



DEPARTMENT
OF INDUSTRIAL
ENGINEERING

FACULTY OF
ENGINEERING
AT **KMITL**



**KING MONGKUT'S INSTITUTE OF
TECHNOLOGY LADKRABANG**
BANGKOK, THAILAND

About KMITL

King Mongkut's Institute of Technology Ladkrabang (KMITL) has been established since 1960 and is considered one of pioneer science and technology institutions in Thailand. The name of the institute was derived from the name of King Rama IV. The royal grand crown seal has been graciously used as the emblem of the institute. As moved to a new era with 50 years' experience, KMITL has not only been very successful as an institute specializing in the field of science and technology in Thailand, but also produced a great exceptional number of professional "Practical Engineers" in diversified engineering territories. KMITL is moving forward with the new era with the philosophy "Education and Research in Science and Technology are the Foundation of the Development of the Nation" and KMITL is also ready to glow globally as internationalized activities and supports.

About Industrial and Management System Engineering (IMSE) Program

The department of Industrial Engineering at KMITL is offering a bachelor's degree of Industrial and Management Systems Engineering (IMSE). The ultimate goal of IMSE program is to prepare our students to be capable of creating value for organizations and society. High quality and diverse students will be educated through hands-on experiences and project-based settings. The course curriculum covers all essential materials in industrial engineering methods and tools, a fundamental of mathematical, physical, engineering and management sciences. The students will be taught to possess system-oriented, critical, and analytical thinking with the purpose of strengthening their abilities to apply knowledge and skills to solve problems in any global organization.

What You Will Study

The core intellectual theme of the IMSE program is the analysis, design, management of highly complex systems involving the interaction among human, machines, and environment. The IMSE curriculum covers the fundamental and the state-of-art knowledge in industrial engineering, system thinking, and management sciences. Sample courses include:

- ↙ System Dynamics Modeling
- ↙ Data Sciences and Data Analytics
- ↙ Operations Research and Simulation
- ↙ Supply Chain Economics and Logistics Management
- ↙ Human Interaction and Services Engineering
- ↙ Integrated Management Systems for sustainability

INDUSTRIAL AND MANAGEMENT SYSTEMS ENGINEERING PROGRAM

IMSE

Industrial Collaboration

In the third year of program, students must complete a minimum 12 weeks of engineering industry experience. This allows all students to experience hand-on projects in an engineering practice under the supervision of practicing professional engineers. Furthermore, in the final year of program, students will undertake a capstone project that is either industry-based cooperative education or both basic and applied research-based engineering project. Students will practice open-ended engineering design that incorporate fundamental and advanced concepts in Industrial and Management Systems Engineering. Students will learn to build innovation, identify the opportunities, propose ideas, design and implement innovative solutions while being able to deal with realistic engineering constraints.

Career

Career opportunities in Industrial and Management Systems Engineering are versatile. Graduates will find employment opportunities in wide range of industrial and government sectors, including manufacturing industries, consulting and engineering services, finance and banking industries, health-care industries, logistics industries and research and development firms.

Degree and Curriculum

B.Eng. (Industrial and Management Systems Engineering), a fourth-year international program, is suitable for students who are seeking to develop their technical knowledge and the aspects of system management, and form a suitable basis for a career focused on engineering solutions to business-related issues.

For further information, please feel free to contact Dr. Chumpol Yuangyai (chumpol.yuangyai@gmail.com) or kychumpoo@kmitl.ac.th

