## $\square$ Course Requirements

1. Graduation Credits

- At least 130 credits in total
- A cumulative grade point average of 2.0 or higher out of a possible 4.3 in all coursework.

2. Completion of General Courses: At least 27 credits and 9AU (applicable to students entering KAIST in 2009 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)

## - Required General Courses

| Academic Year | Credits | Required Courses |
| :---: | :---: | :--- |
| In 2009 and <br> onward | 6 credits and <br> 9 AU | English Communication(1), Critical Thinking in English(2), Writing(3), Physical <br> Education(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics <br> and Safety II(1AU) |
|  |  | English Communication I(1), English Communication II(1), English <br> Reading\&Writing(2), Writing(3), Physical Education(4AU), Community <br> Between 2007 <br> and 2008 |
| 7credits and |  |  |
| 9AU | Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU) <br> * English Communication I $\rightarrow$ English Communication <br> * English Communication II $\rightarrow$ English Conversation <br> * English Reading\&Writing $\rightarrow$ Critical Thinking in English |  |

(1) English: 3 credits (applicable to students entering KAIST in 2009 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)

- Students entering KAIST in 2009 and onward: English Communication (1), Critical Thinking in English (2)
- Students entering KAIST between 2007 and 2008 (4 credits): English Communication I (1), English Communication II (1), English Reading\&Writing (2)
※ Criteria for credit recognition of English courses (applicable to students entering KAIST in 2009 and onward; for those who have entered KAIST before 2009, refer to the criteria by Year of Admission)
- The criteria for credit recognition of "English Communication" is the sum of scores from a certified English test taken before entering KAIST (TEPS/TOEFL/IELTS; 50\%) and the KAIST Speaking Test (50\%).

| Grade | Score | Credit Recognition |
| :---: | :---: | :---: |
| 1 | $91-100$ | To be exempt from English Communication and graded with an " S " |

- The criteria for credit recognition of "Critical Thinking in English" is the sum of scores from a certified English test taken before entering KAIST (TEPS/TOEFL/IELTS; 50\%) and the KAIST Speaking Test (50\%).

| Grade | Score | Credit Recognition |
| :---: | :---: | :---: |
| 1 | $91-100$ | To be exempt from Critical Thinking in English and graded with an "S" |

(2) Writing: 3 credits

- Writing certification system upon graduation: Undergraduate students are required to take one or more graduation tests on writing and record 60 points or a higher score before graduation (applicable to students entering KAIST in 2009 and onward).
- Graduation tests on writing are held once each semester.
- Credit recognition and course-taking criteria for writing courses (applicable to students entering KAIST in 2009 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)
- Level tests are held to classify students into three grades (i.e. A, B, C) and provide them with differentiated writing guidance depending on their writing levels.

| Grade | Credit Recognition and Course-Taking Criteria |
| :---: | :--- |
| A | To be exempt from writing courses (graded with an "S") and the graduation test on writing |
| B | To take one of the writing courses; those earning a B- (2.7) or a higher grade are exempt <br> from the graduation test on writing |
| C | To take the "Non-Accredited Writing" class provided by the Writing Center before taking <br> the writing course; those not wishing to take Non-Accredited Writing are allowed to take <br> the writing class if they take another level test and get a B or a higher grade |

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

- Since each course in Physical Education has 2 AU, 2 courses should be taken
- 2 AU among 4 AU can be replaced by sports club activities.
(4) Community Service : Students who entered the KAIST in or before 2006 must complete 4AU; those who enter the KAIST in or after 2007 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 department of school affairs (school register).
(5) Humanity/Leadership : 2 AU (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 or phoenix leadership <br> training | 1 AU |
| Humanity/Leadership II | Communication training | 1 AU |
| Humainty/Leadership III | Complete one program among photography, musical <br> instruments, jazz dance, hip-hop, a cappella, etc | 1 AU |

- Program and credit recognition per course
* Only students within their first 2 semesters can attend the Humanity/Leadership III course
(6) Ethics and Satey II : 1AU(applicable to all of the students presently studying at KAIST. not counted for GPA but required for graduation.)
- Ethics and Safety II(HSS070/10.179) includes Research Ethics, Lab Safety, Sex Education and Leadership. 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.

| Year | Criteria | Notes |
| :---: | :--- | :---: |
| 2009 | 60 or higher in all of the 4subjects(Research Ethics, Lab Safety, <br> Sex Education and Leadership) |  |
| 2010 | 70 or higher in all of the 4subjects(Research Ethics, Lab Safety, <br> Sex Education and Leadership) | Total 100 in each <br> subject |
| 2011 | 80 or higher in all of the 4subjects(Research Ethics, Lab Safety, <br> Sex Education and Leadership) |  |

