

# □ Course Requirements

## 1. Credits for graduation

### 1) Master's Program

A) Thesis Master's Degree Program: at least 33 credits

<at least 21 credits for coursework + research credits (thesis research, thesis seminar, seminar)>

B) Coursework Master's Degree Program: at least 33 credits

<at least 21 credits for coursework + at least 6 for additional coursework credits + research credits (independent study, seminar)>

### 2) Doctoral program: at least 60 credits

<at least 30 credits for coursework + at least 30 research credits (dissertation research, dissertation seminar, and, seminar)>

※ The curriculum credits acquired in the master's course may be cumulatively added to the curriculum credits in PhD course.

3) A cumulative grade point average of 2.5 or higher out of a possible 4.3 in all coursework for graduation.

4) Mandatory general course credits : at least 3 credits from the general courses.

※ Each department has different requirements for mandatory general courses. Please refer to the departmental course requirement.

※ For those who have taken mandatory general courses in their master's degree program, they do not have to take mandatory general courses in their doctoral program.

※ List of Mandatory General Courses

Classification	Course No. (Code)	Course	Credit(s) (Homework)	Department (or Team in charge)	Remark
Mandatory General	CC010 (11.010)	Special Lecture on Leadership	1:0:0	Leadership Center	Non-Credit but Required for Graduation
	CC020 (11.020)	Ethics and Safety I	1AU	Academic Planning Team	
	CC500 (11.500)	Scientific Writing	3:0:3(4)	Humanities and Social Sciences	Each department has different course requirements. Please refer to the departmental course requirement.
	CC510 (11.510)	Introduction to Computer Application	2:3:3(10)	Computing	
	CC511 (11.511)	Probability and Statistics	2:3:3(6)	Mathematical Sciences	
	CC512 (11.512)	Introduction to Materials Science and Engineering	3:0:3(3)	Materials Science Engineering	
	CC513 (11.513)	Engineering Economy and Cost Analysis	3:0:3(6)	Industrial and Systems Engineering	
	CC522 (11.522)	Introduction to Instruments	2:3:3(8)	Electrical Engineering	
	CC530 (11.530)	Entrepreneurship and Business Strategies	3:0:3(6)	Innovation and Technology Management	
	CC531 (11.531)	Patent Analysis and Invention Disclosure	3:0:3(6)	Intellectual Property Minor	
	CC532 (11.532)	Collaborative System Design and Engineering	4:0:4	Mechanical Engineering	
	CC533 (11.533)	Entrepreneurial Leadership	3:0:3	K-School	

- 5) All of the students presently studying at KAIST should complete the Ethics and Safety I course(CC020, 1AU) for graduation. Also, it is recommended to take the course in their first semester. (take one time between master's program and doctoral programs)

- Ethics and Safety I(CC020) includes Research Ethics, Lab Safety, and Human Rights & Gender Equality.  
Students do not have to register for the course but go to the web-site(<http://eethics.kaist.ac.kr>), complete the course and pass the test with the grade "S" if they satisfy the criteria below.

- Opening semester : Spring, Fall

※For Human Rights & Gender Equality only, students can take all the year around.

- Taking the course: Please log in at <http://eethics.kaist.ac.kr> for course registration.

※It is highly recommended that students take Human Rights & Gender Equality before deciding their major, which is the time before entering their third semester.

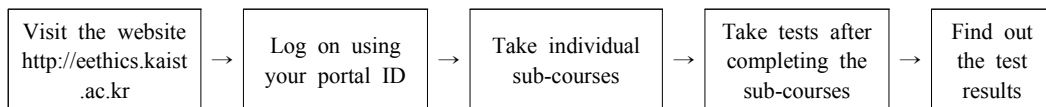
- Students must score 80 or higher in all of the 3 subjects (Research Ethics, Lab Safety and Human Rights & Gender Equality)

\*Note that total points are 100 in each subject.

- Exam period: From the beginning of each semester through the final exam period (One may take exams by up to ten times per each sub-course during the period except for Human Rights & Gender Equality)

\*There is no limit on taking exams on Human Rights & Gender Equality.

- Exam-taking process



\* Students will pass the course only with a score of 80 or higher in all of the 3 subjects during one semester.

- 6) For the master's program, the non-credit leadership course has to be completed.

※ Students enrolled in Integrated Master's and Doctoral degree program should also take the leadership course.

※ General Scholarship students, international students, and students of College of Business are exempt from taking the leadership.

※ CC010 (consisting of two sub classes)

Mandatory General	Sub Class	Credit	Course	Department (or Team in charge)	Remark
Leadership	A	1:0:0	Special Lecture on Leadership	Leadership Center	Choose among the two (A, B)
	B		Entrepreneurship	K-School	

※ Completion of Requirement for Graduation and Credit: Students should choose one out of the two sub classes and participate in the chosen class. The leadership course is completed on condition that students participate at least five lectures in the chosen class and upon completion, Grade S will be given. (For non-completion, U will be given)

- 7) The mandatory major course, elective course and research course requirements are different for each department. Refer to the course requirements of each department.

