Course Requirements

□ Undergraduate Program

General Course			Basic Course			Major Course			Elective Course	Research	Total
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal			
7 (9AU)	21	28 (9 AU)	23	9	32	19	30	49	18	3	130

A. 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

B. General Course : At least 28 credits and 9AU(applicable to students entering KAIST in 2011 and thereafter; for those who have entered KAIST in 2010 and before, refer to the Course Completion Requirements by Year of Admission)

  ○ Mandatory General Course

   - Students entering KAIST in 2014 and thereafter: 7 credits and 9AU

    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)

   - Students entering KAIST between 2011 and 2013: 6 credits and 9AU

    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)

   * Community Service: not applicable, but leadership mileage is given by submitting community service

     confirmation document

   - Students entering KAIST between 2009 and 2010: 6 credits and 9AU

    English Communication(1), Critical Thinking in English(2), Writing(3), Physical Education(4AU), Community Service(2AU), Humanity/Leadership(2AU), Ethics and Safety II(1AU)

   - Students entering KAIST between 2007 and 2008: 7 credits and 9AU

    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 → English Communication
      English Communication II → English Conversation
      English Reading&Writing → Critical Thinking in English

  ○ Elective General Course in Humanities & Social Science : 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 thereafter; for those who have entered KAIST in 2008 and before, refer to the Course Completion Requirements by Year of Admission)

   - Students entering KAIST between 2007 and 2010 should earn at least 9 credits through lectures in English 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 between 2007 and 2010 should take 6 credits through lectures in English.)

※ The requirement of taking lectures in English as Elective General Courses in Humanities & Social Science is not applied to students entering KAIST in 2011 and thereafter.

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

  ○ Mandatory Basic Courses: 23 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)

  – Students having entered KAIST in 2007 or before : 23 credits (①~⑨)

  – Students having entered KAIST between 2008 and 2011: 26 credits((①~⑨), Freshman Design Course: Introduction to Design and Communication)(3))

  ○ Elective Basic Courses: at least 9 credits (including at least two courses among MAS109, MAS201 and MAS202)

  ※ Students with a double major take more than 6 credits including one course among MAS109, MAS201, MAS202.

D. Major Courses: 49 credits at least

  ○ Mandatory Major Courses: 19 credits at least

  Thermodynamics, Fluid Mechanics, Solid Mechanics, Dynamics, Aerospace Engineering Lab. I, Aerospace Engineering Lab. II, Aerospace System Design I.

  ○ MAE211Thermodynamics(3) and MAE210 Thermodynamics(3), MAE221Fluid Mechanics(3) and MAE220 Fluid Mechanics(3), MAE231Solid Mechanics(3) and MAE230Solid Mechanics(3), MAE251Dynamics and MAE250Dynamics are replaceable each other.

  ○ Elective Major Course : 30 credits at least

E. Elective Courses

F. Research Courses: 3 credits at least

  ○ It is required to take B.S. thesis study or Aerospace System Design II.

  Up to 4 credits are accumulated for individual study.

  ※ Students having a double major are not required to take Research Course.

G. English Proficiency Requirements upon Graduation

  ○ 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.

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

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

  – 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

- 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

2) 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	IELTS
General qualification score	83	560	220	720	599	6.5
Qualification score for hearing impairment level 3 or above	62	372	146	360	359	4.8

H. Graduation Requirements for Foreign Students: TOPIK (Test of Proficiency in Korean)
  ○ Undergraduate foreign 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
I. Requirements for Double Major and Minor
  ○ Double major : 40 credits including mandatory major courses
  ○ Minor : 21 credits at least in AE major including 4 courses out of 8 required major courses

※ General and basic courses in undergraduate program are different from years of admission; therefore, students should refer to the Course Completion Requirements by Year of Admission.

□ Graduate Course
  1) Graduate program leading to the degree of Master of Science.
    33 credit hours at minimum, 21 from course work plus at least 12 from thesis research, are required to be eligible for this degree.

Mandatory General	Mandatory Major	Elective	Research (including seminar credits)	Total
3 + 1AU	0	18	12	33

  A. Graduation Credits: 33 credits at least
  B. Mandatory General Course Requirements: 3 credits and 1AU
    - CC010 Special Lecture on Leadership (non-credit, this applies to students entering KAIST in 2002 and thereafter; general scholarship students, foreign students are excluded)
    - CC020 Ethics and Safety I(1AU)
  C. Mandatory Major Course Requirements: None
  D. Elective Course Requirements: 18 credits at least (At least 15 credits should be obtained from courses opened in school of Mechanical, Aerospace and Ocean Systems Engineering, including over 6 credits of Aerospace Engineering courses.)
  E. Research Credits: 12 credits at least including 2 credits of seminar (General scholarship students

and foreign students entering KAIST in 2008 and thereafter are exempt.)

2) Graduate program leading to a Doctoral degree

60 credit hours at minimum, 30 from course work plus at least 30 from thesis research, are required for eligibility.

Mandatory General	Mandatory Major	Elective	Research (including seminar credits)	Total
3 + 1AU	0	27	30	60

A. Graduation Credits : 60 credits at least in total

B. Mandatory General Course Requirements : 3 credits (the same as the Master's program; students who already earned 3 credits from their Master's course do not need to obtain 3 credits again).
   - CC020 Ethics and Safety I(1AU)

C. Mandatory Major Course Requirements: None

D. Elective Course Requirements: 27 credits at least (At least 15 credits should be obtained from courses opened in school of Mechanical, Aerospace and Ocean Systems Engineering, including over 6 credits of Aerospace Engineering courses.)

E. Research Credits: 30 credits at least

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 ※ The credits earned in the Master's course work can be used towards the Doctoral degree (except research credits).

❑ Design courses for Renaissance Program
 ○ MAE565 Synthetic Design of Aerospace Systems
 ○ MAE406 Aerospace System Design II