Graduate School of Science and Engineering

I Curriculum

1 Structure of the graduate school

The following courses are offered by the Graduate School of Science and Engineering.

(1) Master's Program, Engineering Science major
Discipline of Mathematics; discipline of Pure and Applied Physics; discipline of Mechanical Engineering; discipline of Electrical and Electronic Engineering

(2) Master's Program, Environmental and Urban Engineering major
Discipline of Architecture; discipline of Civil, Environmental and Applied System Engineering; discipline of Chemical, Energy and Environmental Engineering

(3) Master's Program, Chemistry, Materials and Bioengineering major
Discipline of Chemistry and Materials Engineering; discipline of Life Science and Biotechnology

(4) Ph.D. Program, Integrated Science and Engineering major
Discipline of Mathematics; discipline of Pure and Applied Physics; discipline of Mechanical Engineering; discipline of Electrical and Electronic Engineering; discipline of Architecture; discipline of Civil, Environmental and Applied System Engineering; discipline of Chemical, Energy and Environmental Engineering; discipline of Chemistry and Materials Engineering; discipline of Life Science and Biotechnology

2 Organization of courses

Courses in the Graduate School of Science and Engineering which may be taken to earn credits are classified as follows.

Refer to the List of Courses for details of each course.

Course	Classification	Description
Master's Program	Group A Subjects	Common subjects in the graduate school
	Group K Subjects	Basic subjects in the International Master Course
	Group B Subjects	Common subjects in the major
	Group C Subjects	Major subjects required by each discipline (including Seminar) Major subjects in the International Master Course (including Seminar)
Ph.D. Program	-	Seminar and on-site technology training

3 Credits required for completion

(1) Master's Program

Students who have been enrolled in the Master's Program for 2 years <4 semesters> or more, and for within 4 years <8 semesters>, and who have earned 30 credits or more, completed the required amount of directed study, and passed the Master's thesis evaluation and examination, will be awarded the Master of Science and the Master of Engineering.

[Details of the 30 credits required for completion]

Engineering Science major

(a) In the Mathematics discipline, students must earn a total of 30 credits or more, including 2 credits from Groups A and B, 22 credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).
Students in the International Master Course must earn a total of 30 credits or more, including 4 credits from Group K, 12 credits from Group C[International Master Course in their

discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(b) In the Pure and Applied Physics discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 12 credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor). No more than 6 credits from Group A shall be counted toward the credits required for completion.
Students in the International Master Course must earn a total of 30 credits or more, including 2 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(c) In the Mechanical Engineering discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 2 credits from Group B, and 22 credits from Group C (including a total of 8 credits for Seminar I, II, III and IV of their research field and 2 credits of Advanced Applied Mathematics).
Students in the International Master Course must earn a total of 30 credits or more, including 2 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(d) In the Electrical and Electronic Engineering discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 2 credits from Group B, and 20 credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor). No more than a total of 6 credits from Group A and B shall be counted toward the credits required for completion. Moreover, no more than a total of 6 credits earned for Electrical, Electronic and Information Engineering PBL- A, B, Advanced Internship I, II, III, and Overseas Technology Training I, II, III in Group C shall be counted toward the credits required for completion.
Students in the International Master Course must earn a total of 30 credits or more, including 2 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(e) The required number of credits shall be earned from the major of affiliation for Group B, and from the discipline of affiliation for Group C.

Environmental and Urban Engineering major

(a) In the Architecture discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 2 credits from Group B, 24 credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor). No more than 2 credits for Internship on Architectural Design I, II, and III shall be counted toward the credits required for completion. Moreover, credits of Advanced Internship I, II, III, and Overseas Technology Training I, II, III shall not be counted toward the credits required for completion.
Students in the International Master Course must earn a total of 30 credits or more, including 4 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(b) In the Civil, Environmental and Applied System Engineering discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 4 credits from Group B, and 20 credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor, 2 credits of Science and Technology English, and 6 credits of Required Elective Subjects in the department to which the faculty advisor belongs). No more than 4 credits of Advanced Internship I, II, III, and Overseas Technology Training I, II, III

shall be counted toward the credits required for completion.
Students in the International Master Course must earn a total of 30 credits or more, including 2 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(c) In the Chemical, Energy and Environmental Engineering discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 4 credits from Group B, and 20credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor). Credits of Advanced Internship I, II, III, and Overseas Technology Training I, II, III shall not be counted toward the credits required for completion.
Students in the International Master Course must earn a total of 30 credits or more, including 4 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(d) The required number of credits shall be earned from the major of affiliation for Group B, and from the discipline of affiliation for Group C.

Chemistry, Materials and Bioengineering major

(a) In the Chemistry and Materials Engineering discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 4 credits from Group B, and a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor. No more than 4 credits from Group A and 8 credits from Group B shall be counted toward the credits required for completion.
Students in the International Master Course must earn a total of 30 credits or more, including 4 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(b) In the Life Science and Biotechnology discipline, students must earn a total of 30 credits or more, including 2 credits from Group A, 2 credits from Group B, and 20 credits from Group C (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).
Students in the International Master Course must earn a total of 30 credits or more, including 4 credits from Group K, 12 credits from Group C[International Master Course in their discipline] (including a total of 8 credits of Seminar I, II, III and IV given by the faculty advisor).

(c) The required number of credits shall be earned from the major of affiliation for Group B, and from the discipline of affiliation for Group C.

(2) Ph.D. Program

Students who have been enrolled in the Ph.D. Program for 3 years <6 semesters> or more, and for within 6 years <12 semesters>, and who have earned 8 credits or more, completed the required amount of directed study, and passed the doctoral thesis evaluation and examination, will be awarded the Doctor of Science and the Doctor of Engineering.
[Details of the 8 credits required for completion]
Students must earn a total of 8 credits of Seminar V, VI, VII, and VIII in their research field.

II Matters requiring special attention with respect to taking/completing subjects

1 Taking courses

(1) Course registration

Students must register within the specified registration period for courses they intend to take in that academic year by referring to graduate school handbook, syllabus, class schedules and other materials, after seeking the guidance and obtaining the approval of the faculty advisor in advance.

As a general rule, making changes and/or additions to courses is not acceptable after deadline has passed for course registration. However, changes may be permitted under certain conditions during a specified period (details will be provided via the Information System). The list of subjects offered in the International Master Course will also be posted in the Information System.

(2) Course load [Master's Program]

The maximum number of credits that can be earned in 1 academic year is 28. The upper limit of credits earned shall be 14 for students entering in the fall semester in their first year of enrollment and in the spring semester when all of the credits required for completion are due to be earned.
Credits received for Advanced Internship I, II, III, Overseas Technology Training I, II, III and Internship on Architectural Design I, II, III are not counted toward the course load.

(3) Seminar [Master's Program]

Seminar III and IV may not be taken unless Seminar I and II have been completed. This rule does not apply if enrollment is approved by the Graduate School Committee.

