

Division of Mechanical Engineering

Web Site : me.kaist.ac.kr

Dept. Phone : +82-42-350-3002~5

□ Introduction

Achieving the Dreams of Human-centric Society of the 21st Century

The Mechanical Engineering Department at KAIST has fostered about 5,700 talented graduates since its establishment in 1971, and the graduates of our department have taken central roles in domestic and international companies, research institutions, universities, as well as government agencies. Our department pursues world-class excellence in both education and research, and expands our pioneering professional reputation on the merits of their contributions in fundamental and creative research and of their services in high-growth industries. We recognize the importance of our commitment and service to develop the tools and methodologies to realize our imagination in a 21st Century Human-centric Society. We strive to provide engineering solutions to key issues facing our society and to foster elite leaders of the future in mechanical engineering who will uphold the prestige of our profession with a genuine responsibility for mankind. The ultimate dream of all members in our department is for the happiness and well-being of human society for generations to come.

Fostering Responsible Mechanical Engineering Leaders Who Will Reform the Future

As the core foundation of all engineering, Mechanical Engineering spans over diverse academic fields and knowledge. In our Mechanical Engineering Department, students gain comprehensive knowledge on the fundamental basics of mechanics and mechanical design methodologies. Having its basis in systems engineering, various disciplines of mechanical engineering can be sub-categorized into thermal engineering, fluid engineering, energy and power engineering, dynamics and control, production and design engineering, solid mechanics and structural mechanics, materials and fracture mechanics, opto-electro mechanics, bio mechanics, and micro and nano-mechanics. Moreover, mechanical engineering has recently been grafted with other neighboring fields such as electrical engineering, chemical engineering, bioengineering, materials engineering, and physics to create new areas for convergence technology, serving the future of high-tech industry as the most comprehensive and vital component. Accordingly, we are putting forth great efforts to nurture students so they will be ready to take leading roles in a wide range of the fields and activities in our society. Our department's priority is to improve and tailor our education system to emphasize and cultivate the fundamentals in mechanical engineering, logical thinking and comprehensive design-capability. Along with the recent expansion in the field of convergence, the education of fundamental courses

of traditional mechanics in mechanical engineering, which appears to have been overlooked, will be strengthened to educate students on scholastic abilities that have the basic principles and knowledge upon which they can build up their research and career. We are developing our curricula in such a way to nurture students with fundamental classical engineering courses that have been modified and improved to meet the needs of the future. Furthermore, we not only offer opportunities for students to participate in diverse caliber-enhancing programs to inspire creative thinking and a challenging spirit, but also work continuously to embed a proper sense of engineering ethics, diverse viewpoints and other fundamental qualities of global leaders.