ever-growing demand for advanced expertise in mechanical industries, possess a vast body of knowledge about physical phenomena and their engineering applications, and who are capable of research and development on mechanical system optimization design, functional sophistication, and intelligence integration on the basis of computational mechanics and electronic measuring and control technology; promoting advanced research/ interdisciplinary research in Mechanical Systems Engineering so as to contribute to society through research results in building an affluent society	Training the students as highly specialized engineers and researchers who have the superb ability to set advanced research themes for themselves and effectively work them out on the basis of the fundamental knowledge in Mechanical Systems Engineering acquired in the Master's Program; promoting advanced cutting-edge research/interdisciplinary research in Mechanical Systems Engineering so as to contribute to society through research results in building an affluent society
Dept. of Mechanical Science and Engineering	Training the students as specialized engineers and researchers who have a vast body of knowledge about physical phenomena and their engineering application especially in the fields of energy, materials, and the environment, and who are capable of research and development concerning mechanical design and manufacturing, detection of causes of abnormal phenomena and discovery of new functions; promoting advanced research/interdisciplinary research in Mechanical Science and Engineering so as to contribute to society through research results in building an affluent society	Training the students as highly specialized engineers and researchers who have the superb ability to set advanced research themes for themselves and effectively work them out on the basis of the fundamental knowledge in Mechanical Science and Engineering acquired in the Master's Program; promoting advanced cutting-edge research/interdisciplinary research in Mechanical Science and Engineering so as to contribute to society through research results in building an affluent society
Dept. of System Cybernetics	Leading the students to acquire a broad body of basic knowledge necessary to systematically understand diverse and complex systems that surround humans in the highly information-oriented contemporary society and to effectively utilize such systems, as well as specialized knowledge about the latest technologies and applications. The Department's education and research aim at training the students as highly specialized engineers capable of contributing to the development of methodologies concerning various real systems, as well as their integration in human society and their harmonization with the global environment.	In addition to the same objectives as in the Master's Program, training the students as highly specialized engineers, researchers, and educators who, based on their structured of specialized knowledge about diverse and complex systems, develop new methodologies for analyzing, designing, controlling, and utilizing various real systems (large-scale complex systems, optimized systems, systems with organic man-machine interfaces, etc.) from the systems engineering perspective, create innovative new 21st century technologies, and lead their development
Dept. of Information Engineering	Leading the students to acquire a broad body of advanced knowledge and information technologies ranging from basics to application systems on the foundation of computer hardware and software, the basic theories of information engineering, and the organic integration of five domains of applied mathematics; training the students as globally operational scientists who proactively take up research and development in new and complex fields; developing the student's ability to put the knowledge and expertise they have acquired to practical use through participation in research and development projects that mobilize the most advanced theories and technologies in Information Engineering	Training the student's ability to assimilate advanced knowledge required to adequately respond to advanced developments in Information Engineering and concurrent changes and progress in the information society; to find original research themes on their own; and analyze and find solutions; leading the students to enrich their experience, deepen their understanding of the knowledge acquired thus far, and improve their ability to practice their expertise through participation in advanced research and development projects as proactive and leading members; training the students as globally operational and highly specialized engineers and researchers who take the lead in research and development by mobilizing their superb abilities