(4) Group K subjects

Only students who have taken the International Master Course may take Group K subjects. Other students are not eligible.

(5) Group C subjects

[1] Specialized subjects specified by each discipline (excluding major subjects in the International Master Course)
Students who have taken the International Master Course may take these subjects only when the faculty advisor considers them necessary for research reasons and the course instructor permits them to attend.

[2] Major subjects in the International Master Course
Students other than those who have taken International Master Course may take these subjects only the faculty advisor considers them necessary for research reasons and the course instructor permits them to attend.

(6) Additional subjects

Students may take subjects in another major, graduate school, faculty, or institution as additional subjects separate from the courses offered by the major and graduate school of affiliation, if the faculty advisor considers it necessary for research reasons. The maximum number of credits that can be earned for additional subjects is 20 credits throughout the entire period of enrollment.
Except in the case of (7) below, these credits will not be counted toward the course load.
Some subjects, however, may not be taken; this will depend on the particular situation.

(7) Allotment of additional subjects [Master's Program]

Up to 10 credits earned for additional subjects during the Master's Program may be counted toward the credits required for completion, with the approval of the faculty advisor. However, these may not be counted toward the credits of Seminar.
Any additional subject taken as an allotted subject is counted toward the course load.

(8) Taking faculty subjects

Students will be permitted to take faculty courses [1] when acquiring qualifications for a Teacher's License, [2] when acquiring qualifications required for various licenses or to meeting the completion requirements, or [3] when the faculty advisor considers it necessary for research reasons. Students must obtain the approval of the faculty advisor before taking the required subjects. As for [1] and [2]

faculty subjects, students may earn up to 32 credits in 1 academic year. Faculty subjects [3] will be treated as additional subjects, as described in (6). A maximum of 20 credits may be earned throughout the entire period of enrollment.
Students may not be able to register for a particular subject; this will depend on the host faculty.

2 Transferring credits with other institutions

(1) Transferring credits between 4 major university graduate schools

In accordance with the "Agreement on Transferring Postgraduate Credits between Four Major University Graduate Schools in Kansai," courses offered by the graduate schools of Kwansei Gakuin University, Doshisha University, and Ritsumeikan University may be taken as additional subjects. Refer to the "Kansai University Agreement to Transfer Credits between Four Major University Graduate Schools in Kansai" for detailed requirements.
Interested students must first consult with the instructor in charge of the subject they wish to study, and then submit an "Application for Transferring Credits between Four Major University Graduate Schools in Kansai" (available at the Center for Academic Affairs; schedules and other detailed information will be provided via the Information System) to the Center for Academic Affairs before the specified deadline (this registration may not be processed online).

(2) Transferring credits to and from Osaka University and Kyoto University

Kansai University has an academic exchange agreement with Osaka University and Kyoto University for the mutual acceptance of special auditing students. It permits students to attend courses and transfer credits between institutions. Students interested in signing up for courses at the graduate schools of Osaka University or Kyoto University for educational reasons must complete the required procedures after obtaining the permission of the faculty advisor. Details will be provided via the Information System.

3 Requirements for submitting a Master's thesis/doctoral thesis

There are requirements that govern the submission of a Master's thesis/Doctoral thesis; review these requirements thoroughly and formulate a study plan before registering for a course. For detailed information, see the "procedures for applying for a Master's degree and the criteria for evaluating a Master's thesis" or the "procedures for applying for a Doctoral degree and the criteria for evaluating Doctoral thesis" below.

4 Transferring credits earned prior to admission to the University

A maximum of 10 credits earned for courses taken in another graduate school prior to entering Kansai University Graduate School (including credits earned as credited auditor) will be accepted. Details will be provided to students as they enter the Graduate School.

5 Early Completion Program [Master's Program in the Engineering Science major, discipline of Mechanical Engineering]

This program offers an opportunity to complete the Master's Program in 3 semesters (1.5 years) to students who have demonstrated particularly excellent academic performance in graduate school, among those who entered the Master's Programs after early graduation from their faculties (in 3.5 years). This pathway offers a coordinated integrated educational program that links the faculty to the graduate school Master's Program in order to turn out highly qualified human resources (advanced professional engineers) who will meet the needs of the society. Students are strongly encouraged to continue on to Ph.D. Program after completing the Master's Program.
Details of the program will be provided via the Information System.

<Discipline of Mechanical Engineering>

(1) Eligible students

Students who graduated early from the Kansai University Faculty of Engineering Science, Department of Mechanical Engineering and are currently enrolled in the Kansai University Graduate School of Science and Engineering, Engineering Science major, discipline of Mechanical Engineering, and who wish to complete early

(2) Application period

Specified time during the second semester

(3) Conditions for applying for the Early Completion Program

Students must meet all of the following conditions to be eligible for the Early Completion Program.

a They must have been currently enrolled for 1 semester without any change in their registered status after entering the Engineering Science major, discipline of Mechanical Engineering

b They must have been assessed as capable of completing early at the midterm evaluation conducted during the first semester (Note 1)

c They must have excellent grades at the end of the first semester (Note 2), and have earned 20 credits or more (including Seminar) of the credits required for completion (Note 3)

(4) Conditions for acceptance into the Early Completion Program

Students must meet all of the following conditions in order to complete early.

a They must have excellent grades at the end of the second semester in subjects applicable to the credits required for completion (Note 2)

b They must have been attending continuously for 3 semesters at the end of the third semester and have earned all of the credits required for completion

c They must have passed the Master's thesis evaluation and examination

(5) Measures taken, and other matters relating to courses

a Students who are eligible for the Early Completion Program are allowed to take Seminar III and IV simultaneously during the third semester.

b Permission to participate in the Early Completion Program will be withdrawn if any change is made to the registration status of a student who is eligible for the Early Completion Program, in which case such student will not be acknowledged to have completed the program unless he/she attends the school for a total of 4 semesters or more and passes the Master's thesis evaluation and examination.

c Permission to participate in the Early Completion Program will be withdrawn if a student who is applicable notifies the Dean of Graduate School of Science and Engineering of an intention to decline the application of the Early Completion Program (Note 4) through his/her faculty advisor before the end of the second semester, in which case such student will neither be allowed to take Seminar III and IV simultaneously in the third semester nor to submit the Master's thesis in the third semester.

Similarly, permission to participate in the Early Completion Program will be withdrawn if a student announces an intention to decline the application of the Early Completion Program (Note 4) before the end of the third semester, in which case such student will not be allowed to submit the Master's thesis in the third semester.

d A guidance will be held at the time of entrance into the Master's Program to provide summarized information on the Early Completion Program in graduate school.

Note 1: The guideline for the midterm evaluation is provided separately.

Note 2: The grade evaluation criteria is provided separately.

Note 3: As the course load in the first semester is 14, students will not be able to meet the conditions for the Early Completion Program, if they do not earn at least 6 credits, out of the 10 credits earned from the Graduate School of Science and Engineering subjects during the spring semester of the faculty fourth year.