- Opening semester : Spring, Fall
- 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)
- Exam-taking process

| Visit the website http://eethics.kaist. ac.kr | $\rightarrow$ | Log on using your portal ID | $\rightarrow$ | Take individual sub-courses | $\rightarrow$ | Take tests after completing the sub-courses | $\rightarrow$ | Find out the test results | $\rightarrow$ | Print out the test results |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

- Elective General Courses in Humanities \& Social Sciences: at least 21 credits
- Take ( 6 credits) 1 course of each of the following 2 categories among 3 categories : Humanity, Society and Literature and Arts; the rest can be chosen regardless of the category. (applicable to students entering KAIST in 2009 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)
- Students entering KAIST in 2007 and onward should earn at least 18 credits through English lectures among the 21 credits required as Elective General Courses in Humanities \& Social Science.
※ Students having a double major take 12 credits without considering categories. (Students entering KAIST in 2007 and onward should take 12 credits through English lectures.)
- Liberal education course requirements for international students in the undergraduate program
A. English language courses : As for international students, those who have completed high school at an English-speaking high school are exempt from English language requisites, granted credit recognition, and given a grade of S. (applicable to students who enter the KAIST in or after 1998)
B. Completion of Korean language courses(Exemption from Writing course) : International students are exempt from Writing course, which is a liberal education requisite. However, the students who are exempt from Writing course should take HSSO06(10.108, Basic Korean I for foreign Students, 3 credits), which is a liberal education requisite, and HSS193(10.167, Basic Korean II for foreign Students, 3 credits), which is a general elective. (applicable to students who enter the KAIST in or after 1998)
C. Completion of AU courses : International students must complete AU courses (Total 9 : Physical Education 2AU, Community Service 2AU, Humanity/Leadership 2AU, Ethics and Safety II 1AU), which are liberal education requisites. However, Humanity/Leadership may be substituted by Cultural Experience (applicable to students who enter the KAIST in or after 2007).
* Students entering KAIST in 2006 or before : Physical Education 4AU, Community Service 4AU, Ethics and Safety II 1AU (Total: 9AU)

3. Completion of Basic Courses: at least 32 credits (applicable to students entering KAIST in 2008 and onward; for those who have entered KAIST before 2009, refer to the Course Completion Requirements by Year of Admission)

- Mandatory Basic Courses: 26 credits
(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)
(10) Freshman Design Course : Introduction to Design and Communication (3)
※ Students having entered KAIST in 2007 or before : 23 credits (1)~(9)
※ The students who major in Industrial Design should complete 20 credits and are exempt from taking General Physics II (Basic, General, Advanced), and Calculus II (General, Advanced).
- Elective Basic Courses: at least 6 credits (Each department has different specific requirements. Please refer to the departmental requirements for course completion.)
※ The students who major in Industrial Design can take General Physics II (Basic, General, Advanced), and Calculus II (General, Advanced) as elective basic courses.
※ Students having a double major take 3 credits.

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

- Please be sure to take 3 credits for graduate research (However, students having a double major are exempt)
- Each department grants different credit hours for individual study or the seminar course. (Please refer to the departmental requirements for course completion.)


## 7. English Proficiency Requirements upon Graduation

- Students are required to meet one of the following requirements on English proficiency before entering KAIST or during their years of enrollment: 560 points in PBT TOEFL; 220 points in CBT TOEFL; 83 points in IBT TOEFL; 6.5 points in IELTS; 720 points or $760 / 775$ points in TOEIC (see below); or 599 points or 670/690 points in TEPS (see below).
※ Criteria for TOEIC and TEPS scores
- Students submitting scores from new TOEIC (held in May 2006 and onward) or TEPS held on March 1, 2007 and onward: 720 points in TOEIC; or 599 points in TEPS
- Students submitting scores from old TOEIC (held before April 2006) or TEPS held before February 28, 2007:
- Students entering KAIST in 2008 and onward: 775 points in TOEIC; or 690 points in TEPS
- Students entering KAIST in 2007 or before: 760 points in TOEIC; or 670 points in TEPS


## 8. Minor and Double Major

- 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.
- Double Major

| General |  |  | Basic |  |  | Major | Double Major | Research | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Required General | Elective in Humanities\&Socal Sciences | Sub-total | Required | Elective | Sub-total |  |  |  |  |
| $\begin{gathered} 6 \\ +(9 \mathrm{AU}) \end{gathered}$ | 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.
- In the case of Elective General Courses in Humanities \& Social Sciences, students entering KAIST in 2007 and onward should take 12 credits through English lectures.
- In the event that major courses and double-major/minor courses overlap, up to 9 credits can be applied to
both courses of study.
- Completion of minor and double major courses is based on the requirements of the admission year or the time of application.
- In case of completing minor and double major courses, the credits taken for minor and double major are included into the ones for graduation (credits of elective courses among 130 credits).