Dept. of Chemical Engineering	Training the students as highly specialized engineers wh are capable of constructing a recycling-oriented industrial society that eliminate environmental, energy and resource-related problems, based on knowledge about the transfer, conversion, and circulation of matter and energy and through the creation of new materials featuring novel functions and the development of highly efficient manufacturing, separating and recycling processes; in addition, the Department's education and research aim at developing the students as human resources with a broad perspective who will contribute to building an affluent society with the ability to understand human activity and environment-related problems and material recycling from a global, engineering perspective	Training the students as highly specialized engineers and researchers who, on the basis of the fundamental knowled Chemistry and Process Engineering acquired in the Ma Program, have the ability to conduct research and development and find solutions from an advanced perspective, to design original research plans, and to actively work as leaders and instructors, and who also have advanced knowledge that enable them to flexibly handle complex problems and the excellent ability to work on a global scale
Dept. of Applied Chemistry	The properties of materials largely depend on their molecules as components; accordingly, the chemical approach of analyzing materials at a molecular level is essential for the development of novel functional materials The Department of Applied Chemistry, charged with the social mission of developing planet-friendly materials, aims at training the students as highly specialized engineers and researchers who conduct molecular-level material design and analysis and take the lead in creating new functional materials and energy sources by mobilizing chemical methods.	Training the students as highly specialized engineers and researchers who, on the basis of the acquisition of the abil acquired in the Master's Program to design and analyze materials at a molecular level and create novel functional materials and energy sources through chemical methods, have the ability to conduct research and development and find solutions from an advanced perspective, to design original research plans, and to actively work as leaders and instructors, and who also have advanced knowledge that enable them to flexibly handle complex problems and the excellent ability to work on a global scale, considering that many of the research projects handled by the Department require global collabor
Dept. of Civil and Environmental Engineering	Training the students as highly specialized engineers wi broad based of knowledge and the ability to solve problems in the area of Civil and Environmental Engineering who will be able to work as leading technical administrators charged with infrastructural development and maintenance and disaster prevention in national or regional governments, construction engineers who can complete globally with advanced technical and management abilities, environmental engineers who develop new industrial fields with technologies for the preservation and restoration of natural environment, etc.	In addition to the same objectives as in the Master's Program, training the students as researchers and educators who creat new specializations expected to promote global environmental preservation, discover concrete individual research themes and implement them, and contribute to the development of global advanced science and technology with a strong sense of mission in the area of Civil and Environmental Engineering, which explores a foundation for society's sustainable development
Dept. of Transportation and Environmental Systems	Training the students as researchers capable of advanced research and highly specialized engineers capable of working on technical problems relating to transportation equipment, distribution systems, and the environment comprehensively and from a broad global environmental perspective to find solutions, and building or creating systems that harmonize artificial transportation equipment with the natural environment	Training the students as educators, researchers capable of advanced research, and highly specialized engineers capable of working on technical problems relating to transportation equipment, distribution systems, and the environment comprehensively and from a broad global environmental perspective to find solutions, and building or creating systems that harmonize artificial transportation equipment with the natural environment
Dept. of Architecture	Training the students as engineers who can take the lea architectural projects that aim at reasonably realizing buildings that are safe, comfortable, and sustainable, and cities as assemblies of such buildings; leading the students to acquire specialized knowledge about structures, materials, loads, production, environment, planning, and architectural and artistic design as the fundamental requirement for architectural projects, as well as the practical ability to mobilize such knowledge in integrating manners, so as to train the students as highly specialized engineers capable of setting research problems based on societal needs and proactively finding solutions	Training the students as engineers who can take the lead i architectural projects that aim at reasonably realizing buildi that are safe, comfortable, and sustainable, and cities as assemblies of such buildings; leading the students to acquire specialized knowledge about structures, materials, loads, production, environment, planning, and architectural and artistic design as the fundamental requirement for architectural projects, as well as the practical ability to mobilize such knowledge in integrating manners, so as to train the students as educators, researchers capable of advanced research, and specialized engineers capable of setting research themes based on societal needs and analyzing and working them out from an advanced perspective

(Interdisciplinary Programs)

Article 3 The Departments of the Graduate School each shall establish interdisciplinary programs as indicated in the table below:

Department	Program
Mechanical Systems Engineering	Hyper-Human Technology Biomass
Mechanical Science and Engineering	Biomass Hyper-Human Technology
System Cybernetics	Hyper-Human Technology
Information Engineering	Hyper-Human Technology
Chemical Engineering	Biomass Hyper-Human Technology Green Chemistry
Applied Chemistry	Green Chemistry
Civil and Environmental Engineering	General Urban Disaster Reduction Biosphere Environmental Systems
Transportation and Environmental Systems	Biosphere Environmental Systems
Architecture	General Urban Disaster Reduction

(Special Courses)

Article 4 The Graduate School shall establish a special course for international students of advanced specialization Advanced Global Engineers to Promote International Expansion of Japanese Manufacturers and Advanced Global Engineers in the master's programs.

