☐ Credit Requirements

1. Undergraduate Course

A. Students in the undergraduate program (bachelor's degree) have to complete a minimum of 130 credits for graduation, and have to satisfy the requirements of each classification.

B. Students in the undergraduate program may select subjects in the 100-400 levels and mutually-recognized subjects in the 500 level.

C. With the exception of make-up courses, the same course shall not be repeatedly taken for credit.

D. In the event that a subject is not available for inevitable reasons, a substitute course should be taken.

E. The credit requirements for graduation for each department (division)

(Unit: Credit)

Department /Division	General Courses			Basic Courses			Major Courses			* Elective Courses	Research Courses	Total
	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal			
Physics							19	21↑	40↑		5↑	
Mathematical Science							0	40↑	40↑		3	
Chemistry							18	24↑	42↑		3↑	
Biological Sciences							18	24↑	42↑		3↑	
Bio and Brain Engineering							14	28↑	42↑		7↓	
Chemical&Biomolecular Engineering							6	35↑	41↑		4↑	
Mechanical Engineering							9	40↑	49↑		3↑	
Aerospace Engineering							22	30↑	52↑		3↑	
Civil and Environmental Engineering	6 +(9AU)	21↑	27↑	26	6↑	32↑	9	36↑	45↑		3↑	130 above
Material Science&Engineering							12	30↑	42↑		3↑	
Nuclear and Quantum Engineering							22	21↑	43↑		3↑	
Electrical Engineering							18	29↑	47↑		4↑	
Computer Science							22	21↑	43↑		3↑	
Information and Communications Engineering*												
Industrial&System Engineering							24	27↑	51↑		6↓	
Industrial Design				(20)		(26)	27	27↑	54↑		3↑	
IT Business*												
Management Engineering	7 +(9AU)	21↑	28↑	23	6↑	29↑	21	24↑	45↑		3↑	

※ In the case of Information & Communications Engineering and IT Business, refer to the requirements for each department.

※ When taking mandatory general courses, 9 AU shall be completed separately. (This is no credit course but is required for graduation)

※ Electives have different requirements for each department. (Refer to the requirements of each department)

F. Requirements of minor

Department /Division	Requirements
Physics	Including 2 courses of PH301 Quantum Mechanics I and PH351 Physics Lab III (or PH352 Physics Lab IV), 19 credits or more have to be completed.
Mathematical Sciences	18 credits or more from major courses offered by the department have to be completed.
Chemistry	at least 21 credits including 12 credits of mandatory major courses
Biological Sciences	Including 12 credits of subject with the ten-digits of subject number in 0 or 1 or credits of ten digits of subject number in 0 or 2, 21 credits or more major courses have to be completed.
Bio and Brain Engineering	18 credits or more from mandatory major courses have to be completed.
Civil and Environmental Engineering	12 credits from the mandatory major courses and 9 credits or more from the elective major courses (total of 21 credits or more) have to be completed.
Mechanical Engineering	Basic Mechanical Practice(3), Mechanical Engineering Laboratory(3), Capstone Design I (3), Elective Major Courses at least 4 courses out of 8 Basic ME Elective courses
Aerospace Engineering	At least 21 credits in AE major courses including 4 courses from 8 mandatory major courses have to be completed.
Chemical and Biomolecular Engineering	3 credits from the mandatory major courses and 15 credits from the elective major courses designated by this department (total of 18 credits or more) have to be completed.
Materials Science & Engineering	9 credits from the mandatory major courses and 9 credits or more from the elective major courses (total of 18 credits or more) have to be completed.
Nuclear and Quantum Engineering	At least total 21 credits are required (at least 15 credits from mandatory major courses)
Management Science	At least total 18credits are required including 6 credits of mandatory major courses and 12 credits of elective major courses (at least 6 credits or more from Elective major course I and at least 6 credits or more from Elective major course II)
Electrical Engineering	At least 21 credits in major courses including - Circuit Theory, Signals and Systems, Digital System Design, Electromagnetics, Electronic Circuits, Introduction to electronics design Lab
Computer Science	Including 15 credits of mandatory major courses from this department, 21 credits or more from the major courses from this department have to be completed.
Information and Communications Engineering	At least 21 credits from mandatory major courses (a cumulative GPA of 2.0 or higher in the courses taken for minor)
Industrial & System Engineering	Regardless of mandatory and elective major courses, 18 credits or more have to be completed from the subjects offered from this department.
Industrial Design	Including dimensional design, foundation of product design, and element of product design, 18 credits or more have to be completed.
IT Business	At least 21 credits from mandatory major courses (a cumulative GPA of 2.0 or higher in the courses taken for minor)
Management Engineering	- From the electives in humanities and social science and the basic elective courses, Introduction to Economics and Introduction to OR have to be completed, and - 6 courses or more from major courses offered from this department including Principle of Management have to be completed (18 credits or more).

G. Requirements of double major

General			Basic			Major	Double Major	Research	Total
Required General	Elective in Humanities&Socal Sciences	Sub-total	Required	Elective	Sub-total				
6 +(9AU)	12 or above (without considering divisions)	18 or above	26	3 or above	29 or above	refer to the requirements for each	40 including mandatory major courses	0	130 or above

- Applicable all of the attending students. However, in the case of required general course and required basic course, refer to the course completion requirements by year of admission.