Note 4: Details for declining the Early Completion Program are provided separately.

6 Early Completion Program [Master's Program in the Environmental and Urban Engineering major, discipline of Civil, Environmental and Applied System Engineering]

This program offers an opportunity to complete the Master's Program in 3 semesters (1.5 years) to students who have demonstrated particularly excellent academic performance in graduate school, among those who entered the Master's Programs after early graduation from their faculties (in 3.5 years). This pathway offers a coordinated integrated educational program that links the faculty to the graduate school Master's Program in order to turn out highly qualified human resources (advanced professional engineers) who will meet the needs of the society.

Details of the program will be provided via the Information System.

<Discipline of Civil, Environmental and Applied System Engineering>

(1) Eligible students

Students who graduated early from the Kansai University Faculty of Environmental and Urban Engineering, Department of Civil, Environmental and Applied System Engineering and are currently enrolled in the Kansai University Graduate School of Science and Engineering, Environmental and Urban Engineering major, discipline of Civil, Environmental and Applied System Engineering, and who wish to complete early

(2) Application period

Specified time during the second semester

(3) Conditions for applying for the Early Completion Program

Students must meet all of the following conditions to be eligible for the Early Completion Program.

a They must have been currently for 1 semester without any change in their registered status after entering the Environmental and Urban Engineering major, discipline of Civil, Environmental and Applied System Engineering

b They must have been assessed as capable of completing early at the midterm evaluation conducted during the first semester (Note 1)

c They must have earned 20 credits or more (including Seminar) of the credits required for completion at the end of the first semester with excellent grades (Note 2) (Note 3)

(4) Conditions for acceptance into the Early Completion Program

Students must meet all of the following conditions in order to complete early.

a They must have excellent grades at the end of the second semester in subjects applicable to the credits required for completion (Note 2)

b They must have been attending continuously for 3 semesters at the end of the third semester and have earned all of the credits required for completion

c They must have passed the Master's thesis evaluation and examination

(5) Measures taken, and other matters relating to courses

a Students who are eligible for the Early Completion Program are allowed to take Seminar III and IV simultaneously during the third semester.

b Permission to participate in the Early Completion Program will be withdrawn if any change is made to the registration status of a student who is eligible for the Early Completion Program, in which case such student will not be acknowledged to have completed the program unless he/she attends the school for a total of 4 semesters or more and passes the Master's thesis evaluation and examination.

c Permission to participate in the Early Completion Program will be withdrawn if a student who is applicable notifies the Dean of the Graduate School of Science and Engineering of an intention to decline the application of the Early Completion Program (Note 4) through his/her faculty advisor before the end of the second semester, in which case such student will neither be allowed to take Seminar III and IV simultaneously in the third semester nor to submit the Master's thesis in the third semester.

Similarly, permission to participate in the Early Completion Program will be withdrawn if a

student announces an intention to decline the application of the Early Completion Program (Note 4) before the end of the third semester, in which case such student will not be allowed to submit the Master's thesis in the third semester.

d A guidance will be held at the time of entrance into the Master's Program to provide summarized information on the Early Completion Program in graduate school.

Note 1: The guideline for the midterm evaluation is provided separately.

Note 2: The grade evaluation criteria is provided separately.

Note 3: As the course load in the first semester is 14, students will not be able to meet the conditions for the Early Completion Program, if they do not earn at least 6 credits, out of the 10 credits earned from the Graduate School of Science and Engineering subjects during the spring semester of the faculty fourth year.

Note 4: Details for declining the Early Completion Program are provided separately.

Schedule for the Early Completion Program (plan)

[First semester]	
After entering in the fall semester	Guidance by the director of relevant discipline
In early February	Midterm evaluation schedule and other information will be officially communicated via the Information System
In late February	Midterm evaluation
In late March, from the Graduate School Committee	Midterm evaluations and the assessment of applications for early completion
[Second and third semesters] * Hereafter, the schedule for submitting the Master's thesis is the same as that of ordinary M2 students	
In mid-September, from the Graduate School Committee	Academic Performance Assessment for the Early Completion Program
In mid-February	**Submission of thesis**
From mid- to late February	**Final examination**
In late February, from the Graduate School Committee	**Completion assessment**
In early March	Announcement of degree holders
In late March	Ceremony to award diplomas (Master's degrees/Doctoral degrees)