2. The Graduate School shall establish a special course of Advanced Global Engineers to Promote International Expansion of Japanese Manufacturers in the doctoral program.
3. Students wishing to enroll in either of the special courses indicated in the two paragraphs above may do so by obtaining permission from their respective academic advisor and applying to the Dean of the Graduate School for approval.

(Selection of Interdisciplinary Program)

Article 5 Students may select and study in one of the interdisciplinary programs indicated in Article 3.

(Academic Advisor)

Article 6 Upon student's enrollment in the Graduate School, the Head of each Department shall promptly assign to each student an academic advisor and secondary academic advisor who will offer advice and guidance on course subjects and research. Each student shall have up to two secondary academic advisors, who may be chosen, as the need arises, from teaching faculty members of other Hiroshima University graduate schools or other universities' graduate schools.

2. Students wishing to change their primary or secondary academic advisor shall apply to the Head of the Department for approval.
3. The Head of each Department may change their students' primary and/or secondary academic advisor if such change is deemed desirable upon obtaining approval of the students concerned.

(Research Title)

Article 7 Upon enrollment in the Graduate School, the students must decide their research title in consultation with their academic advisors within two months from enrollment and submit it to the Dean of the Graduate School.

(Curriculum)

Article 8 The curricula of the Graduate School shall be as indicated in the appended table.

(Class Subjects and Related Matters)

Article 9 Course subjects and their numbers of credits shall be as indicated in the appended table.

2. The syllabus and timetable of classes shall be published at the beginning of each academic year.

(Standards for Calculation of Credits)

Article 10 The number of credits of each course shall be calculated based on the following standards and according to course modes:

(1) For lectures, 15 hours of coursework constitute 1 credit.
(2) For seminars, 15 or 30 hours of coursework constitute 1 credit.
(3) For experiments and practical exercises, 30 or 45 hours of coursework constitute 1 credit.

2. For a course conducted in two or more modes in parallel, the number of hours of coursework to be conducted in each mode shall be determined in light of the standards indicated above and so that 45 hours of combined coursework constitute 1 credit.

(Registration Procedure)

Article 11 The students must select courses in consultation with their academic advisors and complete the prescribed procedure to register for the courses within the period designated for each semester.

2. Students who fail to complete the procedure as stated in the preceding paragraph shall not be allowed to take courses unless under legitimate circumstances, in which case the students may take courses upon obtaining approval from the instructors in charge of the courses concerned.
3. The students may take courses offered by other Hiroshima University graduate schools or undergraduate faculties that are deemed necessary by their academic advisors upon obtaining approval from the Dean of the Graduate School in accordance with the rules of the graduate school or undergraduate faculty concerned; in such cases, the courses may count toward the degree requirements of the Graduate School if so approved by the Faculty Council of the Graduate School of Engineering, Hiroshima University (the "Faculty Council"), with the exception of undergraduate faculty courses.
4. Students of other graduate schools wishing to register for courses offered by the Graduate School must take the prescribed procedure within the designated period for each semester upon obtaining approval from instructors in charge of the courses concerned.

(Special Arrangements)

Article 12 Special arrangements may be made to facilitate the pursuance of graduate school education by students with professional activities, if the Faculty Council considers it especially necessary from an educational standpoint, by scheduling classes or research guidance sessions in the evening or at specific hours or during specific period or devising other appropriate measures.

(Recognition of Credits Acquired Prior to Admission)

Article 13 The Graduate School may, if it considers this to be beneficial from an educational standpoint, recognize as part of its degree requirements the credits that the students acquired by completing courses at other graduate schools in Japan or

overseas (including credits acquired as credited auditors) prior to admission to the Graduate School.

2. The number of credits other than those acquired at the Graduate School (including credits acquired as credited auditors) that may be recognized as part of the degree requirements pursuant to the provision of the preceding paragraph shall not exceed 10 credits, except in cases of transfer.

