

Division of Ocean Systems Engineering

URL : <http://kaist-ocean.org>
Dept. Phone : +82-42-350-1502~5

Introduction

The Department of Ocean Systems Engineering (OSE) at KAIST (KAIST OSE) was established in 2008 within the School of Mechanical Engineering. Its pillar charters are to educate young talents and conduct research so that its graduates will play leading roles in the new burgeoning frontiers of ocean systems as well as in Korean shipbuilding and offshore industry. The OSE Department's status was further bolstered in November 2008 by winning the World Class University Project funded by Korean Science Foundation that will facilitate KAIST OSE to become a leading ocean systems engineering department in the world.

Ocean systems would be large in spatial dimension and require complex construction and operation procedures. In order to develop a good ocean system, several core technologies have to be integrated such as shipbuilding, ocean engineering, mechanical engineering, electrical and electronic engineering, civil engineering, industrial engineering, petro chemical engineering, technology management, computer science, telecommunications, and perhaps a new field heretofore not identified. Hence, interdisciplinary synergism and collaboration is essential.

To complement the young department, KAIST OSE plans to collaborate with and seek support from Korea's shipbuilding industry and also from the national research laboratories in Daedeok Science town such as MOERI (marine and ocean engineering research institute, www.moeri.re.kr), KIMM (Korea institute of machinery and materials, www.kimm.re.kr), KR (Korea Register of Shipping, www.krs.co.kr), Korean Navy (www.navy.or.kr), and ADD (Agency for Defense Development, www.add.re.kr).

As of 2009, the department has twelve full-time faculty members with several of them highly recruited from international community, and 20 jointly appointed faculty members from other departments of KAIST and industry.

To foster interdisciplinary education experience, the OSE graduate students will scope out their individualized courses offered not only in the School of Mechanical Engineering but also across the institute with consultations with mentoring faculty members. Hands-on experience through laboratory work and industry internship will help students to grasp the real world requirements and problems.