List of Courses

a. Master's Program, Engineering Science major

Classification		Course Title	Allotted academic year	Number of credits
Group A	Common subjects in the Graduate School	Engineering Ethics	1	2
		Management of Technology	1	2
		Intellectual Property	1	2
		Philosophy of Science and Technology	1	2
		Marketing	1	2
		Current Issues on Energy and Environment	1	2
		Economy and Industry	1	2
		Technology and Venture	1	2
		Safety Science and Management	1	2
		Humanities Basic Knowledge for Engineers	1	2
		Specific Lecture	1	2
		Sponsored Lecture	1	2
Group K	Basic subjects in the International Master Course	International Master Course	1	2
Group B	Common subjects in the Major	Introduction to Modern Mathematics	1	2
		Advanced Algorithm Engineering	1	2
		Advanced Course in Modern and Applied Physics	1	2
		Applied Imaging Metrology	1	2
		Advanced Lecture on Soft Computing	1	2
		Science of Self-assembly and Self-organization	1	2
		Science of Phase Equilibrium	1	2
		X-ray Diffraction	1	2
		Special Lecture A	1	2
		Special Lecture B	1	2
		Special Lecture C	1	2
Group C	Discipline of Mathematics	Seminar I (Mathematics)	1	2
		Seminar II (Mathematics)	1	2
		Seminar III (Mathematics)	2	2
		Seminar IV (Mathematics)	2	2
		Special Topics in Functional Analysis	1	2
		Introduction to Operator Algebra	1	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Mathematics	Differential Geometry	1	2
		Information Geometry	1	2
		Algebraic Number Theory	1	2
		Arithmetic Geometry	1	2
		Representation Theory of Groups and Rings	1	2
		Introduction to Stochastic Processes	1	2
		Stochastic Differential Equations	1	2
		Advanced Theory of Stochastic Processes	1	2
		Advanced Theory of Stochastic Analysis	1	2
		Statistical Inference	1	2
		Statistical Distribution Theory	1	2
		Insurance Mathematics	1	2
		Probability Models	1	2
		Global Analysis I	1	2
		Global Analysis II	1	2
		Homological Algebra	1	2
		Module Theory over Commutative Rings	1	2
		Advanced Internship I	1	2
		Advanced Internship II	1	2
		Advanced Internship III	1	2
		Overseas Technology Training I	1	2
		Overseas Technology Training II	1	2
		Overseas Technology Training III	1	2
		[International Master Course in Mathematics]		
		International Master Course	1・2	2
	Discipline of Pure and Applied Physics	Seminar I (Pure and Applied Physics)	1	2
		Seminar II (Pure and Applied Physics)	1	2
		Seminar III (Pure and Applied Physics)	2	2
		Seminar IV (Pure and Applied Physics)	2	2
		Introduction to Theory of Magnetism	1	2
		Advanced Course in Quantum Physics	1	2
		Advanced Course in Quantum Many-Body Physics	1	2
		Advanced Course in Solid State Physics	1	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Pure and Applied Physics	Advanced Course in Semiconductor Device Physics	1	2
		Advanced Course in Fluid Physics	1	2
		Bio-fluid Dynamics	1	2
		Nonlinear Mathematical Sciences	1	2
		Light Waves and Special Relativity	1	2
		Photon Radiation Physics and Technology	1	2
		Advanced Course in Theoretical Materials Science	1	2
		Computational Materials Science	1	2
		Advanced Electrical and Optical Function-Material	1	2
		Nanophysics Technology	1	2
		Nano Functional Devices	1	2
		Fluid and Elastic Mechanics	1	2
		Advanced Measurement Systems	1	2
		Advanced Nano-bio Devices	1	2
		Advanced Plasma Engineering	1	2
		Advanced Physical Analysis of Electronic Materials	1	2
		Advanced Transport Theories for Insulators, Semiconductors and Metals	1	2
		Advanced Course in Ultrasonic Physics	1	2
		Advanced Course in Analysis of Mathematical Science	1	2
		Advanced English Course for Pure and Applied Physics	1	2
		Advanced Internship I	1	2
		Advanced Internship II	1	2
		Advanced Internship III	1	2
		Overseas Technology Training I	1	2
		Overseas Technology Training II	1	2
		Overseas Technology Training III	1	2
		[International Master Course in Pure and Applied Physics]		
		International Master Course	1・2	2
	Discipline of Mechanical Engineering	Seminar I (Mechanical Engineering)	1	2
		Seminar II (Mechanical Engineering)	1	2
		Seminar III (Mechanical Engineering)	2	2
		Seminar IV (Mechanical Engineering)	2	2
		Nanophysics Technology	1	2
		Nano Functional Devices	1	2
		Advanced Nano-bio Devices	1	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Mechanical Engineering	Advanced Bio-Fluid Mechanics	1	2
		Advanced Biomechanics & Fluids Engineering (Applied)	1	2
		Fluid and Elastic Mechanics	1	2
		Advanced Fluid and Elastic Mechanics	1	2
		Advanced Materials Evaluation	1	2
		Advanced Materials Design Systems	1	2
		Advanced Computational Mechanics of Materials	1	2
		Advanced Applied Mathematical Analysis	1	2
		Nano-mechatronics	1	2
		Informechanics	1	2
		Engineering Tribology	1	2
		Control Engineering for Information Devices	1	2
		Nanotechnology on Surface Control and Analysis	1	2
		Advanced Thermal Energy System	1	2
		Advanced Power and Energy System	1	2
		Advanced Two-Phase Flow	1	2
		Advanced Heat Transfer Engineering	1	2
		Advanced Precision Machining	1	2
		Advanced Non-Traditional Machining	1	2
		Advanced Nano/Micro-Machining	1	2
		Advanced Applied Mathematics	1	2
		Vibration Control Engineering	1	2
		Mechatronics Systems	1	2
		Finite Element Method and Advanced Vibration Engineering	1	2
		Advanced Measurement Systems	1	2
		Advanced Solid State Physics	1	2
		Robotics	1	2
		Advanced Micro Systems Engineering	1	2
		Advanced Lectures on Nanodevice fabrication	1	2
		Advanced Visual Information Engineering	1	2
		Advanced Theory and Practice of PIV	1	2
		Advanced Thermal Fluid Analysis	1	2
		Advanced Human Factors Engineering	1	2
		Advanced Cognitive Engineering	1	2
		Advanced Biosignal Engineering	1	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Mechanical Engineering	Advanced Human Interface	1	2
		Bio-fluid Dynamics	1	2
		Fracture Mechanics	1	2
		Science and Technology English	1	2
		Advanced Course in Theoretical Materials Science	1	2
		Advanced Course in Solid State Physics	1	2
		Advanced Internship I	1	2
		Advanced Internship II	1	2
		Advanced Internship III	1	2
		Overseas Technology Training I	1	2
		Overseas Technology Training II	1	2
		Overseas Technology Training III	1	2
		[International Master Course in Mechanical Engineering]		
		International Master Course	1・2	2
	Discipline of Electrical and Electronic Engineering	Seminar I (Electrical, Electronic and Information Engineering)	1	2
		Seminar II (Electrical, Electronic and Information Engineering)	1	2
		Seminar III (Electrical, Electronic and Information Engineering)	2	2
		Seminar IV (Electrical, Electronic and Information Engineering)	2	2
		Advanced Power Engineering	1	2
		Software System	1	2
		Advanced Plasma Engineering	1	2
		Advanced Electronic Control System	1	2
		Advanced System Optimization	1	2
		Advanced Computer Communications	1	2
		Advanced Solid State Physics	1	2
		Advanced Electrical and Optical Function-Material	1	2
		Advanced System Dynamics	1	2
		Advanced Information Optics	1	2
		Advanced Environmental and Energy Engineering	1	2
		Advanced Distributed Power Generation System	1	2
		Advanced Electrical Machinery	1	2
		Advanced Power Electronics	1	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Electrical and Electronic Engineering	Advanced Course in Quantum Physics	1	2
		Advanced Semiconductor Devices	1	2
		Advanced Intelligent Systems Engineering	1	2
		Advanced Information Networks	1	2
		Advanced Next Generation Internet Technology	1	2
		Advanced Applied Engineering for Solar-pumped Lasers	1	2
		Advanced Wireless Communications	1	2
		Advanced Physical Analysis of Electronic Materials	1	2
		Advanced Transport Theories for Insulators, Semiconductors and Metals	1	2
		Advanced Image Processing	1	2
		Advanced Pattern Recognition	1	2
		Advanced Human Interface	1	2
		Advanced Speech and Audio	1	2
		Advanced Signal Processing	1	2
		Advanced Optical and Electromagnetic Wave Engineering	1	2
		Advanced Internet Engineering	1	2
		Advanced Epitaxial Growth Technology	1	2
		Advanced Semiconductor Materials for Optical Devices	1	2
		Advanced Data Engineering	1	2
		Advanced Digital System	1	2
		Advanced Probabilistic Information Processing	1	2
		Science and Technology English	1	2
		Electrical, Electronic and Information Engineering PBL-A	1	2
		Electrical, Electronic and Information Engineering PBL-B	1	2
		Advanced Internship I	1	2
		Advanced Internship II	1	2
		Advanced Internship III	1	2
		Overseas Technology Training I	1	2
		Overseas Technology Training II	1	2
		Overseas Technology Training III	1	2
		[International Master Course in Electrical and Electronic Engineering]		
		International Master Course	1・2	2