3. The recognition of credits acquired prior to admission to the Graduate School as prescribed in the preceding two paragraphs shall be determined in accordance with the Hiroshima University By-Laws Regarding Approval of Previously Acquired Credits (approved by the Vice President in charge of education and students affairs on April 1, 2004).

(Requirements for Completing Master's Program)

Article 14 To complete a Master's Program, a student must have been enrolled in the Program for at least two years, have obtained 30 credits or more by completing the courses indicated in the appended table, received necessary research guidance, submitted a Master's thesis during the enrollment period, and passed the screening of the thesis and final examination, with the exception of students whom the Faculty Council recognizes as having achieved outstanding academic performance, who may be exempt from the enrollment requirement and may complete the Program in one year at least.

2. For the students exempt from the enrollment requirement as per the preceding paragraph, credits indicated in the following may not be added to 30 credits required for completing the Master's Program.

(1) Enrollment for more than 1 year and less than 1 year and a half: Lecture IIA, Seminar IIA, Lecture IIB and Seminar IIB indicated in the appended table of each department.

following consultation with the Faculty Council.

2. The year of study and the number of years that students admitted to the Graduate School may remain in their

Hiroshima University Degree Regulations
(Graduate School of Engineering Regulations)

April 1, 2004
Approved by the Dean of the Graduate School

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Chapter I General Provisions

(Purpose)

Article 1 The purpose of these Graduate School Regulations shall be to stipulate necessary matters regarding the conferral of academic degrees by the Graduate School of Engineering, Hiroshima University ("Graduate School") pursuant to the provisions of Article 17 of the Hiroshima University Degree Regulations ("Hiroshima University Regulations").

(Appellation of area of specialization)

2 The areas of specialization inscribed on certificates of academic degrees that are defined under Article 3, Paragraph 2 of the Hiroshima University Regulations and conferred by the Graduate School shall be as summarized in the table below, according to the Department with which each degree recipient is affiliated.

Department	Area of specialization	
	Master's	Doctorate
Mechanical Systems Engineering Mechanical Science and Engineering Chemical Engineering Applied Chemistry Civil and Environmental Engineering Transportation and Environmental Systems Architecture	Engineering	Engineering
System Cybernetics Information Engineering	Engineering Arts	Engineering Philosophy

Chapter II Review of Dissertation for Confirmation of Completion of Doctoral Program at the Graduate School of Engineering

(Timing and Eligibility for Submitting Dissertation)

Article 2 Candidates for doctoral degrees as prescribed in Article 2, Paragraph 2 of the Hiroshima University Regulations shall submit a doctoral dissertation while enrolled in the Graduate School no later than January 20 of the academic year in which the candidates expect to complete their doctoral program (or no later than July 20 for candidates whose academic year ends in September). Students enrolled in the Graduate School for a period longer than three years or those corresponding to the provisions of Article 15 of the By-laws of the Graduate School of Engineering, Hiroshima University ("Graduate School By-laws") may submit their dissertations at any time.

2 Before submitting their dissertations as per the paragraph above, the candidates for doctoral degrees must have obtained the required number of credits stipulated in Article 15 of the Graduate School By-laws ("Required Credits") or fully expect to obtain the Required Credits by the end of the academic year in which the Dissertation is submitted, and have received academic guidance for the writing of the dissertation ("Research Guidance").

(Procedures for Submitting Dissertation)

Article 3 Doctoral degree candidates as prescribed in Paragraph 2 of the preceding article must submit, at the time of submitting their dissertation, the documents listed below to the Dean of the Graduate School upon obtaining approval from the candidate's respective advisor.

(1) Application for Review of Dissertation: 1 copy
(2) List of publications: 3 copies

(3) Dissertation: 1 copy (bound in file form)
(4) Reference papers (if any): 2 sets of copies
(5) Summary of the dissertation: 3 copies
(6) Curriculum vitae: 3 copies
(7) Statement of confirmation regarding submission and publication of the dissertation (application form): 1 copy
(8) Electronic versions of (3) and (5): 1 set
(9) Letters of consent: 1 copy (not required if the dissertation is single-authored)

(Acceptance of Dissertation)

Article 4 When a dissertation is submitted pursuant to the provisions of the preceding article, the Dean of the Graduate School shall consult with the Faculty Meeting of the Graduate School to decide whether or not to accept the dissertation.

