

## □ Undergraduate Course Requirements

### 1. Graduation Credits

- A. At least 136 credits in total (applicable to students entering KAIST in 2016 and thereafter)
- A cumulative grade point average of 2.0 or higher out of a possible 4.3 in all coursework.
  - For students enrolled before 2016, refer to course completion requirements by year of admission
- B. Students must apply for at least one out of advanced major, minor, double major, or individually designed major. (applicable to students entering KAIST in 2016 and thereafter)

### 2. General Courses Requirements: At least 28 credits and 8AU (applicable to students enrolled in 2018 and thereafter. For students enrolled before 2018, refer to course completion requirements by year of admission.)

#### A. Mandatory General Courses

Admission Year	Credits	Required Courses
In 2018 and thereafter	7 credits and 8 AU	English Presentation & Discussion (1), Advanced English Listening (1), Advanced English Reading (1), Advanced English Writing (1), Writing (3), Physical Education (4AU), Humanity/Leadership(2AU), Happy College Life (1AU), Exciting College Life (1AU)
In 2014 and thereafter	7 credits and 9 AU	English Presentation & Discussion(1), Advanced English Listening(1), Advanced English Reading(1), Advanced English Writing(1), Writing(3), Physical Education(4AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU), Happy College Life(1AU), Exciting College Life(1AU)
Between 2011 and 2013	6 credits and 9 AU	English Communication(1), Critical Thinking in English(2), Writing(3), Physical Education(4AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU), Happy College Life(1AU), Exciting College Life(1AU) * English Communication → Intermediate English Speaking & Listening * Critical Thinking in English → Intermediate English Reading & Writing
Between 2009 and 2010	6 credits and 9 AU	English Communication(1), Critical Thinking in English(2), Writing(3), Physical Education(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU) * English Communication → Intermediate English Speaking & Listening * Critical Thinking in English → Intermediate English Reading & Writing
Between 2007 and 2008	7 credits and 9 AU	English Communication I(1), English Communication II(1), English Reading&Writing(2), Writing(3), Physical Education(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU) * English Communication I → Intermediate English Speaking & Listening * English Communication II → English Presentation & Discussion * English Reading & Writing → Intermediate English Reading & Writing
2006 or before	7 credits and 9 AU	English I(2), English II(2), Writing(3), Physical Education(4AU), Community Service(4AU), Ethics and Safety II(1AU) * English I → Intermediate English Speaking & Listening * English II → Intermediate English Reading & Writing

1) **English: 4 credits** (applicable to students entering KAIST in 2014 and thereafter; for those who have entered KAIST in 2013 and before, refer to the Course Completion Requirements by Year of Admission)

A) The four required English classes should be taken within the first four semesters(except for summer and winter semester) after admission. For those who have not taken the required English classes within the period, students only can take classes offered in summer semester or winter one.

B) English Course Credit Recognition Criteria

① For students entering KAIST in 2014

- According to the score of English Proficiency Test (TOEFL) or mock TOEFL administered by KAIST for incoming freshmen, students will be exempted from taking the required English classes and their test score will be transferred into credits as follows.

Score	Class Exemption and Credit Transfer	Grade
22 or higher in Speaking	English Presentation & Discussion (1 credit)	S
22 or higher in Listening	Advanced English Listening (1 credit)	S
22 or higher in Writing	Advanced English Writing (1 credit)	S
22 or higher in Reading	Advanced English Reading (1 credit)	S

② For students entering KAIST in 2015 and thereafter(※ Recognition of IELTS scores is applicable to students entering KAIST Fall 2015 and thereafter.)

- According to the score of English Proficiency Test (TOEFL), mock TOEFL administered by KAIST for incoming freshmen or the score of IELTS, students will be exempted from taking the required English classes and their test score will be transferred into credits as follows.
- For those who have taken English classes for two semesters including summer and winter semester, they will be exempted from taking the required English courses and their test score will be transferred into credits in accordance with their test score as follows on condition that they submit the official score of TOEFL or that of IELTS by two weeks before the start of the course registration for the next semester.

Score		Class Exemption and Credit Transfer	Grade
TOEFL	IELTS		
22 or higher in Speaking	7.0 or higher in Speaking	English Presentation & Discussion (1 credit)	S
22 or higher in Listening	7.0 or higher in Listening	Advanced English Listening (1 credit)	S
22 or higher in Writing	6.0 or higher in Writing	Advanced English Writing (1 credit)	S
22 or higher in Reading	7.0 or higher in Reading	Advanced English Reading (1 credit)	S

C) Criteria for Taking English Course(applicable to students entering KAIST in 2014 and thereafter)

Level	TOEFL iBT scores	IELTS scores	Subject (credit)	Hours	Classification	Remark
Exempt	22-30	Speaking 7.0 - 9.0 Listening 7.0 - 9.0 Writing	- (4)	-	-	-

Level	TOEFL iBT scores	IELTS scores	Subject (credit)	Hours	Classification	Remark
		6.0 – 9.0 Reading 7.0 – 9.0				
Advanced	Speaking 19–21	Speaking 6.0 – 6.5	English Presentation & Discussion (1)	2	Mandatory General	Prerequisite: Students should meet either of the following two criteria: 1. TOEFL score 2. Completion of Intermediate English Speaking & Listening courses
	Listening 19–21	Listening 6.5	Advanced English Listening (1)	2	Mandatory General	Prerequisite: Students should meet either of the following two criteria: 1. TOEFL score 2. Completion of Intermediate English Speaking & Listening courses
	Writing 19–21	Writing 5.5	Advanced English Writing (1)	2	Mandatory General	Prerequisite: Students should meet either of the following two criteria: 1. TOEFL score 2. Completion of Intermediate English Reading & Writing courses
	Reading 19–21	Reading 6.5	Advanced English Reading (1)	2	Mandatory General	Prerequisite: Students should meet either of the following two criteria: 1. TOEFL score 2. Completion of Intermediate English Reading & Writing course
Intermediate	Speaking or listening 15–18	Speaking 5.0 – 5.5 or listening 6.0	Intermediate English Speaking & Listening (2)	3	Elective	Prerequisite: Students should meet either of the following two criteria: 1. TOEFL score 2. Completion of English Camp
	Writing or reading 15–18	Writing 5.0 or reading 6.0	Intermediate English Reading & Writing (2)	3	Elective	Prerequisite: Students should meet either of the following two criteria: 1. TOEFL score 2. Completion of English Camp
Remedial	Speaking and listening below 14	Speaking and listening below 4.5 and 5.5 respectively	Basic English Conversation (0)	-	Academic English Camp (Pre-admission Program)	
	or	or	TOEFL (0)			
	Reading and writing	or	Basic English			