2. Graduate course

A. Students in the master's course may take 500-900 levels of subjects and 400 level of mutually recognizing subjects for credit.

B. Students in the PhD course may take 500-900 levels of subjects for credit. (Major courses from the undergraduate program can be taken for credit under special circumstances. Refer to the course requirements for the graduate program.)

C. The master's course is classified into the master's with thesis and the master's with coursework (The following table is for the master's with thesis. Refer to the legend following the table for the coursework master's degree program.).

D. With the exception of ″F″ grade for mandatory subjects, the same subject cannot be repeatedly taken for credit.

E. In the event that a required subject is later not offered, a designated substitute course has to be completed.

F. Department (major, interdisciplinary major)/completed credit chart for Master's and PhD programs.

Department /Division	Master's					Doctoral				
	Mandatory General	Mandatory Major	Elective Major	Research	Total	Mandatory General	Mandatory Major	Elective Major	Research	Total
Physics	3 (1AU)	9	9↑	12↑	33↑	3 (1AU)	9	18↑	30↑	60↑
*Mathematical Sciences	3	0	21↑	12↓	36↑	3	0	33↑	30↑	66↑
Chemistry	3	0	18↑	12↓	33↑	3	0	18↑	39↓	60↑
Graduate School of Nanoscience & Technology	3	15	3↑	12↑	33↑					
*Biological Sciences	3	6	9↑	15↓	33↑	3	6	18↑	33↓	60↑
*Bio and Brain Engineering	3	0	18↑	12↑	33↑	3	0	27↑	30↑	60↑
Graduate School of Medical Sciences & Engineering						3	0	18↑	39↓	60↑
Civil and Environmental Engineering	3	0	18↑	12↑	33↑	3	0	27↑	30↑	60↑
Mechanical Engineering	3	0	18↑	12↑	33↑	3	0	33↑	30↑	66↑
Aerospace Engineering	3	0	18↑	12↑	33↑	3	0	27↑	30↑	60↑
Ocean Systems Engineering	3	0	21↑	9↓	33↑	3	0	27↑	30↑	60↑
Chemical and Biomolecular Engineering	3	0	18↑	12↑	33↑	3	0	27↑	30↑	60↑
Materials Science & Engineering	3	0	18↑	12↑	33↑	3	0	27↑	30↑	60↑
*Nuclear and Quantum Engineering	3	0	18↑	12↑	33↑	3	0	27↑	30↑	60↑
Graduate School of EEWS	3	3	15↑	12↑	33↑	3	3	24↑	30↑	60↑
Management Science	3	3	18↑	9↑	33↑	3	3	30↑	30↑	66↑
Graduate School of Technology Management and Innovation	3	15	24↑	3↑	45↑	3	15	33↑	30↑	81↑
*Graduate School of Culture Technology	3	6	12↑	12↑	33↑	3	6	21↑	30↑	60↑
Electrical Engineering	3	3	18↑	6↑	33↑	3	3	24↑	30↑	60↑
*Computer Science	3	0	18↑	6↑	33↑	3	0	27↑	30↑	60↑
Information and Communications Engineering*										
Industrial & System Engineering	3	0	21↑	9↑	33↑	3	0	36↑	30↑	69↑
Knowledge Service Engineering	3	0	21↑	9↑	33↑	3	0	30↑	30↑	63↑
Industrial Design	3	6	12↑	12↑	33↑	3	0	27↑	30↑	60↑
IT Business*										
Graduate School of Management — Management Engineering	3	12	21↑	9↑	45↑	3	12↑	39↑	30↑	84↑
Graduate School of Management — *Techno-MBA	3	15	30↑	6↑	54↑					
Graduate School of Management — **Executive-MBA	3	36↑	6↑	3↑	48↑					
Graduate School of Management — **IMBA	3	30↑	18↑	3↑	54↑					
*Graduate School of Finance	3	9	33	9↑	54↑					
Graduate School of Information & Media Management — **Information & Media Management	3	19.5	22.5↑	9↑	54↑					
Graduate School of Information & Media Management — *MIS-MBA	3	9	33↑	9↑	54↑					
Graduate School of Information & Media Management — *Telecom-MBA	3	12	30↑	9↑	54↑					
Interdisciplinary Program / Other Program										

Note: Mandatory General = 3 (1AU).

※ In the case of Information & Communications Engineering, IT Business, Interdisciplinary Programs and others, refer to the requirements for each.

※ When taking mandatory general courses, 1 AU shall be completed separately. (This is no credit course but is required for graduation)

※ The subject credits from the master's course can be cumulatively added to the credits for the Ph.D. course.

※ '**' indicates department/major which offer coursework master's degree program.
  - Students in the coursework master's degree program should acquire certain extra curriculum credits (6 credits or more: different depending on the department) without the degree thesis review.
  - In coursework master's degree program, the research credit is available only from individual research and seminar (thesis research and thesis seminar are not counted.).
  - Students in coursework master's degree program should refer to page 50 for the requirements for graduation.

※ The Interdisciplinary Program and other programs may have different credit requirements depending on departments.