## 9. Taking Special Courses

- In case the course subtitles are different from each other, up to 3 courses may be taken; a make-up course can be taken only if the course subtitles are the same.
- However, make-up courses can be taken for cultural subjects 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.


## 10. Leadership Mileage

- 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
- 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
- The mileage can be added to the GPA used in settling tuition fees(Not in the academic transcript)
- For 50 leadership mileage, 0.1 GPA is added when settling tuition fees
- Only mileages over 100 can be used(ex. 50 mileage can be used when holding 150 mileage)
- Maximum of 150 mileage can be used per semester

11. Undergraduate Research Participation (URP) program courses

- 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.
- Courses

| $\begin{array}{c}\text { Course } \\ \text { No. }\end{array}$ | Code | Course Name | $\begin{array}{c}\text { Lec: lab: } \\ \text { credits }\end{array}$ | Semesters | Remarks |
| :--- | :--- | :--- | :--- | :--- | :--- |
| URP495 | 08.495 | $\begin{array}{c}\text { URP (A) } \\ \text { (Undergraduate } \\ \text { Research } \\ \text { Participation) }\end{array}$ | $0: 6: 3$ | $\begin{array}{c}\text { Spring, } \\ \text { fall }\end{array}$ | $\begin{array}{c}\text { - Cannot substitute for graduation research } \\ \text { (although the credits for this course are recognized as } \\ \text { research credits, graduation requirements follow those for } \\ \text { each department) } \\ \text { Eligibility } \\ \text { - Students in the first semester of their third year or an } \\ \text { earlier stage in the undergraduate program conducting } \\ \text { individual research for independent study }\end{array}$ |
| • Students conducting team research for independent study |  |  |  |  |  |$]$

※ 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 $\mathrm{S} / \mathrm{U}$ 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).
12. National/International Internship Program

- The program has been offered from Spring 2008 to give students chances to grow social skills by adding field ability to theoretical learning
- Department in charge : Counseling and Student Development Center
- Application : Undergraduate students who are recommended by the advisor and the internship professor (students in their leave of absence can also apply)
- 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(Undeclared students and sophomores are not able to substitute graduation research)
- Credits

| Course <br> No. | Course Name | Credit | Internship <br> Period | Available <br> Semester | Graduation Research Substitution |
| :--- | :--- | :--- | :---: | :--- | :--- |
| INT493 | National Internship <br> Program I | 1Credits | Over <br> 4 weeks | Summer | Available with 2 additional credits of <br> Individual Study |
| INT494 | National Internship <br> Program II | 2Credits | Over <br> 6 weeks | Summer | Available with 1 additional credits of <br> Individual Study |
| INT495 | National Internship <br> Program III | 3Credits | Over <br> 9 weeks | Summer | Available |
| INT498 | International <br> Internship Program I | 3Credits | Over <br> 9 weeks | Summer | Available |
| INT499 | International <br> Internship Program II | 12Credit <br> s | Over <br> 14 weeks | Spring/Fall | Available, Only 6 credits are recognized <br> as credits for graduation(including <br> graduation research) |

※ When the internship program is substituted as graduation research, the code numbers are printed in the academic transcript as INT483(over 4 weeks), INT484(over 6 weeks), INT485(over 9 weeks) for domestic internship and INT488(over 9 weeks), INT489(over 14 weeks) for international internship
※ The maximum credit available for domestic internship is 6 credits
13. Advanced Placement (Article 31, Paragraph 2 of the Guidelines on Curriculum Management)

- Credits and grades earned from AP courses at Korea Science Academy (KSA) are recognized as those acquired at KAIST; if the grade is $\mathrm{C}^{+}$or above, choose one among below (applicable to students entering KAIST in 2010 and onward)
- being marked as the grade earned from AP courses at KSA in the academic record and included in GPA
- being marked as $S$ in the academic record and excluded in GPA
※ For students entering KAIST before 2010, 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.
- If a student applies for credit recognition of an AP course that is a mandatory basic course or a basic elective, the student is exempt from completion of the corresponding basic course.
- Application method: Applicants are requested to fill in the application form for recognition of AP credits and submit the application along with one original copy of their student report to the Academic Registrar's Team.
- Application period: Within the very first semester following admission; until the official end of the Spring semester (Note: Recognition of AP courses is not allowed once the application period is over, so make sure to apply for course recognition within the application period.)
- Credit recognition table for AP credits earned at KSA:

| No. | Korea Science Academy Course |  |  | KAIST Course |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Course Name | Course No. | Credit | Course Name | Course No. | Credit | Course <br> Class. |
| 1 | Calculus II | KSA100 | 3 | Calculus 1 | MAS101 | 3 | Mandatory Basic |
| 2 | Calculus III | KSA101 | 3 | Calculus II | MAS102 | 3 | Mandatory Basic |
| 3 | Linear Algebra | KSA102 | 3 | Introduction to Linear Algebra | MAS109 | 3 | Elective Basic |
| 4 | Differential Equations | KSA103 | 3 | Differential Equations and Applications | MAS201 | 3 | Elective Basic |
| 5 | General Physics I | KSA104 | 3 | General Physics I | PH141 | 3 | Mandatory Basic |
| 6 | General Physics Lab I | KSA105 | 1 | General Physics Lab. I | PH151 | 1 | Mandatory Basic |
| 7 | General Physics II | KSA106 | 3 | General Physics II | PH142 | 3 | Mandatory Basic |
| 8 | General Physics Lab II | KSA107 | 1 | General Physics Lab. II | PH152 | 1 | Elective Basic |
| 9 | General Chemistry I | KSA108 | 3 | General Chemistry I | CH101 | 3 | Mandatory Basic |
| 10 | General Chemistry Lab I | KSA109 | 1 | General Chemistry Experiment I | CH102 | 1 | Mandatory Basic |
| 11 | General Chemistry II | KSA110 | 3 | General Chemistry II | CH103 | 3 | Elective <br> Basic |
| 12 | General Chemistry Lab II | KSA111 | 1 | General Chemistry Experiment II | CH104 | 1 | Elective Basic |
| 13 | General Biology I | KSA112 | 3 | General Biology | BS120 | 3 | Mandatory Basic |
| 14 | General Biology II | KSA114 | 3 |  |  | 3 | Elective |
| 15 | General Biology Lab I | KSA113 | 1 |  |  | 1 | Elective |
| 16 | General Biology II | KSA115 | 1 |  |  | 1 | Elective |
| 17 | General Earth Science | KSA116 | 3 |  |  | 3 | Elective |
| 18 | General Earth Science Lab | KSA117 | 1 |  |  | 1 | Elective |
| 19 | General Astronomy | KSA118 | 3 |  |  | 3 | Elective |
| 20 | General Astronomy Lab | KSA119 | 1 |  |  | 1 | Elective |
| 21 | Programming | KSA120 | 3 | Introduction to Programming | CS101 | 3 | Mandatory Basic |
| 22 | Elementary Number Theory | KSA121 | 3 | Introduction to Number Theory | MAS210 | 3 | Elective Major |
| 23 | DNA Science | KSA122 | 3 | Molecular Biology | BS209 | 3 | Mandatory Major |
| 24 | Molecular Biology | KSA123 | 3 | General Cell Biology | BiS222 | 3 | Elective <br> Major |
| 25 | Discrete Structure | KSA124 | 3 | Discrete Mathematics | CS204 | 3 | Mandatory Mary |
| Total |  |  | 59 |  |  |  |  |

※ If a student has completed two courses (i.e. "DNA Science" and "Molecular Biology") at KSA, credits earned from both courses are recognized, provided that only one KAIST course of his/her choice between BS209 (Molecular Biology) and Bis222 (General Cell Biology) is to be recognized as a corresponding course. If he or she has taken only one of the two courses at KSA, the course is to be recognized as a free elective.
14. Honor Program (Article 16, Paragraph 2 of the Guidelines on Curriculum Management)

- 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.
- As for undergraduate students who have completed six or less semesters, have earned 81 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.
- Benefits
- Honor students are allowed to take master's and doctor's courses with the approval of instructors in charge of the courses; credits earned from these courses are included in their GPA upon college graduation.
- 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 within one year following their enrollment into the master's program, provided that their final GPA upon college graduation exceeds 3.7.
- 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.

15. Bridge Program

- The courses cover the basic knowledge and skills needed for taking regular courses so that graduates of international school and foreign students can gain basic academic skills and fulfill their regular course requirements successfully. They are also offered online for the prospective students of the $1^{\text {st }}$ undergraduate application round and so on.
- Courses

| Course Classification | Course No. | Course Name | Lec..Lab.:Credit | Opening semester |
| :---: | :---: | :---: | :---: | :---: |
| Elective general | PH101 | College Physics | $3: 1: 3$ | Fall |
| Elective general | MAS105 | College Mathematics | $3: 1: 3$ | Fall |
| Elective general | CH107 | College Chemistry | $3: 0: 3$ | Fall |

- Starting Points: Fall 2009

16. Measures for Change

- Please refer to the departmental course completion requirements in case of unification or separation of department, change in department, revision of curriculum, etc.
- 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

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