Level	TOEFL iBT scores	IELTS scores	Subject (credit)	Hours	Classification	Remark
	below 14	Reading and Writing below 5.5 and 4.5 respectively	Reading (0)			
			Basic English Writing (0)			
			Basic English Grammar (0)			
			Basic English Speaking & Listening (0)	3	-	
			Basic English Reading & Writing (0)	3	-	

※ Students may apply for a higher course after completing the course(s) for their TOFLE/IELT scores

※ For course(s) not subject to the above English course-taking criteria, students should begin with the Intermediate level courses.

D) Criteria for credit recognition of English courses (applicable to students from foreign high schools using English as primary language)

Admission Year	Requirement
2013 and thereafter	Students whose mother tongue is English or students who graduated from a high school where English is the primary language will be exempted from required English courses and will be graded with an 'S'.
Between 2011 and 2012	Students who completed the high school curriculum where English is the primary language will be exempted from required English courses and will be graded with an 'S'.
Before 2010	International students who completed the entire high school curriculum where English is the primary language will be exempted from required English courses and will be graded with an 'S'.

## 2) Writing: 3 credits (not applicable to international students)

- Students will take a level test and will be divided into level A, B and C according to the students' level of writing. (Level test can only be taken only once during the undergraduate course)

Level	Credit Recognition and Prerequisite
A	To be exempted from Writing course and graded with an "S"
B	Required to take 1 of the Writing courses
C	Required to take 1 of the Writing courses after taking 'Fundamentals of Writing' course.

※ Starting from Spring 2014, students with Level C in Writing tests should take 'Fundamentals of Writing' course (1 credit, Elective) and then another 1 Writing course.

- ※ Students who have received Level C by Fall 2013 and not taken 'Basic Writing' should take 'Fundamentals of Writing' course (1 credit, Elective) and then another Writing course.
- ※ Writing classes: Logical Writing, Critical Writing, Practical Writing, Creative Writing

**3) Physical Education : 4AU** should be completed. (Not counted for GPA but required for graduation.)

- Since each course in Physical Education has 2AU, 2 courses should be taken.
- 2AU among 4AU can be replaced by extra curricular sports club activities.

**4) Community Service:** Not applicable to students entering KAIST in 2011 and thereafter. However, leadership mileage will be awarded for proof of community service.

- Students who entered the KAIST in or before 2006 must complete 4AU; those who enter the KAIST between 2007 and 2010 must complete 2AU. (not counted for GPA but required for graduation.)
- Service at the flower town, serving as an executive member of student association, serving as a student representative of a department, service in the school clean-up campaign, service at a public welfare organization such as the welfare center, service at public organizations such as the national park management corporation, service at government offices such as a city hall and a town-block office.
- The proof of the community service sealed with the signature of the service organization for the off-campus service and of the head of the corresponding administrative office for the on-campus service should be submitted to the Academic Registrar's Team.

**5) Humanity/Leadership : 2AU** (not counted for GPA but required for graduation.)

- Applicable to students who enter the KAIST in or after 2007 and is mandatory for graduation

Course	Program	Credit
Humanity/Leadership I	Complete either 7H leadership training, phoenix leadership training, or Carnegie leadership	1AU
Humanity/Leadership II	Young Leaders Thursday Lecture, or GLA(Group Leadership Activity)	1AU
Humanity/Leadership III	Complete one program among photography, musical instruments, jazz dance, hip-hop, a cappella, etc	1AU

- ※ Humanity/Leadership III can be taken within two semesters of enrollment during the undergraduate course.

- ※ Program and credit recognition per course

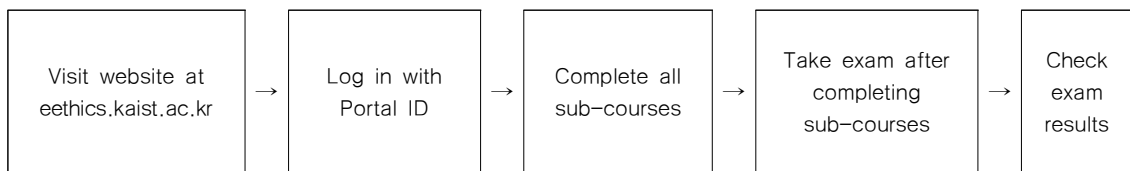
**6) Completion of Ethics and Safety** (required for graduation)

- A) Offered since spring 2009 to prevent laboratory accidents and corrupt practices in research
- B) Course code and course name (applicable to students enrolled no later than 2017)
  - \* Undergraduate: HSS070, Ethics and Safety II
  - \* Masters/PhD: CC020, Ethics and Safety I

C) How to complete: Visit the website at <http://eethics.kaist.ac.kr>; Course registration is not required.

Students enrolled no later than 2017	Students enrolled in 2018 and 2019	Students enrolled in 2020	Students enrolled in 2021 and thereafter
1. Course opening (In principle) Regular semester (spring, fall) (If incomplete) Students in their last semester may request the course to be offered ※ Human Rights and Gender Equality offered year-round	1. Course opening: Year-round	1. Course opening: Year-round	1. Course opening: Year-round
2. Courses ① Laboratory Safety ② Research Ethics ③ Human Rights and Gender Equality	2. Courses ① Laboratory Safety ② Research Ethics ③ Human Rights and Gender Equality ④ Cyber Ethics	2. Courses ① Laboratory Safety ② Research Ethics ③ Human Rights and Gender Equality ④ Cyber Ethics	2. Courses ① Laboratory Safety ② Research Ethics ③ Human Rights and Gender Equality ④ Cyber Ethics
3. Completion period: At least 40 days prior to date of degree conferment in desired semester of graduation ※ (Recommendation): Complete Human Rights and Gender Equality within first three semesters of enrollment	3. Completion period (In principle) Within two semesters of enrollment (Recommended) In first semester of enrollment	3. Completion period (In principle) Complete before the start of the mid-term period in first semester of enrollment (Recommended) Complete before the beginning day of the first semester of enrollment	3. Completion period (In principle) Complete before the beginning day of the first semester of enrollment (Recommended) Complete before the start of the course registration period for the first semester of enrollment.
4. Result: 1AU awarded during grading period	4. Result: Considered as satisfying graduation requirements upon completion	4. Result: Considered as satisfying graduation requirements upon completion	4. Result: Considered as satisfying graduation requirements upon completion

