KOREA SCIENCE ACADEMY OF KAIST 2023 School Profile

105-47 Baegyanggwanmun-ro, Busanjin-gu, Busan 47162, Republic of Korea
Tel: +82-51-606-2186, Fax: 82-51-606-2157
Website: http://www.ksa.hs.kr/Eng CEEB : 682023

Mission / Vision / Spirit

- **Mission:** Nurturing Creative Global Leaders Who Will Contribute to World Society
- **Vision:** KSA! The Science-gifted Institute Leading the Future
- **Spirit:** Creativity, Passion, Service

About Us

1) History

KSA was officially designated as the first school for science-gifted students in 2003. It became affiliated with KAIST, world-class university in science and technology in 2009. Since then, KSA has continued to produce future global leaders in science under the strong support from KAIST. As the only science-gifted institute whose entire budget comes from the Ministry of Science and ICT of Korea, KSA has been striving to reach the top level of the world's best schools for science-gifted students.

2) Level: Secondary School

- Senior high school for specialized education for science-gifted students (Grades 10 to 12)
- Number of teaching faculty: 65 (All of math & science teachers have Ph.D. degrees.)
- Pattern of school year: 2 semesters (Spring: Feb.-Jun. / Fall: Aug.-Dec.)
- Size of graduating class of 2022: 123

3) Enrollment

- Students (As of Aug, 2023)
  Grade 10: Male 111, Female 32, Total 143
  Grade 11: Male 100, Female 30, Total 130
  Grade 12: Male 112, Female 13, Total 125
  (28 International students included)

Admission

- The admission process carried out by admissions officers involves a comprehensive evaluation of giftedness, creativity, and problem-solving skills.
- Process: 3 stages are included - document evaluation, math & science test and interview for giftedness assessments.
- Competition rate: 8.76:1 (in 2023)

University Acceptance

- Domestic: KAIST, Seoul National Univ, POSTECH, UNIST, Yonsei Univ, Korea Univ, GIST, DGIST
- Overseas: Harvard Univ, Yale Univ, Stanford Univ, Univ. of Oxford, Univ. of Cambridge, Imperial College London

Curriculum

1) **Research-oriented education for in-depth study** in math & science, convergence education, and customized education carefully designed to meet individual abilities and interests
2) Minimum credits for graduation are 174 credits and one credit is awarded when a student completes 50-minute class throughout a semester (16 weeks).
3) The credits for required courses can be obtained without taking the classes if students pass the **PT (Placement Test).**
   * Eligible Courses
   - Math I&II, Physics and Exp. I&II, Chemistry and Exp. I&II, Biology and Exp. I&II, Computer Science I&II, English I&II
   - Taking the English PT as English proficiency tests such as TOEFL and TOEIC
4) **Over 40 AP level and above classes** in math & science are offered to meet the academic needs of the students. Those AP-level courses are accepted for credit at prestigious science and technology institutes such as KAIST.
   - Calculus II&III, Programming and Problem Solving, General Physics I&II, General Chemistry I&II, General Biology I&II, General Astronomy, General Earth Science
5) **KSA HP (Honor's Program)**: As a part of our educational-research collaboration with KAIST, selected senior students who participate in the program can register courses at KAIST and get grades.
6) To graduate, students must obtain at least 15 credits for math and science courses taught in English (**EC**) designed by the school.
7) **Creative Research Activities:** KSA

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curriculum also features creative research activities through which students can design and develop their own researches. 30 credits are required for the research activities.

8) **Leadership Activities:** KSA requires a minimum of 300 hours of self-development, group and world citizen activities to nurture good citizenship in young minds.

Grading System

A+(4.3), A(4.0), A-(3.7)
B+(3.3), B(3.0), B-(2.7)
C+(2.3), C(2.0), C-(1.7)
D+(1.3), D(1.0), D-(0.7), F(0.0)

Class Rank

We basically do not rank our students because students are allowed to take classes tailored to their academic interests and needs.

Research & Globalization

1) Creative Research Activities

- Grade 10: Creative Basic Research
  (Spring: Survey of Creative Research, Fall: Research Methodology Seminar)
  Goal: To develop the creative problem-solving and basic research skills

- Grade 11: Self-directed Research & Education (R&E)
  Goal: To experience professional research by participating in a small group research project for one year and writing a research report under the guidance of their advisors (KSA teachers, and professors of universities and research institutes including KAIST)

- Grade 12: Graduation Research
  (KSA Individual Research or KAIST HRP*)
  Goal: To conduct research and write a graduation thesis individually

* HRP (High school Research Program)

- Performing research and writing a thesis over one regular semester and 30 days of intensive education during the summer break under the guidance of a KAIST professor

2) Dream Design Center (DDC)

- Dream Design Center (DDC) is the perfect place for students to stretch their dreams by stimulating inspiration in a comfortable environment allowing them to make their own product from initial idea with a variety of instruments including laser cutter, 3D printers, CNC lathe, 3D scanner.
- DDC has a wide range of tools for prototyping and fabrication, enabling students to move through complete idea processes from initial sketch to refined final product.
- DDC consists of Idea Conference Hall (2F), IoT and 3D Printing Room (3F), Basic Convergence Lab (4F), General Workroom (5F) and Digital Machining Lab 2 (5F, Exploration Hall).

3) Globalization Education

- Exchange agreements with 21 institutes in 11 countries including the US, the UK, Japan, Singapore, Thailand and China.
- International Collaborative Research with 6 Institutes, 8 Teams (in 2023)
- International Academic Exchange Program with 6 Schools in 5 countries (in 2023)
- At grade 11, international on-site research program provides students with research and global experience in the US or the UK universities.

Extracurricular Activities

(Over 60 Clubs and Study Groups)

KSA motivates the students to engage in school activities to become versatile and well rounded. Students can learn teamwork, leadership, responsibility through them.

- Club: Around 20 clubs exist and it's mandatory for each student to participate in one club over 3 years.
- Study Group: Around 40 study groups exist in each semester. Students can participate in 3 study groups and a teacher can guide 2 study groups each semester.
- Students' Festival: SAF (Science Academic Festival), SAC (Science Adventure Celebration)