(Review Committee)

Article 5 When a decision of acceptance is made pursuant to the provisions of the preceding article, the Dean of the Graduate School shall promptly entrust the review of the dissertation to the Faculty Meeting.

2 Upon entrustment as prescribed in the preceding paragraph, the Faculty Meeting shall immediately form a Review Committee.

3 A Review Committee shall consist of at least three faculty members of the Graduate School and may include members of other Hiroshima University graduate school faculties, postgraduate faculties of other universities, research institutions and the like when deemed necessary by the Faculty Meeting.

4 The Review Committee shall establish a chair, to which a faculty member of the Graduate School shall be appointed.

5 The Review Committee shall organize a public defense of the dissertation.

Chapter III Review of Dissertation for Conferral of Doctoral Degree

(Eligibility for Applying for Conferral of Doctoral Degree)

Article 6 To be eligible to apply for the conferral of a Doctoral Degree by submitting a dissertation as prescribed in Article 2, Paragraph 3 of the Hiroshima University Regulations, a candidate must fall under any of the items below:
(1) The candidate was enrolled in a Doctoral Program of the Graduate School for a period of three or more years, obtained the Required Credits, and received Research Guidance before withdrawing from the Graduate School.
(2) The candidate completed a Master's Program and has three or more years of research experience.
(3) The candidate graduated from a university and has five or more years of research experience.
(4) The candidate does not fall under any of the preceding categories and has nine or more years of research experience.

(Dissertation Submission Procedures)

Article 7 A candidate who falls under any of the categories stipulated in the preceding article may apply for review of his or her Dissertation by submitting the documents listed below to the President via the Dean of the Graduate School.
(1) Application for Degree Conferral: 1 copy
(2) List of publications: 3 copies
(3) Dissertation: 1 copy (bound in file form)
(4) Reference papers (if any): 2 sets of copies
(5) Summary of the dissertation: 3 copies
(6) Curriculum Vitae: 3 copies
(7) Certificate of graduation or photocopy of diploma from the last school attended (certificate of completion, or photocopy of degree certificate of the graduate school): 1 copy
(8) Document signed by head academic advisor or equivalent person certifying the length of research experience: 1 copy
(9) Statement of confirmation regarding submission and publication of the dissertation (application form): 1 copy
(10) Electronic versions of (3) and (5): 1 set
(11) Letters of consent: 1 copy (not required if the dissertation is single-authored)

2 Notwithstanding the provisions of the preceding paragraph, candidates who graduated from the Faculty of Engineering, Hiroshima University or Hiroshima University Graduate School of Engineering and whose research experience has exclusively taken place at Hiroshima University shall not be required to submit the documents (7) and (8) of the preceding paragraph.

(Acceptance of Dissertation)

Article 8 Acceptance of a dissertation shall be pursuant to the provisions of Article 4 hereof.

(Review Committee and Examining Committee)

Article 9 Matters relevant to a Review Committee shall be as stipulated in Article 5 hereof.

2 An Examining Committee shall consist of members that include three or more members selected from the teaching faculty members of the Graduate School (Review Committee members may also serve on the Examining Committee), and may include members of other Hiroshima University graduate school faculties, postgraduate faculties of other universities, research institutions and the like when deemed necessary by the Faculty Meeting.

3 The Examining Committee shall establish a chair, to which a faculty member of the Graduate School shall be appointed.

(Time Limitation for Examination or Questioning)

Article 10 The time limitation prescribed in Article 6, Paragraph 4 of the Hiroshima University Regulations shall be three years.

Chapter IV Miscellaneous Provisions

(Formats of Documents)

Article 11 The formats of relevant documents shall be as shown in Appended Forms 1 to 7.

(Other matters)

Article 12 Any relevant matters not stipulated in these Graduate School Regulations shall be determined by the Dean of the Graduate School following deliberations by the Faculty Meeting.

Supplementary provisions

(omitted)