#### D) Examination



※ Up to ten times per sub-course during examination period (No limit for Human Rights & Gender Equality)

E) Evaluation: Students evaluated online via website (<http://eethics.kaist.ac.kr>); Pass (grade S) awarded to students who receive at least 80 (out of 100) in each of the following courses: Research Ethics, Laboratory Safety, Human Rights & Gender Equality, Cyber Ethics\*

※ Cyber Ethics applicable to students enrolled in 2018 and thereafter

F) Miscellaneous: Course to be completed only once by master's and Ph.D. students during

enrollment in respective programs

- 7) **Happy College Life and Exciting College Life:** Students enrolled in 2011 and thereafter shall take **2AU** in total (not counted for GPA but required for graduation.)
- Students should take Happy College Life (1AU) in the first semester of enrollment, and Exciting College Life (1AU) in the second semester of enrollment (mandatory).

**B. Elective General Courses in Humanities & Social Sciences: at least 21 credits**

- 1) Students are required to take at least 21 credits with a minimum requirement of at least 1 course of each of the following 2 among 3 categories: Humanity, Society, and Literature and Arts; the rest can be chosen regardless of the category. (\* Applicable to students who entered KAIST in 2009 and thereafter; for those who have entered KAIST in 2008 and before, refer to the General Course Requirements by Admission Year)
  - 2) Students who entered KAIST between 2007 and 2010 should take at least 9 credits through lectures offered in English among the 21 credits required by Elective General Courses in Humanities & Social Sciences.
  - 3) Students having a double major should take 12 credits without requirements in categories as stated above. (Students who entered KAIST between 2007 and 2010 should take 6 credits through lectures offered in English.)
- \* The requirement of taking lectures offered in English among Elective General Courses in Humanities & Social Sciences is not applicable to students who entered KAIST in 2011 or thereafter.

**C. Mandatory General course requirements for International Students in the undergraduate program**

**1) Mandatory English Courses: Total 4 credits**

Classification	Course No.	Course Name	Credit
Mandatory General	HSS022	English Presentation & Discussion	1
	HSS023	Advanced English Listening	1
	HSS024	Advanced English Writing	1
	HSS025	Advanced English Reading	1

\* Refer to Criteria for Taking English Courses on the part of '2-A-1'.

- A) Students whose mother tongue is English or students who graduated from a high school where English is the primary language are exempted from taking Required English Courses and will be graded with an 'S' grade (pass). (Applicable to students who entered KAIST in 2013 and thereafter)
- B) Students who graduated from a high school in an English-speaking country are exempted from taking Required English Courses and will be graded with an 'S' grade (pass). (Applicable to students who entered KAIST in 1998 and thereafter)

**2) Required Korean Language Courses: Total 6 credits**

- A) International students admitted prior to fall 2019 (2013~2018)

Classification	Course No.	Course Name	Credit
Mandatory General	HSS006	Basic Korean I for Foreign Students	3
Elective General	HSS193	Basic Korean II for Foreign Students	3

B) International students admitted in fall 2019 and thereafter

Classification	Course No.	Course Name	Credit
Mandatory General	HSS151	Korean3 for undergraduate international students	3
Elective General	HSS152	Korean4 for undergraduate international students	3

- ※ International students are exempted from taking Writing courses (Mandatory General Course)
- ※ International students in the undergraduate program will be able to register for 'Korean3 for undergraduate international students', only if they join 'Korean Language Camp' in their first winter term after admission or they get a TOPIK score of level 1 or higher. (This applies to the students who have entered KAIST in fall 2019 and thereafter) Students who have joined 'Korean Language Camp' cannot register for 'Korean1 for undergraduate international students' and/or 'Korean2 for undergraduate international students'.
- ※ Undergraduate international students are required to obtain level 2 or higher score in TOPIK before entering or during studying at KAIST. (Applies to students entering KAIST in 2013 and thereafter)

**3) AU Courses Requirement**

- A) Students who entered KAIST in 2018 and after: International students must complete mandatory AU courses (Total 8AU: Physical Education 4AU, Humanity/Leadership 2AU, Happy College Life 1AU, Exciting College Life 1AU. However, Humanity/Leadership may be substituted by Cultural Experience)
- B) Students who entered KAIST in 2007~2017: International students must complete mandatory AU courses (Total 9AU: Physical Education 4AU, Humanity/Leadership 2AU, Ethics and Safety II 1AU, Happy College Life 1AU, Exciting College Life 1AU. However, Humanity/Leadership may be substituted by Cultural Experience)
- ※ Students who entered KAIST in 2007~2010: Total 9AU (Physical Education 4AU, Community Service 2AU, Humanity/Leadership 2AU, Ethics and Safety II 1AU)
  - ※ Students who entered KAIST in 2006 or before: Total 9AU (Physical Education 4AU, Community Service 4AU, Ethics and Safety II 1AU)

**3. Completion of Basic Courses: at least 32 credits** (applicable to students entering KAIST in 2012 and thereafter; for those who have entered KAIST in and before 2011, refer to the Course Completion Requirements by Year of Admission)

**A. Mandatory Basic Courses: 23 credits**

Completion of Mandatory Basic Courses
① 1 course among Fundamental Physics I (3), General Physics I (3), and Advanced Physics I (3)
② 1 course among Fundamental Physics II (3), General Physics II (3), and Advance Physics II (3)
③ 1 course of General Physics Lab I (1)
④ 1 course of Basic Biology (3) or General Biology (3)
⑤ 1 course of Calculus I (3) or Honor Calculus I (3)
⑥ 1 course of Calculus II (3) or Honor Calculus II (3)
⑦ 1 course among Basic Chemistry (3), General Chemistry I (3), and Advanced Chemistry (3)
⑧ 1 course of General Chemistry Lab I (1) or Advanced Chemistry Lab (1)
⑨ 1 course of Basic Programming (3) or Advanced Programming (3)