b. Master's Program, Environmental and Urban Engineering major

Classification		Course Title	Allotted academic year	Number of credits	Classification		Course Title	Allotted academic year	Number of credits
Group A	Common subjects in the Graduate School	Engineering Ethics	1	2			Regional Revitalization	1	2
		Management of Technology	1	2	Group C	Discipline of Architecture	Seminar I (Architecture)	1	2
		Intellectual Property	1	2			Seminar II (Architecture)	1	2
		Philosophy of Science and Technology	1	2			Seminar III (Architecture)	2	2
		Marketing	1	2			Seminar IV (Architecture)	2	2
		Current Issues on Energy and Environment	1	2			Regional Revitalization Seminar I	1	2
		Economy and Industry	1	2			Regional Revitalization Seminar II	1	2
		Technology and Venture	1	2			Regional Revitalization Seminar III	2	2
		Safety Science and Management	1	2			Regional Revitalization Seminar IV	2	2
		Humanities Basic Knowledge for Engineers	1	2			Advanced Urban Design	1	2
		Specific Lecture	1	2			Advanced Course in Urban Residential Environment and Design	1	2
		Sponsored Lecture	1	2			Advanced Course in Architectural and Visual Environment	1	2
Group K	Basic subjects in the International Master Course	International Master Course	1	2			Advanced Course in Architectural and Acoustic Environment	1	2
							Advanced Course in Architectural and Thermal Environment	1	2
							Advanced Course in Architectural and Air Environment	1	2
							Advanced Architectural and Urban Environmental Design	1	2
Group B	Common subjects in the Major	Safety Technology	1	2			Exercise in Architectural and Urban Design	1	2
							Building Foundation Engineering	1	2
		Advanced Environmental Analyses	1	2			Advanced Mechanics for Building Materials	1	2
		Advanced Urban Environmentology	1	2			Advanced Aseismic Engineering	1	2
		Advanced Course in Architectural and Environmental Physics	1	2			Advanced Analysis of Building Structures	1	2
		Advanced Course in Architectural and Environmental Psychology	1	2			Advanced Mechanics of Building Structures	1	2
		Advanced Urban Information System Engineering	1	2			Advanced Course in Architectural Heritage	1	2
		Re-Designing of City & Region Adv.	1	2			Advanced Conservation Engineering of Architecture	1	2
		Advanced Lecture on Public Policy	1	2			Advanced Theory of Structural Design of Buildings	1	2
		Advanced Underground Space Engineering	1	2			Advanced Course in Architectural History	1	2
		Advanced Reliability-Based Design	1	2			Advanced Theory of Architectural Design	1	2
		Advanced Planning Management	1	2			Prevention Engineering of Earthquake Disaster	1	2
		X-ray Diffraction	1	2			Earthquake Disaster Engineering	1	2
		Advanced Organic Resources Conversion Engineering	1	2			Advanced Course on the Architectural Design	1	2
		Science of Phase Equilibrium	1	2			Architectural Planning	1	2
		Science of Self-assembly and Self-organization	1	2			Simulation of Physical Environment for Architecture	1	2
		Advanced Elasto-Plastic Theory	1	2			Internship on Architectural Design I	1	2
		Process Design for Environmental Preservation	1	2			Internship on Architectural Design II	1	2

Classification			Course Title	Allotted academic year	Number of credits
Group C	Discipline of Architecture		Internship on Architectural Design III	1	2
			Advanced Internship I	1	2
			Advanced Internship II	1	2
			Advanced Internship III	1	2
			Overseas Technology Training I	1	2
			Overseas Technology Training II	1	2
			Overseas Technology Training III	1	2
			[International Master Course in Architecture]		
			International Master Course	1・2	2
	Discipline of Civil, Environmental and Applied System Engineering		Seminar I (Civil, Environmental and Applied Systems Engineering)	1	2
			Seminar II (Civil, Environmental and Applied Systems Engineering)	1	2
			Seminar III (Civil, Environmental and Applied Systems Engineering)	2	2
			Seminar IV (Civil, Environmental and Applied Systems Engineering)	2	2
			Regional Revitalization Seminar I	1	2
			Regional Revitalization Seminar II	1	2
			Regional Revitalization Seminar III	2	2
			Regional Revitalization Seminar IV	2	2
			Science and Technology English	1	2
		Global Environment	Advanced Rock Engineering	1	2
			Advanced Geomechanics	1	2
			Advanced River Hydraulics	1	2
			Advanced Coastal Engineering	1	2
			Advanced Environmental Engineering for Sustainability Management	1	2
			Advanced Environmental Resources Circulating Engineering	1	2
		Design Construction	Advanced Structural Engineering	1	2
			Advanced Steel Structure	1	2
			Construction Materials	1	2
			Advanced Concrete Engineering	1	2
			Advanced Constructional Management	1	2
			Advanced Stock Infrastructure Management	1	2
		Planning Management	Advanced Regional and Urban Planning	1	2
			Advanced Traffic Engineering (PBL)	1	2
			Infrastructure Planning	1	2
			Advanced Management of Infrastructure Projects	1	2

Classification			Course Title	Allotted academic year	Number of credits
Group C	Discipline of Civil, Environmental and Applied System Engineering	Planning Management	Advanced Operations Research	1	2
			Advanced Decision Making Engineering	1	2
			Advanced Optimization Theory and Algorithms	1	2
			Advanced Mathematical Optimization	1	2
		Information System Engineering	Advanced Simulation Technology	1	2
			Advanced Simulation Modeling	1	2
			Advanced Object-Oriented Software Development	1	2
			Advanced Software Engineering	1	2
			Advanced Distributed Information Processing	1	2
			Optimal Design Engineering	1	2
			Advanced Information Networks	1	2
			Advanced Information Media Engineering	1	2
			Advanced Internship I	1	2
			Advanced Internship II	1	2
			Advanced Internship III	1	2
			Overseas Technology Training I	1	2
			Overseas Technology Training II	1	2
			Overseas Technology Training III	1	2
			[International Master Course in Civil, Environmental and Applied System Engineering]		
			International Master Course	1・2	2
	Discipline of Chemical, Energy and Environmental Engineering		Seminar I (Chemical, Energy and Environmental Engineering)	1	2
			Seminar II (Chemical, Energy and Environmental Engineering)	1	2
			Seminar III (Chemical, Energy and Environmental Engineering)	2	2
			Seminar IV (Chemical, Energy and Environmental Engineering)	2	2
			Chemical, Energy and Environmental Engineering PBL I	1	2
			Chemical, Energy and Environmental Engineering PBL II	1	2
			Theory and Practice in Analyses I	1	2
			Theory and Practice in Analyses II	1	2
			Advanced Energy Materials Engineering	1	2
			Surface and Interface Engineering	1	2
			Advanced Separation Engineering	1	2
			Advanced Surface Chemistry	1	2
			Advanced Transport Phenomena	1	2
			Green Process Engineering	1	2

