

과정별 소개

■ Degree Programs

○ Undergraduate Program

The aims of the program are to educate students to be capable practitioners and researchers of industrial and systems engineering who can define and solve real-world problems from various industries or make methodological advances in engineering domains. The undergraduate courses are classified into applied statistics, operations research, data science, manufacturing and service operations management, and human-centered systems design. To respond to changes into industrial and societal landscape caused by the 4th Industrial Revolution, we have renovated our education program to significantly enhance the curriculum related to Industrial Intelligence. The curriculum is designed to help our students build solid fundamentals in probability, statistics, optimization and computer programming and to leverage them as building blocks to develop strong knowledge and skills in core Industrial Intelligence courses such as big data analysis and machine learning. With this background, we encourage our students

to apply their knowledge of Industrial Engineering and Industrial Intelligence to create innovative manufacturing and service systems such as production systems, service systems, telecommunications, and financial systems. Internship opportunities from various industries are available to our undergraduate students during the summer and winter vacation periods. Opportunities to design, synthesize, and analyze large-scale complex systems in both private and public sectors and to discover ways to improve their effectiveness and efficiency are emphasized. Students are also encouraged to cultivate a global mindset by participating in exchange programs with foreign universities.

○ Graduate Program(Master, Ph.D., and MS&Ph.D. Integrated Program)

The master program focuses on developing a practical skill set for students based on a profound understanding of specific domains as well as enhanced understanding of advanced tools/methodologies in ISysE and KSE. The Ph.D. program emphasizes creative and interdisciplinary research that opens up horizons in new research fields. While research in the graduate program is based on the strong fundamentals built in undergraduate study, the research results from the graduate programs are fed into the undergraduate education system as practical case studies.