- 1) Students having entered KAIST in 2007 or before : 23 credits (①~⑨)
- 2) Students having entered KAIST between 2008 and 2011: 26 credits((①~⑨), Freshman Design Course: Introduction to Design and Communication)(3))



3) Students entering KAIST in 2020 and thereafter: One course from ③ General Physics Lab I (1) and General Physics Lab II(1)

※ 'PH171 Experiment-Oriented General Physics I' may be recognized as both of 'General Physics I' and 'General Physics Lab I' (Students who have taken 'PH171 Experiment-Oriented General Physics I' cannot register for 'General Physics I' or 'General Physics Lab I')

※ 'PH172 Experiment-Oriented General Physics II' may be recognized as both of 'General Physics II' and 'General Physics Lab II'(Students who have taken 'PH172 Experiment-Oriented General Physics II' cannot register for 'General Physics II' or 'General Physics Lab II')

**B. Elective Basic Courses: at least 9 credits** (Each department has different specific requirements. Please refer to the departmental requirements for course completion.)

1) Lab design courses should be treated equally with other subjects (Except where each department designates specific courses to be completed)

2) Students admitted in and before 2011 should take more than 6 credits

※ Students having a double major take at least 3 or 6 credits.

※ Students entering KAIST through the admission for the special talented are required to take 12 credits in the mandatory basic courses and to take the remaining credits in the elective basic courses. (applicable to students entering KAIST in 2015 and thereafter)

**4. Completion of Major Courses: at least 40 credits**

※ Each department has different requirements. Please refer to the departmental requirements for course completion.

**5. Completion of Advanced Major Courses: at least 12 credits**

※ Each department has different requirements. Please refer to the departmental requirements for course completion.

**6. Completion of Individually Designed Major Courses: at least 12 credits**

– Take major courses offered by at least two different academic departments except for students' own department.

**7. Minor and Double Major**

A. Minor: at least 18 credits outside major (according to the article 81 of Academic Policies and Regulations)

– The departmental requirements vary. Please refer to the requirements of interest for course completion.

B. Double Major (Application: students entering in 2016 and after. For students entering in 2015 and before, please refer to the requirements of the year of admission)

General			Basic		Major	Double Major	Research	Total
Mandatory	Elective in Humanities&Social Sciences	Sub-total	Mandatory	Elective				
7 +(8AU)	12 or above (without considering divisions)	19 or above	23	3 or 6 above	refer to the requirements for each	at least 40 including mandatory major courses	0	136 or above

1) In the case of Mandatory General Course and Mandatory Basic Course, refer to the course completion requirements by year of admission.

- 2) In the case of Elective General Courses in Humanities & Social Sciences, students admitted to KAIST between 2007 and 2010 should take at least 6 credits through lectures in English.
- 3) There is no recognition in overlapping courses. But, in the event that major courses and double major courses overlap(that is to say, such cases stipulated in department's course requirements, or designated as a substitute subject in the course curriculum), up to 6 credits can be applied to both courses of study. (Applicable to the students entered KAIST in 2016 and thereafter. For students entered before 2016, please refer to the requirements of the year of admission.)
- 4) Completion of minor and double major courses is based on the requirements of the admission year or the time of application.

**8. Completion of Elective Courses:** Take mandatory and elective major courses from other departments.

※ Some departments requires students to take some specific courses. Please refer to the departmental requirements for course completion.

**9. Completion of Research Courses: at least 3 credits** (Please refer to the departmental requirements for course completion.)

A. Please be sure to take 3 credits for graduate research (However, students having a double major are exempt)

B. Each department grants different credit hours for individual study or the seminar course. (Please refer to the departmental requirements for course completion.)

※ Graduation Research, Internship Program and Study, Individual Study and Seminar shall be recognized as Research Courses for students who entered KAIST in 2001 and thereafter, and recognized as Major courses credits for students who entered KAIST before 2001.

※ Changed in undergraduate 'Research courses': Graduation Research, Internship Program and Study, Individual Study and Seminar, which have been regarded as Major courses or Research courses, should be considered Research Course for students who entered KAIST in 2001 and thereafter.

**10. English Proficiency Requirements upon Graduation**

A. Before entering or during studying at KAIST, students should obtain the minimum required score or higher from one of the following: TOEFL, TOEIC, TEPS and IELTS.

B. Students who have hearing impairment level 3 or above should obtain the minimum required score or higher, excluding listening.

C. Students who have submitted past scores for TOEIC (before April 2006) or TEPS (before February 28, 2007)

1) Students admitted in 2008 or later

Classification	iBT TOEFL	PBT TOEFL	CBT TOEFL	TOEIC	TEPS	IELTS
General qualification score	83	560	220	775	690	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	387	414	4.8

2) Students admitted in 2007 or earlier

Classification	iBT TOEFL	PBT TOEFL	CBT TOEFL	TOEIC	TEPS	IELTS
General qualification score	83	560	220	760	670	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	380	402	4.8

D. Students who have submitted NEW TOEIC score taken after May 2006 or TEPS score taken after March 1, 2007

Classification	iBT TOEFL	PBT TOEFL	CBT TOEFL	TOEIC	TEPS <sup>1)</sup>	NEW TEPS <sup>2)</sup>	IELTS
General qualification score	83	560	220	720	599	326	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	360	359	196	4.8

<sup>1)</sup> TEPS: 2007.3.1. ~ 2018.4.7. Conducted Test

<sup>2)</sup> New TEPS: 2018.5.12. After Conducted Test

### 11. Graduation requirements for international students: TOPIK (Test of Proficiency in Korean)

– Undergraduate international students are required to obtain level 2 or higher score in TOPIK before entering or during studying at KAIST.

※ Applies to students entering KAIST in 2013 and thereafter

### 12. Multidisciplinary Capstone Design(I, II)

A. The classes consisting of lectures and team projects in which various departments join were designed to promote multidisciplinary thinking and major application ability for students and began to be offered as of Spring 2015.