Classification		Course Title	Allotted academic year	Number of credits	Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Chemical, Energy and Environmental Engineering	Advanced Environmental Chemistry and Engineering	1	2	Group C	Discipline of Chemical, Energy and Environmental Engineering	Advanced Internship II	1	2
		Catalyst Engineering	1	2			Advanced Internship III	1	2
		Advanced Functional Materials Engineering	1	2			Overseas Technology Training I	1	2
		Advanced Nanoparticles Technology I	1	2			Overseas Technology Training II	1	2
		Advanced Nanoparticles Technology II	1	2			Overseas Technology Training III	1	2
		Advanced Chemical Reaction Engineering	1	2			[International Master Course in Chemical, Energy and Environmental Engineering]		
		Applied Mineral Engineering	1	2			International Master Course	1・2	2
		Advanced Internship I	1	2					

c. Master's Program, Chemistry, Materials and Bioengineering major

Classification		Course Title	Allotted academic year	Number of credits	Classification		Course Title	Allotted academic year	Number of credits
Group A	Common subjects in the Graduate School	Engineering Ethics	1	2	Group B	Common subjects in the Major	Bio-related Chemistry	1	2
		Management of Technology	1	2			Biomaterials Science	1	2
		Intellectual Property	1	2			Advanced Life Science	1	2
		Philosophy of Science and Technology	1	2			Advanced Biotechnology	1	2
		Marketing	1	2	Group C	Discipline of Chemistry and Materials Engineering	Seminar I (Chemistry and Materials Engineering)	1	2
		Current Issues on Energy and Environment	1	2			Seminar II (Chemistry and Materials Engineering)	1	2
		Economy and Industry	1	2			Seminar III (Chemistry and Materials Engineering)	2	2
		Technology and Venture	1	2			Seminar IV (Chemistry and Materials Engineering)	2	2
		Safety Science and Management	1	2			Advanced Material Science of Iron and Steel	1	2
		Humanities Basic Knowledge for Engineers	1	2			Advanced Metallic Material Design	1	2
		Specific Lecture	1	2			Advanced Metallic Materials for Biomedical and Healthcare Applications	1	2
		Sponsored Lecture	1	2			Advanced Process Metallurgy	1	2
Group K	Basic subjects in the International Master Course	International Master Course	1	2			Advanced Metal Liquid State	1	2
							Advanced Material Functions	1	2
							Advanced Solidification Process Engineering	1	2
							Advanced Processing of Molten Metals	1	2
Group B	Common subjects in the Major	Safety Technology	1	2			Advanced Composite Processing Engineering	1	2
		X-ray Diffraction	1	2			Advanced Surface Engineering	1	2
		Material Process Engineering	1	2			Advanced Crystal and Electronic Structure	1	2
		Material Energy Technology	1	2			Advanced Ceramic Materials	1	2
		Advanced Industrial Organic Chemistry	1	2			Advanced Inorganic Solid State Chemistry	1	2
		Polymer Science	1	2			Advanced Energy Electrochemistry	1	2
		Science for Material Interface	1	2			Advanced Photochemistry	1	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Chemistry and Materials Engineering	Advanced Surface and Colloid Chemistry	1	2
		Advanced Mass Spectrometry	1	2
		Advanced Organic Synthesis	1	2
		Advanced Catalytic Organic Chemistry	1	2
		Advanced Structural Organic Chemistry	1	2
		Advanced Organic Reaction	1	2
		Advanced Chemistry of Organic Semiconductor Molecule	1	2
		Advanced Material Chemistry of Polymers	1	2
		Advanced Synthetic Polymer Chemistry	1	2
		Advanced Polymer Design and Creation	1	2
		Advanced Biomaterials Chemistry	1	2
		Advanced Bionanotechnology	1	2
		Advanced Bioinspired Chemistry	1	2
		Advanced Tissue Engineering	1	2
		Advanced Glycoconjugate Chemistry	1	2
		Advanced Chiral Molecular Chemistry	1	2
		Advanced Biocoordination Chemistry	1	2
		Science and Technology English	1	2
		Special Course of Lecture	1	2
		Advanced Internship I	1	2
		Advanced Internship II	1	2
		Advanced Internship III	1	2
		Overseas Technology Training I	1	2
		Overseas Technology Training II	1	2
		Overseas Technology Training III	1	2
		[International Master Course in hemistry and Materials Engineering]		
		International Master Course	1・2	2

Classification		Course Title	Allotted academic year	Number of credits
Group C	Discipline of Life Science and Biotechnology	Seminar I (Biotechnology)	1	2
		Seminar II (Biotechnology)	1	2
		Seminar III (Biotechnology)	2	2
		Seminar IV (Biotechnology)	2	2
		Advanced Molecular Cell Biology	1	2
		Advanced Pharmaceutical Research & Development	1	2
		Advanced Pharmacological Action of Medicines	1	2
		Advanced Molecular Genetics	1	2
		Advanced Technology of Microorganism Control	1	2
		Advanced Microbial Ecology and Biotechnology	1	2
		Advanced Nutritional Chemistry	1	2
		Advanced Food Chemistry	1	2
		Advanced Food Preservation	1	2
		Advanced Bioprocess Systems Engineering	1	2
		Advanced Environmental Microbiotechnology	1	2
		Advanced Food Microbial Biotechnology	1	2
		Plant Cell Sciences and Technology	1	2
		Advance Lecture on Biohistory	1	2
		Advanced Environmental Sciences and Technology	1	2
		Advanced Bioinformatics	1	2
		Advanced English for Life Science and Biotechnology	1	2
		Advanced Internship I	1	2
		Advanced Internship II	1	2
		Advanced Internship III	1	2
		Overseas Technology Training I	1	2
		Overseas Technology Training II	1	2
		Overseas Technology Training III	1	2
		[International Master Course in Life Science and Biotechnology]		
		International Master Course	1・2	2

