

Dong Joo Song

Professor, Mechanical Engineering,
Yeungnam University, Korea



Dong Joo Song has been involved in engineering education since 1995. He has served many times as University convener(or team chair) for accreditation visit to various universities across Korea over the last ten years. His research areas are CFD, Thermo-fluids system design, Optimization, Engineering Education including Engineering Design, Engineering Ethics, etc.

Recent Innovations in Engineering Education in Hub Center for Engineering Education of Yeungnam University

Recently, a society requires engineers to understand the international affairs and to be global experts endowed with leadership.

Yeungnam university hub center for engineering education(also referred as 'YU HCEE') has been operating in collaboration with 11 'participating' universities and 8 'cooperative' universities since it was selected one of six Hub Center for Engineering Education in Korea by the government in 2012. The vision of YU HCEE is "Implementing Creativity, Convergence, Communication and Culture in Innovation Engineering Education. The objectives of HCEE are providing vision and goal of Innovation of Engineering Education, leading and supporting universities in embodying innovation agenda, developing platform for cooperation among universities, industries, and government, and pioneering development, operation, outcomes propagation of creative and convergence programs. The agenda includes multidisciplinary CDP programs, enhancing creative problem solving capability, cultivating hands-on experience, exchanges in innovation outcomes, establishing global-local network, educating engineers with good characters and cultivating good nature based on tradition.

Major programs of HCEE are as follows:

- 1) Creativity.convergence engineering education program including workshop, camp
- 2) Overseas student field practices, visiting automotive industries in US, China and Japan.
- 3) International Capstone Design Camp for a week along with SAE baja contest. Foreign students and Korean students from participating universities collaborate together in culturally mixed team. The main objectives of the camp are to cultivate design capability, international teamwork, and communication skills. It was a big success and beneficial to foreign students and Korean students.
- 4) Global exchanges in engineering education with foreign universities including SCUT, HKUST and KIT, etc.
- 5) Organizing Engineering education festival along with participating universities.
- 6) Food engineer education program among universities by experiencing culture and tradition. Also science camps for elementary schools were hosted by participating universities to induce motivation of studying engineering majors.

YU HCEE is seeking to increase the role for global engineering talents through establishing global network with famous universities including SCUT, HKUST, KIT, SIT and etc. Recently we had the signing of MOU with South China University of Technology('SCUT', China) and will exchange with Shibaura Institute of Technology ('SIT', Japan) in the near future. Through maintaining a continuous relationship with leading universities and industries, YU HCEE is functioning as a hub of innovation center for engineering education. Additionally, YU HCEE is willing to cultivate 'GOOD' engineers via events such as global field training program with outstanding students, international capstone design project camp, etc.