B. Recognition Chart

Department	Recognition as Mandatory in major	Recognition as Elective in major	Recognition as Graduation Research	Remark
Physics	X	X	X	Recognized as Elective in non major field
Mathematical Sciences	X	X	X	Recognized as Elective in non major field
Chemistry	X	O	O	
Biological Sciences	X	X	X	Recognized as Elective in non major field
Bio and Brain Engineering	X	O	X	
Civil and Environmental Engineering	X	O	O	
Mechanical Engineering	O (I)	O (II)	O (II)	Multidisciplinary Capstone Design I : Recognized as Mandatory in Major (substituted as 「Capstone Design I」) Multidisciplinary Capstone Design II :

				Recognized as Graduation Research or Recognized as Elective in Major (substituted as 「Capstone Design II」)
Aerospace Engineering	X	O	O	
Chemical and Biomolecular Engineering	X	X	O	
Materials Science and Engineering	X	O	O	
Nuclear and Quantum Engineering	X	O	X	
Electrical Engineering	X	O	O	Must obtain approval from adviser for Graduation research recognition
Computing	X	O	X	Only one class can be recognized as elective in major on condition that the two classes(I, II) have been taken
Industrial and Systems Engineering	X	X	O	
Industrial Design	X	O	X	
Business and Technology Management	X	O	X	

### 13. Taking Special Courses

- A. In case the course subtitles are different from each other, up to 4 courses may be recognized, and the special courses opened in Humanities and Social Sciences shall not be included (a make-up course can be taken only if the course subtitles are the same).
- However, make-up courses can be taken for general course of the same category offered from the 1999 summer semester and for the major special courses opened within the same course/major from the 2004 winter semester, if it is allowed by the dean of the department.
- B. For all enrolled students having a double major, up to five special courses (including up to four courses from one academic department) may be recognized as acquired credits.

### 14. Leadership Mileage

- A. This system has been offered from 2007 for the undergraduate students so that they can grow as wholesome human beings with knowledge-creating leadership and serve as leaders in the community.

- B. A fixed amount of mileage is given for leadership activities as humanity/leadership course attendance, on/off campus volunteer activities, physical training and leadership experience.
- A certificate of silver(over 200 mileage), gold(over 250 mileage), platinum(over 300 mileage), diamond(over 350 mileage) grade is granted according to the mileage amount.

### 15. Undergraduate Research Participation (URP) program courses

A. To expand undergraduate students' opportunities for participation in research and to foster creative and outstanding experts through a wealth of research experience, URP program courses will be offered from spring 2007.

B. Courses

Course No.	Code	Course Name	Lec: lab: credits	Semester s	Remarks
URP495	08.495	URP (A) (Undergraduate Research Participation)	0:6:3	Spring, fall	<ul style="list-style-type: none"> <li>- Cannot substitute for graduation research (although the credits for this course are recognized as research credits, graduation requirements follow those for each department)</li> <li>- Eligibility               <ul style="list-style-type: none"> <li>· Students in the first semester of their third year or an earlier stage in the undergraduate program conducting individual research for independent study</li> <li>· Students conducting team research for independent study</li> </ul> </li> </ul>
URP490	08.490	URP (B) (Undergraduate Research Participation)	0:6:3	Spring, fall	<ul style="list-style-type: none"> <li>- Can substitute for graduation research</li> <li>- Eligibility               <ul style="list-style-type: none"> <li>· Students in the second semester of their third year or a later stage in the undergraduate program conducting individual research for independent study</li> </ul> </li> </ul>

- \* URP courses will be offered in spring and fall semesters, and the research period is 6 months (summer semester + regular semester).
- \* Only students who submit final reports may receive S/U grades from their advisors.
- \* Students may register for URP program courses up to a maximum of twice (maximum credits: a total of 6 credits, consisting of 3 credits each).
- \* Students with no graduation requirements (those in their 6th enrolled semester or more) may take URP (A) course.

### 16. National/International Internship Program

- A. The National/International Internship program has been offered from Spring 2008 to give students chances to grow social skills by adding field ability to theoretical learning
- B. Department in charge: Office of Student Life (Leadership Center)
- C. Application: Undergraduate students who are recommended by the advisor and the internship professor (students in their leave of absence can also apply)
- D. Grades and evaluation : S or U is given as grade. Students are evaluated for grades and graduation research substitution according to their final report and the evaluation sheet made by the company (Those in School of Freshmen (undeclared students) and sophomores are not able

to substitute graduation research)

E. Credits

Course No.	Course Name	Credits	Internship Period	Available Semester	Graduation Research Substitution
INT482	Domestic Internship Program IV (Graduation Research)	12	over 16 weeks	Spring/Fall	-Available - Only the students in the departments running a 'Co-op program' can register for this course. (Refer to the table below)
INT483	National Internship Program I (Graduation Research)	1	Over 4 weeks	Summer /Winter	Available with 2 additional credits of Individual Study
INT484	National Internship Program II (Graduation Research)	2	Over 6 weeks	Summer /Winter	Available with 1 additional credits of Individual Study
INT485	National Internship Program III (Graduation Research)	3	Over 8 weeks	Summer /Winter	Available
INT486	Project-based ICT Internship for academic credits with Graduation Research	12	over 16 weeks	Spring/Fall	- Available - 6 credits are recognized for graduation (including 3 credits for Graduation Research).
INT492	Domestic Internship Program IV	12	over 16 weeks	Spring/Fall	- Not Available - Only the students in the departments running a 'Co-op program' can register for this course. (Refer to the table below)
INT493	National Internship Program I	1	Over 4 weeks	Summer /Winter	Not Available
INT494	National Internship Program II	2	Over 6 weeks	Summer /Winter	Not Available
INT495	National Internship Program III	3	Over 8 weeks	Summer /Winter	Not Available
INT496	Project-based ICT Internship for academic credits	12	Over 16 weeks	Spring/Fall	- Not Available - 6 credits are recognized for graduation
INT488	International Internship Program I (Graduation Research)	3	Over 8 week	Summer /Winter	Available
INT489	International Internship Program II (Graduation Research)	12	Over 14 weeks	Spring/Fall	- Available - 6 credits are recognized as credits for graduation (including 3 credits of Graduation Research).
INT498	International Internship Program I	3	Over 8 weeks	Summer /Winter	Not Available
INT499	International Internship Program II	12	Over 14 weeks	Spring/Fall	- Not Available - 6 credits are recognized as credits for graduation

※ Registered credits: Credits registered during the course registration period

※ Recognized credits: Credits recognized for graduation requirements

※ The maximum available credits in the National/International Internship Program recognized for graduation requirements is 6 credits, except for the Co-op program which may be applied differently.