d. Ph.D. Program, Integrated Science and Engineering major

Discipline	Course Title	Allotted academic year	Number of credits	Discipline	Course Title	Allotted academic year	Number of credits
Mathematics	Seminar V (Mathematics)	1	2	Civil, Environmental and Applied System Engineering	Seminar V (Civil, Environmental and Applied Systems Engineering)	1	2
	Seminar VI (Mathematics)	1	2		Seminar VI (Civil, Environmental and Applied Systems Engineering)	1	2
	Seminar VII (Mathematics)	2	2		Seminar VII (Civil, Environmental and Applied Systems Engineering)	2	2
	Seminar VIII (Mathematics)	2	2		Seminar VIII (Civil, Environmental and Applied Systems Engineering)	2	2
Pure and Applied Physics	Seminar V (Pure and Applied Physics)	1	2		Regional Revitalization Seminar V	1	2
	Seminar VI (Pure and Applied Physics)	1	2		Regional Revitalization Seminar VI	1	2
	Seminar VII (Pure and Applied Physics)	2	2		Regional Revitalization Seminar VII	2	2
	Seminar VIII (Pure and Applied Physics)	2	2		Regional Revitalization Seminar VIII	2	2
Mechanical Engineering	Seminar V (Mechanical Engineering)	1	2	Chemical, Energy and Environmental Engineering	Seminar V (Chemical, Energy and Environmental Engineering)	1	2
	Seminar VI (Mechanical Engineering)	1	2		Seminar VI (Chemical, Energy and Environmental Engineering)	1	2
	Seminar VII (Mechanical Engineering)	2	2		Seminar VII (Chemical, Energy and Environmental Engineering)	2	2
	Seminar VIII (Mechanical Engineering)	2	2		Seminar VIII (Chemical, Energy and Environmental Engineering)	2	2
Electrical and Electronic Engineering	Seminar V (Electrical, Electronic and Information Engineering)	1	2	Chemistry and Materials Engineering	Seminar V (Chemistry and Materials Engineering)	1	2
	Seminar VI (Electrical, Electronic and Information Engineering)	1	2		Seminar VI (Chemistry and Materials Engineering	1	2
	Seminar VII (Electrical, Electronic and Information Engineering)	2	2		Seminar VII (Chemistry and Materials Engineering)	2	2
	Seminar VIII (Electrical, Electronic and Information Engineering)	2	2		Seminar VIII (Chemistry and Materials Engineering)	2	2
Architecture	Seminar V (Architecture)	1	2	Life Science and Biotechnology	Seminar V (Biotechnology)	1	2
	Seminar VI (Architecture)	1	2		Seminar VI (Biotechnology)	1	2
	Seminar VII (Architecture)	2	2		Seminar VII (Biotechnology)	2	2
	Seminar VIII (Architecture)	2	2		Seminar VIII (Biotechnology)	2	2
	Regional Revitalization Seminar V	1	2	Advanced Internship IV		1	2
	Regional Revitalization Seminar VI	1	2	Advanced Internship V		1	2
	Regional Revitalization Seminar VII	2	2	Advanced Internship VI		1	2
	Regional Revitalization Seminar VIII	2	2	Overseas Technology Training IV		1	2
				Overseas Technology Training V		1	2
				Overseas Technology Training VI		1	2

III Procedures for applying for the Master's degree and criteria for the Master's thesis evaluation

1 Master's degree

A student who has been enrolled in the Master's Course or Master's Program for a specified period, earned credits required by the relevant graduate school, completed the required amount of directed study, and then passed the evaluation and examination of the Master's thesis or result of study on a particular theme, accordance with the purpose of his or her course, is deemed to have completed the course and will be awarded the Master's degree. (Article 24 and Article 26 of the Graduate School Regulations)

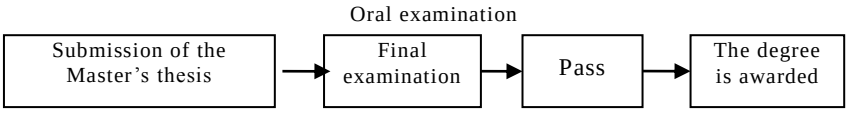
2 Criteria for the Master's thesis evaluation

(1) The student who receives the Master's degree shall be an individual with broad and profound learning, and either research capacity in his/her major field of study or an ability to prove competent in professions or other occupational positions requiring a high level of expertise.

(2) The Master's thesis shall be logically and clearly written, and either be based upon research findings of an academic value with respect to the major field of study or a conception which represents the basic knowledge/comprehension/problem solving ability required in the accomplishment of research in the major field. If the research findings in the thesis are the result of the joint efforts of several researchers, the contribution of the individual receiving the degree must be significantly acknowledgeable.

(3) The substance of the Master's thesis shall be presented and debated at the Master's thesis presentation in each major field in a manner suitable for academic research. As a general rule, Master's thesis presentations shall be open to the public.

3 The basic flow of events leading to the award of a degree



4 Schedule

A detailed schedule will be provided via the Information System.

Date appointed (deadline)		
Element	Award of degrees for the year ending in March	Award of degrees for the year ending in September
Submission of the thesis plan	-	-
Submission of the thesis	In mid-February	From mid- to late July
Final examination	From mid- to late February	From late July to early September

* Students must consult with their faculty advisors regarding the submission of a Master's thesis.

* The submission deadline must be strictly observed.

* Each student is responsible for obtaining a copy of the submission instructions posted in the "Application/Questionnaire" section of the Information System. As submission instructions and other relevant procedures are subject to change, be sure to check the latest information on the Information System and with the Center for Academic Affairs.

5 Requirements for submitting the Master's thesis

In accordance with Article 9 of the Degree Regulations, Master's theses may only be submitted by students who have been enrolled in the Master's Program for 1 year or more, earned 20 credits or more by taking required courses and met the following requirements stipulated by the Graduate School Committee.

[Accreditation of foreign language proficiency]

(1) Number of foreign language subjects

1 language (English)

(2) Method of ascertaining foreign language proficiency

Written test as a general rule (conducted at the discretion of each subject area)

(3) Requirements for exemption from the foreign language proficiency accreditation and how exemptions will be processed

Foreign language proficiency accreditation may be replaced by examination for entrance into the Master's Program (whether or not this may be applied shall be determined by each discipline)

6 Instructions for submitting the Master's thesis and thesis abstract

(1) Number of counterparts to be submitted

1 original copy and 2 duplicate copies (The original copy is to be handwritten by the student or created on a word processor or computer. Duplicates must be reproductions of the original copy)

(2) Restriction on the number of pages

[Master's thesis] None

[Thesis abstract] Summarize the thesis in 1,000 to 2,000 characters.

(3) Standards for paper

Paper must meet the following standards.

a Use size A4 writing paper (used for Graduate School of Science and Engineering), if handwritten .

* Writing paper can be perchased at the Co-op.

b Use A4 size high quality printing paper if written using a word processer (thermal paper is not accepted)

c The text should consist of 31 lines or fewer per page.