- 8) The departments (biological Sciences and chemistry) with self-regulated course requirements have the same number of total required credits, but the specific major course and research course requirements may differ from other department.

◦ Departments/Majors with self-regulated course requirements: biological Sciences department (graduate course), Chemistry department (PhD course)

◦ There is no change in the total required credits, but the major course credits are reduced and the research credits are increased.

## **2. Completion of the Coursework Master's Degree Program**

- 1) Students in coursework master's degree program do not need to submit the master's thesis but have to complete additional coursework (at least 6 more credits)
- 2) Departments/Majors which offer coursework master's degree programs:  
Mathematical Sciences, Biological Sciences, Nuclear and Quantum Engineering, Graduate School of Innovation & Technology Management, Graduate School of Culture Technology, Graduate School of Science and Technology Policy, Master of Science Journalism, Electric Engineering, Computer Science, Industrial & System Engineering, Global Information & Telecommunication Technology Program, Master of Intellectual Property, Software Graduate Program, Software Engineering Program, Telecommunication Engineering Program, College of Business (Techno-MBA, Executive-MBA, IMBA, Finance-MBA, Information & Media MBA)
  - Coursework master's degree program in Nuclear and Quantum Engineering : Applies only to international students who wish to take this option in consultation with his/her academic advisor.
  - Biological Sciences : Limited to the persons scheduled to advance to the PhD course.
  - Electrical Engineering : Applicable only to Dual Degree Program

## **3. Completion of the Interdisciplinary Program**

- 1) The interdisciplinary program is classified into two categories: the students who graduate with the name of the department(interdisciplinary program) and students who graduate only by the name of interdisciplinary program and complete the requirements.
- 2) Students to graduate with the name of the department(interdisciplinary program) shall complete the curriculum of the department and interdisciplinary program at the same time, and students who wish to graduate with the name of the interdisciplinary program shall complete the curriculum of the applicable interdisciplinary program.

## **4. Completion of the Integrated Master's and Doctoral Degree Program**

- 1) Students who enter the integrated master's and doctoral degree program are expected to complete their doctoral degree. They start with the master's program and are admitted to the PhD program without the usual requirements of submitting the master's thesis and passing the PhD entrance exam.
- 2) Completion of Curriculum
  - The curricula of existing master's and PhD programs are followed.
  - For the course requirements for this integrated program, a total of 60 credits (including the curriculum credits of 30 credits or more and the research credits) have to be acquired including credits acquired in the master's program. In addition, students have to satisfy the requirements for the PhD program separately regulated by the department (including the completion of the leadership course).
  - The curriculum credits and research credits earned from the master's course may be cumulatively counted.
  - Conferment of degree: the doctoral degree is conferred after the student fulfills the course requirements and passes the comprehensive examination and the degree thesis review.
  - For a detailed description of the full number of students and student selection procedures, refer to the operation manual of the integrated course for master's and PhD and recruitment instructions for each year's master's and PhD programs.
  - Action taken for people who drop out from the integrated program: In case that a student drops out, the master's degree can be conferred if the requirement of master's degree is completed.

## **5. Renaissance Program** (The program was discontinued. For those who have applied for the program during the operation, they will be given a certificate upon the completion of the requirements written below)

- The Renaissance Program is a system design-centric curriculum for fostering graduate students' comprehensive thinking; it is set to be run starting from Spring 2009.
- Eligibility: In principle, the Renaissance Program is open to the freshmen who have entered KAIST graduate program in Spring semester and wish to enter the integrated master's and doctoral program

- Benefit: Successful participants will be conferred a certificate that demonstrates their completion of the Renaissance program.
- Course requirements
  - Course requirements are to be set independently by individual departments, with the following Mandatory courses being an exception:

Order	Classification	Cours No.	Course Title	Credit
1	Mandatory General	CC532	Collaborate System Design and Engineering	4
		EE612	Discrete Event System Modeling & Simulation	3
		IE577	Fundamentals of Systems Engineering	3
		AE500	Synthetic Design of Aerospace Systems	3
2	-	-	System Design Course	3
3	-	-	System Design Project	3
Total				More than 9 credits

- \* Students are encouraged to take design and project courses offered by their respective departments after completing CC532.
- \* Students can take design courses offered by any departments (regardless of their own department); ones not participating in Renaissance Program can also take the courses above.
- System Design Project: It is possible to replace by research credits(thesis research) of the belonging department if the department allows.

#### 6. Completion of special courses

A total of 9 credits are allowed to be taken in master's program (The subtitles are needed for opening special courses and they are recorded on the grade report.)

#### 7. Action taken and others

- 1) Matters on curriculum shall be determined with the entry year as the basis except the separately determined, and in the event that the subject is closed or changed, make sure to complete the replacement course.
- 2) In the event of having separate matters other than the Handbook or instruction related to the curriculum, the policy of the department shall be complied with, however, in the event of having objection or adjustment, it shall be determined through the review of a relevant committee and others.

#### \* Note

The confirmation of graduation requirement including the status of subject, requirement of subject, and others shall be implemented under the responsibility of the student.