※ INT482 and INT492 are only applicable to students in the departments running 'Co-op program'. Refer to the details regarding the operation of Co-op programs below:

Co-op program	Credits	Credits recognized for graduation	The way a department recognizes credits for graduation
EE Co-op 1 (INT482 and INT495)	15 (12+3)	9	Recognized as Graduation Research (3), Mandatory Major 'EE405 Electronics Design Lab.' (3), and Elective (3)
EE Co-op 2 (INT492 and INT495)	15 (12+3)	3	Elective (3)
ISysE Co-op 1 (INT482 and INT495)	15 (12+3)	9	Recognized as Graduation Research (3), Elective Major 'IE436 Case Studies for Industrial & Systems Engineering' (3), and Elective Major 'IE481 Special Topics in Industrial Engineering I' (3)
ISysE Co-op 2 (INT492 and INT495)	15 (12+3)	3	Elective (3)
ME Co-op 1 (INT482 and INT495)	15 (12+3)	9	Recognized as Graduation Research (3), Elective Major(3), and Elective (3)
ME Co-op 2 (INT492 and INT495)	15 (12+3)	3	Elective (3)
SoC Co-op 1 (INT482 and INT495)	15 (12+3)	9	Recognized as 'CS490 Research in Computer Science(3)', Elective Major 'CS409 Software Projects for Industrial Collaboration'(3), and Elective (3)
SoC Co-op 2 (INT492 and INT495)	15 (12+3)	3	Elective (3)

**17. Advanced Placement – Individual AP program** (Article 31, Paragraph 2 of the Guidelines on Curriculum Management)

A. Credits and grades earned from AP courses at Korea Science Academy (KSA) and Seoul Science High School and Gyeonggi Science High School recognized as those acquired at KAIST. For the students from Seoul Science High School and Gyeonggi Science High School, only the credits and grades earned from AP courses by 2017 fall semester can be recognized.

B. Grade conversion standard

- 1) Korea Science Academy: If the grade is C<sup>+</sup> or above, choose one among below (applicable to students entering KAIST in 2010 and thereafter)
  - A) being marked as the grade earned from AP courses at KSA in the academic record and included in GPA
  - B) being marked as S in the academic record and excluded in GPA

※ For students entering KAIST in and before 2009, credits and grades earned from AP courses at Korea Science Academy (KSA) are recognized as those acquired at KAIST, being marked as they are in the academic record and included in GPA.
- 2) Seoul Science High School: If the grade is B0 or above, it is marked as S in the academic record and excluded in GPA.
- 3) Kyonggi Science High School: If the grade is B0 or above, it is marked as S in the academic

record and excluded in GPA

C. Credit recognition table for AP credits earned at KSA

Korea Science Academy Course			KAIST Course		
Course Name	Credit	Remark	Course Name	Credit	Course Class.
Calculus2	4	4 Credits by 2013 5 Credits from 2014 to 2018	Calculus 1	3	Mandatory Basic
Advanced Calculus2	5	4 Credits by 2013			
Calculus3	3	4 Credits by 2013	Calculus II	3	Mandatory Basic
Advanced Calculus3	3	4 Credits by 2013			
Linear Algebra	3		Introduction to Linear Algebra	3	Elective Basic
Differential Equations	3		Differential Equations and Applications	3	Elective Basic
General Physics1	4		General Physics I	3	Mandatory Basic
General Physics Lab1	1		General Physics Lab. I	1	Mandatory Basic
General Physics2	4		General Physics II	3	Mandatory Basic
General Physics Lab2	1		General Physics Lab. II	1	Elective Basic
General Chemistry1	4		General Chemistry I	3	Mandatory Basic
General Chemistry Lab1	1		General Chemistry Experiment I	1	Mandatory Basic
General Chemistry2	4		General Chemistry II	3	Elective Basic
General Chemistry Lab2	1		General Chemistry Experiment II	1	Elective Basic
General Biology1	4		General Biology	3	Mandatory Basic
General Biology2	4			1	Elective
General Biology Lab	1	"General Biology Lab I" by 2013		1	Elective
General Biology Lab2	1	To be recognized when taking the course before 2013		1	Elective
General Earth Science	3			3	Elective
General Earth Science Lab	1			1	Elective
General Astronomy	3			3	Elective
General Astronomy Lab	1			1	Elective
Programming and Problem Solving	3		Introduction to Programming	3	Mandatory Basic
Elementary Number Theory	3		Introduction to Number Theory	3	Elective Major



Korea Science Academy Course			KAIST Course		
Course Name	Credit	Remark	Course Name	Credit	Course Class.
DNA Science	3			3	Elective
Discrete Structure	3		Discrete Mathematics	3	Mandatory Major
Probability and Statistics	3		Probability and Statistics	3	Elective Basic

- ※ For courses with an empty course title in the KAIST course titles column, the corresponding course names from the KSA course column are recognized.
- ※ If a student has completed "DNA Science" and "Molecular Biology"(3 credits, recognized if obtained by 2013) at KSA, credits earned from both courses are recognized, with the provision that only one KAIST course of BiS222 (Molecular and Cellular Biology, Mandatory Major) is to be recognized as a corresponding course. If a student has taken only one of the two courses at KSA, the course is to be recognized as an elective.
- ※ The course name "Programming and Problem Solving " in the KSA course was "Object-oriented programming" before its curriculum revision in 2017.