(4) Binding instructions (* instructions given in a to d below apply to both originals and duplicates)

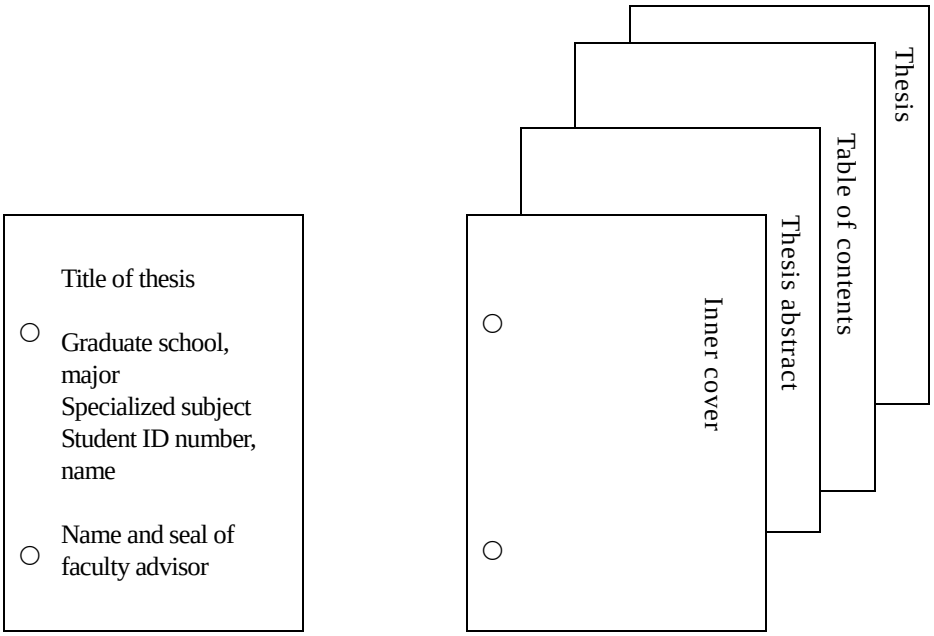
a Bind thesis pages using a flat file available at stores (example: A4 size Kokuyo Fu-V10).

b Create an inner cover indicating the title of the thesis, graduate school, major, discipline, student ID number and name.

c Bind the pages in the following order: inner cover, thesis abstract, table of contents, and thesis.

d Write your graduate school, major, discipline, student ID number, and name horizontally on the front cover and the back cover of the file.

Format of inner cover



(5) Notes

a As a general rule, the thesis and thesis abstract must be written in black ink.

b If the volume of reference materials is large and must be submitted as a separate volume, create this volume in accordance with the binding instructions for the thesis (a to d in (4) above) with "Materials" clearly written on the front.

c Fold any larger documents or materials so that they can be bound together with thesis, fitting the required size.

d Attach diagrams, tables, photographs, and so on as necessary.

e Be sure to have your faculty advisor sign and affix a seal on the inner cover of the original copy (the inner cover of duplicates may be reproduced).

IV Procedures for applying for the doctoral degree and criteria for the doctoral thesis evaluation

1 Acquiring the doctoral degree by completing the course

A student who has been enrolled in the Doctoral Course for a specified period, earned the credits required by the relevant graduate school, completed the required amount of directed study, and then passed the doctoral thesis evaluation and final examination, is deemed to have completed the course and will be awarded the doctoral degree (Article 25 and Article 28 of the Graduate School Regulations).

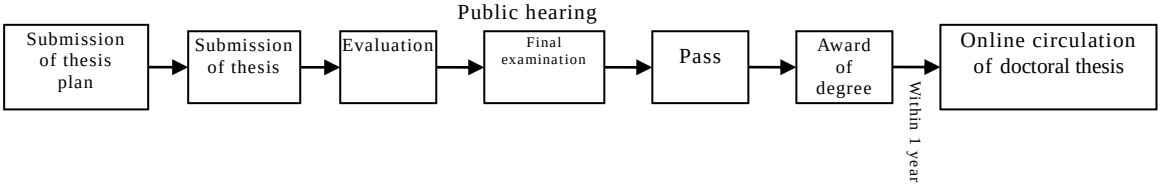
2 Criteria for the docoral thesis evaluation

(1) The student who receives the doctoral degree shall be an individual with profound learning in the subject field of research, and a sufficient level of specialized research capacity in his/her field of study to independently accomplish that research.

(2) The doctoral thesis shall be logically and clearly written, and based upon research findings of high academic value in the field of study. If the research findings in the dissertation are the result of the joint efforts of several researchers, the contribution of the individual receiving the degree must be distinguished.

(3) The substance of the doctoral thesis shall be presented and debated at a public hearing in a manner suitable for academic research. As a general rule, the hearing shall be open to the public.

3 Basic flow of events leading to the award of degree



4 Schedule

Procedures for award of degree (Ph.D.)	[Doctorate by advanced course]		[Doctorate by dissertation]	
	Award for the year ending in September	Award for the year ending in March	Award for the year ending in September	Award for the year ending in March
Submission of "doctoral thesis plan" *1 <To Center for Academic Affairs>	**By the end of February**	**By the end of August**	-	-
Receipt and evaluation by Dissertation Acceptance Committee	Conducted as deemed appropriate by each discipline			
Submission of doctoral thesis and a complete set of documents including "Application for Degree" <To Center for Academic Affairs> *2	**By the end of May**	**By the end of November**	**By the end of May**	**By the end of November**
Ascertainment of scholastic ability and oral examination on doctoral thesis (public hearing)	-	-	July	December to January
Final examination (public hearing)	July	December to January	-	-
Diploma awarding ceremony	Around September 18	Around March 23	Around September 18	Around March 23

*1 Plan must be submitted at least 1 year before the submission of doctoral thesis upon obtaining the approval of the faculty advisor. Provided that this term may be reduced to 3 months, if accepted by the Graduate School Committee.

*2 Acceptance must be approved by the Dissertation Acceptance Committee prior to submission to Center for Academic Affairs.

* Students must consult with the faculty advisor regarding the submission of doctoral thesis.

* The submission deadline must be strictly observed.

* Documents required for application will be distributed by Center for Academic Affairs. As submission instructions and other relevant procedures are subject to change, be sure to check the latest information on Information System and at Center for Academic Affairs.

5 Requirements for submission of doctoral thesis

In accordance with Article 19 of the Degree Regulations, doctoral thesis may only be submitted by students who have been enrolled in the Ph.D. Program and have earned or are expected to earn the required credits, obtained a prior approval on the thesis plan, and met the following requirements stipulated by the Graduate School Committee.

[Accreditation of foreign language proficiency]

(1) Number of foreign language subjects

1 language (English)

(2) Method of ascertaining foreign language proficiency

Written test as a general rule

(3) Requirements for an exemption from foreign language proficiency accreditation and how that exemption will be processed

Foreign language proficiency accreditation may be replaced by either one of the following (provided that whether or not item a. will be applied shall be determined by each field)

a An examination for entrance into the Ph.D. Program

b An English proficiency test taken during the Master's Course, for students who have completed the Master's Program in the relevant graduate school

[Criteria for research achievements]
As a general rule, 2 or more association journals [acceptance (completion of evaluation)] by an academic conference with a referee system.
The criteria for the field of mathematics shall be discussed separately.

6 Circulation of the doctoral thesis

(1) Circulation of the thesis evaluation
In the event that a doctoral degree is awarded, summaries of the thesis and its evaluation will be circulated via the Internet (Kansai University Academic Repository).

(2) Circulation of a doctoral thesis
In accordance with Article 39 of the Degree Regulations, doctoral theses must be circulated via the Internet (Kansai University Academic Repository) within 1 year after the award.

* Detailed circulation procedures will be communicated separately via the Information System.