

2017 KAIST Matriculation Ceremony

Congratulatory Speech

President Sung-Chul Shin

Freshmen of 2017!

I am delighted to meet you all. I sincerely congratulate each and every one of our 756 freshmen on your matriculation. Welcome to KAIST. In particular, I'd like to congratulate the students from abroad from the bottom of my heart.

My deepest gratitude goes to your parents, who have raised you with love and devotion and have made you who you are today. I am thankful to them for coming a long way to join us at this ceremony.

I would also like to thank the distinguished guests who have taken time out of their busy schedules to join us, as well as KAIST professors and staff who are here today.

Freshmen of KAIST,

KAIST is unquestionably the best science and technology university in Korea, which also boasts a strong global reputation. KAIST was founded in 1971 with masters programs, then established its first undergraduate programs in 1984. To date, the number of KAIST alumni reach 58,000. 11,700 of them graduated with Ph. D degrees.

KAIST alumni were, and continue to be, the backbone of Korea's science & technology advancement and industrial growth. More than 20% of leading scientists and researchers in Korea's top universities, corporations, and government-affiliated research institutes are KAIST alumni. I stand here today giving a speech as the KAIST president, but I was also once a KAIST student just like you.

KAIST is renowned not only in Korea but also worldwide. There are barely any scientists or educators around the world who are not aware of KAIST's presence. So please take pride in the fact that you have now become a member of the KAIST community.

Dear freshmen,

Let's give a warm round of applause to your parents, who have supported you with love and have made it possible for you to become a proud member of KAIST.

Dear parents,

This time, let's give a big hand to the students to congratulate them on joining one of the best universities in the world.

Also, I'd like to ask everyone to give a big hand to all international students.

Today's freshmen will be spending the next four years or more on the KAIST campus for their undergraduate studies. I

hope you dream ambitious dreams for your future during your time at KAIST.

Dream a big dream! Only those who dream can make that dream come true. Only when you dream can your heart beat. Only when you dream can you study with passion and prepare for the future.

Your achievements can only be as high as your ambition. I advise you all to dream big dreams; dreams that can lead innovative developments in science and technology, and dreams that allow you to leave your footprint on the history of human society.

Those who sleep hard to dream cannot make their dreams come true. For your dream to come true, you must diligently prepare for it when you are young. The four years of college ahead of you should be a time of preparation to turn your ambitious dreams into a reality.

With that in mind, I would like to give three words of advice that can guide your college life towards the realization of your dream.

First, build a wide and strong academic foundation in the basic sciences. The main difference between a 100-story building and a 10-story building is how strong its foundation is. It is not possible to erect a 100-story building on a foundation meant for a 10-story building. Deepen and broaden your knowledge in the basic sciences to build a strong foundation, on which you can build a monumental tower of academic growth.

The fourth industrial revolution is dawning upon us. In this new paradigm, a majority of new discoveries and inventions will not come from traditional academic fields, but from multidisciplinary convergence. Having a strong academic foundation will allow you to navigate smoothly between different fields of study.

Demis Hassabis, the globally renowned inventor of Alpha Go, once said that his achievements were possible thanks to a strong academic basis in not just computers but also in biology and mathematics.

The winner of the 2002 Nobel Prize in Chemistry, Professor Kurt Wüthrich, was the first person to identify the structure of macromolecules using NMR. He said that having a strong understanding of mathematics and physics along with chemistry was a large factor in his success.

So, I would like to ask you to devote your undergraduate studies to the basic sciences – physics, mathematics, chemistry, biology – as well as engineering sciences – computer coding, statistics, automatic control, engineering design, and more.

I would also like to emphasize the importance of studying humanities and social sciences. Steve Jobs once said that knowledge of humanities was the basis of his creative research and design.

Science and technology courses stimulate the left brain, while humanities and social science courses stimulate the right brain. KAIST will develop full-brain academic tracks that can

stimulate both sides of the brain. After receiving this full-brain education, you will be able to venture into any field without hesitation. You will also be able to easily understand rapidly changing trends in science and technology and utilize your creativity.

Second, please strengthen your global leadership skills. You are the best talents in science and technology, ranking in the top 0.3% in terms of intellectual capability. So whether you like it or not, you will become the future leaders of the science community.

The mega trends of the 21st century make it clear that science leadership is essential in all areas of society including industry, economics, politics, national defense, diplomacy, and more.

On the other hand, Korea's global status is incomparable with that of 1971, which is the year I became a college student. In economic terms, Korea transformed from a developing country with a GNI of 300 USD to one of the world's top ten economic powerhouses with a GNI of nearly 30,000 USD. In the field of science and technology, Korea could barely publish SCI papers or register international patents. Today, Korea holds the world's 12th highest number of published papers and is one of the five powerhouses in international patents.

Korea of the 21st century is no longer a developing nation in a distant corner of Asia. It is one of the seven most innovative countries in the world with boundless potential to become a global leader.

In this regard, I would like to ask you all to go beyond

Korea and aspire to be a global leader. In the next 30 years, I look forward to seeing members of your class become presidents of globally prestigious universities, or CEOs of global corporations.

Leadership is not built in a day. From this moment on, you must prepare and train to become a leader. KAIST plans to establish a “Global Leadership Center” where you can learn the traits, manners, and mindset of a true global leader.

Science and technology students such as yourselves must focus on building communication skills. Leaders of the hyper-connected, horizontal society of the future will need to possess communication skills as an essential trait. You must be able to speak or write your thoughts and opinions in a logical, clear, and persuasive manner.

In particular, English communication skills are no longer a choice but a must if you are to fulfill your vision of becoming a global leader. Regardless of your academic achievements, you cannot become a leader in the international society if you are lacking in English communication skills.

Israel has the highest number of Nobel Prize winners by population and has the second highest number of NASDAQ-listed companies after the United States. I asked the president of Technion – Israel Institute of Technology what Israel’s secret was. He replied that professionalism and English communication skills were the keys to success. So, please focus on enhancing English communication skills along with your academic studies.

On the other hand, I'd like to strongly advise international students to learn Korean during your stay at KAIST. Speaking Korean will be a great asset for your career in the future.

Last but not least, please strengthen your time management skills. Until now your schedule was largely determined by your teachers or parents, so you did not enjoy true ownership of your time.

As you begin a new life at KAIST, you must take responsibility over your own time schedule and manage it wisely. I have seen KAIST students fail at adapting to college life. Their grades ended up being Christian Dior (C,D) or double pistol (F,F). In most cases, their low grades were caused by bad time management. In particular, these students failed to manage the sudden freedom they were given in their first semester as a college student.

So from now on, I advise you to set up a time plan in terms of days, weeks, months, and years to manage your time wisely. Please put a priority on your major studies, mental growth, emotional growth, and physical health. A report on successful leaders by WHO revealed that successful leaders were healthy in knowledge, mind, emotion, and body.

In Korea, people say that "well begun is half done." Looking back at my 65 years of life and the people around me, I think that the beginning determines not half but 99% of any outcome.

Your future will be determined by what dreams you dream

in college and how you prepare for it. I hope that your four years at KAIST will be a time of diligent preparation for your ambitious dreams.

Professors at KAIST will teach with passion to help you achieve your dream. Our administrative staff will do their best to support you.

As the president of KAIST, I will always be there for you and will do my best to make your dreams come true. My office and e-mail box is always open, so please ask for help when you need it. I will heed to your voices. You are the most important reason for KAIST's existence.

I congratulate you once again on your matriculation, and I also thank the parents who are with us today.

Thank you.

February 27nd, 2017
KAIST President Sung-Chul Shin