D. Credit recognition table for AP credits earned at Seoul Science High School

Seoul Science High School Course		KAIST Course			
Course Name	Credit	Course Name	Course No.	Credit	Course Class.
General Physics I, II	3 credits per 1 course (total 6 credits)	General Physics I	PH141	3	Mandatory Basic
General Physics III, IV	3 credits per 1 course (total 6 credits)	General Physics II	PH142	3	Mandatory Basic
General Physics Lab I	1	General Physics Lab. I	PH151	1	Mandatory Basic
General Physics Lab II	1	General Physics Lab. II	PH152	1	Elective Basic
Calculus I	4	Calculus I	MAS101	3	Mandatory Basic
Calculus II	4	Calculus II	MAS102	3	Mandatory Basic
Linear Algebra	3	Introduction to Linear Algebra	MAS109	3	Elective Basic
General Chemistry I, II	3 credits per 1 course (total 6 credits)	General Chemistry I	CH101	3	Mandatory Basic
General Chemistry III, IV	3 credits per 1 course (total 6 credits)	General Chemistry II	CH103	3	Elective Basic
General Chemistry Lab I	1	General Chemistry Experiment I	CH102	1	Mandatory Basic
General Chemistry Lab II	1	General Chemistry Experiment II	CH104	1	Elective Basic
General Biology I	3	General Biology	BS120	3	Mandatory Basic
General Biology II	3	-	SSH114	3	Elective
General Biology Lab. I	1	-	SSH113	1	Elective
General Biology Lab. II	1	-	SSH115	1	Elective
Programming	3	Introduction to Programming	CS101	3	Mandatory Basic

※ When entering grade of AP subjects from Seoul Science High School, subject name will be substituted with corresponding KAIST course name.

E. Credit recognition table for AP credits earned at Kyonggi Science High School

Kyonggi Science High School Course		KAIST Course			
Course Name	Credit	Course Name	Course No.	Credit	Course Class.
General Physics I	3	General Physics I	PH141	3	Mandatory Basic
General Physics II	3	General Physics II	PH142	3	Mandatory Basic
General Physics Lab I	1	General Physics Lab I	PH151	1	Mandatory Basic
General Physics II	1	General Physics Lab II	PH152	1	Elective Basic
Calculus I	3	Calculus I	MAS101	3	Mandatory Basic
Calculus II	3	Calculus II	MAS102	3	Mandatory Basic
Linear Algebra I	3	Introduction to Linear Algebra	MAS109	3	Elective Basic
Linear Algebra II	3				
General Chemistry I	3	General Chemistry I	CH101	3	Mandatory Basic
General Chemistry II	3	General Chemistry II	CH103	3	Elective Basic
General Chemistry Lab I	1	General Chemistry Lab I	CH102	1	Mandatory Basic
General Chemistry Lab II	1	General Chemistry Lab II	CH104	1	Elective Basic
General Biology I	3	General Biology	BS120	3	Mandatory Basic
General Biology II	3	-	-	3	Elective
General Biology Lab I	1	-	-	1	Elective
General Biology Lab II		-	-	1	Elective
Computer Programming I	2	Basic Programming	CS101	3	Mandatory Basic
Computer Programming II	2				
Basic Programming	3	Basic Programming	CS101	3	Mandatory Basic

※ When a student from Kyonggi Science High School has completed the computer programming I and II, Object-Oriented Programming, the credits will be recognized as follows.

- ① Completion of both Computer Programming I and II will be recognized as taking CS101 Basic Programming (3 credits)
- ② Completion of Object-Oriented Programming will be recognized as taking CS101 Basic Programming (3 credits)

※ Programming Language, Introduction to Computer Science (Computer Programming I & II from 2011) will not be recognized as CS101 Basic Programming

※ Kyonggi Science High School: If the grade is B0 or above, it is marked as S in the academic record and excluded in GPA

F. Credit recognition table for AP credits earned at Daegu Science High School

1) Time of application(the table below): Students entered KAIST Spring 2014

(Applicable to the 2014 spring semester freshmen. However, in the case of Daegu Science High School, subjects taken after 2013 will be corresponding for credit transfer.)

Daegu Science High School Course	AP Class Semester	Criteria for Credit Recognition	KAIST Course	
			Course Name	Course No.
Calculus II	1st, 2nd Semester	B0 or higher of Daegu High School GPA	Calculus II	MAS102
General Physics I	1st	B0 or higher of Daegu High School GPA and 78 or higher of KAIST Credit Recognition Test(S)	General Physics I	PH141
General Physics II	2nd		General Physics II	PH142
General Chemistry Lab I	1st	B0 or higher (S)	General Chemistry Lab I	PH151
General Chemistry Lab II	2nd	B0 or higher (S)	General Chemistry Lab II	PH152
General Chemistry I	1st	B+ or higher(S)	General Chemistry I	CH101
General Chemistry II	2nd	A- or higher(S)	General Chemistry II	CH103
General Biology I	1st	B- or higher (S) and I&II all taking	General Biology	BS120
General Biology II	2nd			

2) Time of application(the table below): Students entered KAIST Spring 2015

(Applicable to the 2015 spring semester freshmen. However, in the case of Daegu Science High School, subjects taken after 2013 will be corresponding for credit transfer.)

Daegu Science High School Course	AP Class Semester	Criteria for Credit Recognition	KAIST Course	
			Course Name	Course No.
Calculus I	1st	B0 or higher of Daegu High School GPA (S)	Calculus I	MAS101
Calculus II	2nd	B0 or higher of Daegu High School GPA (S)	Calculus II	MAS102
Probability and Statistics	1st and 2nd	B0 or higher of Daegu High School GPA (S)	Probability and Statistics	MAS250
General Physics I	1st	with verifiable information that students are ranked within the top 40 percent in their grade. (S)	General Physics I	PH141
General Physics II	2nd		General Physics II	PH142
General Physics Lab I	1st	B0 or higher of Daegu High School GPA (S)	General Physics Lab I	PH151
General Physics Lab II	2nd	B0 or higher of Daegu High School GPA (S)	General Physics Lab II	PH152
General Chemistry I (2014 Shin Seok Jin)	1st	A0 or higher(S)	General Chemistry I	CH101
General Chemistry I (2013 Lee Young Hwa)	1st	B+ or higher(S)		
General Chemistry II (2014 Shin Seok Jin)	2nd	A0 or higher(S)	General Chemistry II	CH103
General Chemistry II (2013 Lee Young Hwa)	2nd	A- or higher(S)		
General Chemistry Lab II	2nd	A- or higher(S)	General Chemistry Lab II	CH104

General Biology I	1st	B- or higher (S) and I&I all taking	General Biology	BS120
General Biology II	2nd			

**18. University-level program(UP) (Valid until the year of 2015. Recognizing credits is only applied to classes offered before the year of 2015)**

A. High school - university bridge program allowing high school students to learn university-level curriculum during vacation at universities agreed to provide University-level Program(UP). When students enters university, credits acquired through UP can be recognized as credits acquired at universities.

