

GIST opens future aerospace research center to lead AI and big data-based space technology research

- G-STAR Center, led by Professor Seongim Choi of the School of Mechanical and Robotics Engineering, held an opening ceremony on the 12th (Wednesday)
- Conducting core research on aerospace and advanced mobility... Will work closely with the Goheung Space Launch Vehicle National Industrial Complex in Jeollanam-do to take the lead in fostering talent and research and development for the development of the domestic space industry



▲ GIST opens the Space Technology and Aeronautics Research Center and attendees take a commemorative photo. (Front row, center) G-STAR Center Director Seongim Choi, Vice President for R&DB Sungho Jeong

The Gwangju Institute of Science and Technology (GIST, President Kichul Lim) announced that it has established and started operating the G-STAR Center (GIST Space Technology and Aeronautics Research Center, Director Seongim Choi, Professor of Mechanical and Robotic Engineering) to lead research on artificial intelligence (AI) and big data-based space technology and conduct core research in the fields of aerospace and advanced mobility.

The opening ceremony was held on the first floor of the School of Mechanical and Robotics Engineering on Wednesday, February 12, with approximately 30 people in attendance, including GIST Vice President for R&DB Sungho Jeong, G-STAR Center Director Seongim Choi, professors of the School of Mechanical and Robotics Engineering, Jeollanam-do New Growth Industry Division Director Byeong-seong Kim, Goheung-gun Deputy Governor Dae-jeong Cho, Korea Aerospace Research Institute Goheung Center Director Deok-kwan Kim, Pusan National University Aerospace Engineering Professor Jeong-yeol Choi, officials from the Korea Aerospace Administration, and Gwangju Metropolitan City Future Vehicle Industry Division Director Dong-hyeon Lee.

The G-STAR Center will conduct core research based on 12 national strategic technologies, including aerospace and advanced mobility, and in particular, will work closely with the Goheung Space Launch

Vehicle National Industrial Complex in Jeollanam-do to take the lead in fostering talent and research and development for the development of the domestic space industry.

The main research areas are ▲ AI/big data-based space technology, ▲ space robotics, ▲ space bio, and future aviation based on sustainable digital engineering. In order to build a new hub for future aerospace research, it is expected to lead innovation in future aviation and space industry technology by ▲ leading AI and big data-based space technology research, ▲ strengthening space robotics and space bio research with global research institutes such as NASA, and ▲ promoting customized talent training in conjunction with the Goheung Space Launch Vehicle National Industrial Complex.



▲ Key attendees at the opening ceremony of the GIST Space Technology and Aeronautics Research Center are unveiling a plaque. (From left) Director Seung-cheol Choi of the Korea Aerospace Research Institute, Director Dong-hyeon Lee of the Future Automobile Industry Division of Gwangju Metropolitan City, Professor Jeong-yeol Choi of Pusan National University, Director Seongim Choi of the G-STAR Center, GIST Vice President for R&DB Sungho Jeong, Deputy Mayor Dae-jeong Cho of Goheung County, Director Byeong-seong Kim of the New Growth Industry Division of Jeollanam-do Province, and Director Deok-gwan Kim of the Goheung Center of the Korea Aerospace Research Institute.

G-STAR Center Director Seongim Choi stated, “As a new base for national space industry development and future aerospace research, the G-STAR Center plans to build a cooperative model encompassing industry, academia, research, and government, and play a pivotal role in the development of the aerospace industry in cooperation with global research institutes.”

She also stated, “We will do our best to lead the development of the global space industry through innovative research utilizing GIST’s strengths, AI and big data technology.”



▲ G-STAR Center Director Seongim Choi introduces the center to attendees at the Space Technology and Aeronautics Research Center ceremony.

Director Choi, who received her Ph.D. in aerospace engineering from Stanford University in 2006, worked as a researcher at the U.S. Army Aero Flight Dynamics Directorate from 2006 to 2009 and at NASA Ames Research Center from 2009 to 2012. She then served as an assistant professor at KAIST and an assistant/associate professor at Virginia Tech before joining GIST in 2021.

With the opening of the G-STAR Center, GIST plans to invite domestic and international experts in the second half of this year to discuss joint research and cooperation plans for the advancement of the aerospace field.