- List of universities that agreed to provide UP (26 universities)

KAIST, Seoul National University, Yonsei University, Kangnam University, Kangwon National University, Gyeongsang National University, Kyunghee University, Kwangju Women's University, Dong-A University, Mokpo Natoinal University, Pukyong National University, Pusan National University, Seoul Women's University, Sungkyunkwan University, Sookmyung Women's University, Sunchon National University, Youngdong University, Eulji University, Ewha Womans University, University of Incheon, Chonnam National University, Chonbuk National University, Jeju National University, Chungnam National University, Chungbuk National University, Hanyang University

B. Credit recognition standard

- 1) If students who completed UP subjects enter KAIST, credit acquired from UP subjects will be recognized as credit acquired from undergraduate course.
- 2) Credit will be recognized upon students' request only if acquired grade is B0 or above.
- 3) Request should be made within 5 years of the completion of subjects, and within the first semester of studying in KAIST. (request can be made at Academic Registrar's Team)
- 4) Grades acquired from UP subjects will be recorded as it is and will be included as total credits, but will not be included in calculation of GPA.
- 5) Students can't retake subjects credited by UP.

C. List of UP subjects recognized by KAIST

UP Course			KAIST Course			
Course Name	Course No.	Credit	Course Name	Course No.	Credit	Course Class.
Calculus I	UP101	3	Calculus I	MAS101	3	Mandatory Basic
Calculus II	UP102	3	Calculus II	MAS102	3	Mandatory Basic
General Physics I	UP103	3	General Physics I	PH141	3	Mandatory Basic
General Physics II	UP101	3	General Physics II	PH142	3	Mandatory Basic
General Physics Lab. I	UP105	1	General Physics Lab. I	PH151	1	Mandatory Basic
General Physics Lab. II	UP106	1	General Physics Lab. II	PH152	1	Elective Basic
General Chemistry I	UP107	3	General Chemistry I	CH101	3	Mandatory Basic
General Chemistry II	UP108	3	General Chemistry II	CH103	3	Elective Basic
General Chemistry Lab. I	UP109	1	General Chemistry Experiment I	CH102	1	Mandatory Basic
General Chemistry Lab. II	UP110	1	General Chemistry Experiment II	CH104	1	Elective Basic

UP Course			KAIST Course			
Course Name	Course No.	Credit	Course Name	Course No.	Credit	Course Class.
General Biology I	UP101	3	General Biology	BS120	3	Mandatory Basic
General Biology II	UP101	3	-		3	Elective
General Biology Lab. I	UP101	3	-		3	Elective
General Biology Lab. II	UP101	1	-		1	Elective
History of Science	UP115	3	History of Science	HSS100	3	Elective General Courses in Humanities & Social Science
Environmental Science	UP116	3	-		3	Elective
Writing	UP117	3	-		3	Elective
English Writing	UP118	3	-		3	Elective
Computer Science	UP119	3	-		3	Elective

#### 19. Honor Program (Article 16, Paragraph 2 of the Guidelines on Curriculum Management)

- A. The Honor Program defines undergraduate students with certain qualifications as "honor students" to honor their excellence and allows them to complete master's and doctor's courses during their undergraduate years.
- B. As for undergraduate students who have completed six or less semesters, have earned 85 or more credits as of the last semester and have recorded 3.7 or a higher GPA, they are referred to as "honor students" based on the recommendations from their research advisors and the heads of their respective departments.
- C. Benefits
- 1) Students can attend the subjects in the masters or doctoral curriculum by getting approval from the professor lecturing the subject. Acquired credit will be recognized as described below, but if department of belonging defined major subjects (mandatory major, elective major) to be completed, follow the rules defined by department.
    - ※ Credits acquired from mandatory major and elective subjects of masters or doctoral curriculum from department of belonging will be recognized as elective major credit of undergraduate course.
    - ※ Credits acquired from masters or doctoral subjects that does not apply the above will be recognized as elective.
  - 2) Credits that the students have earned from master's or doctor's courses during their undergraduate years may be recognized as master's credits by applying for credit recognition until the end of the final semester of the master's program following their enrollment into the master's program, provided that their final GPA upon college graduation exceeds 3.7.
- D. Application method: During the registration period of each semester, Honor Program applicants are requested to submit their application form and academic record to the Academic Registrar's Team—via the offices of their respective departments or majors—with letters of recommendation from their research advisors and the heads of their departments/majors enclosed.

## 20. Bridge Program

- A. To help students from foreign high schools and foreign students to complete regular curriculum by understanding basic courses, preliminary basic courses will be opened. This is also online credit recognition program subjects for pre-freshmen (admitted students) to help them on regular subjects (General Physics, Calculus, General Chemistry, etc.).
- B. Online Bridge Program provides chance of acquiring credits and experience of actual university class, increasing adaptability of students to the university.
- C. Courses

Course Classification	Course No.	Course Name	Lec.:Lab.:Credit	Opening semester
General Elective	PH101	College Physics	3:1:3	Fall
General Elective	MAS100	College Mathematics	3:1:3	Fall
General Elective	CH107	College Chemistry	3:0:3	Fall

- D. Starting Points: Fall 2009

## 21. Measures for Change

- A. Please refer to the departmental course completion requirements in case of unification or separation of department, change in department, revision of curriculum, etc.
- B. Matters regarding curriculum are based on each student's admission year unless any exceptions are specified; in case courses have been changed or are no more opened, the substitute courses should be taken.

\* Note \*

1. The confirmation of graduation requirement including the status of subject, requirement of subject, and others shall be implemented under the responsibility of the students.
2. The common graduation requirements for each year reflects the graduation requirements subject to different enrollment years and any changes/revisions made in the applicable year, and thus the students shall confirm the common graduation requirements corresponding to their enrollment year and any updates made thereto.
  - i.e) Any updates in graduation requirements made in 2020 are specified in 2020 common graduation requirements, but may also be applied to those enrolled in KAIST in 2019 or before.