KMITL ROBOTICS and AI International Program

BACHELOR OF ENGINEERING PROGRAM
IN ROBOTICS and AI ENGINEERING
(MULTIDISCIPLINARY INTERNATIONAL PROGRAM)

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 wes 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 eld of science and technology in Thailand, but also produced a great exceptional number of professional "Practical Engineers" in diversied 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 Robotics and AI Engineering (RAI) Program

The Robotics and AI Engineering at KMITL is offering a bachelor of engineering. Our program will provide technical deep-dive into the area of Robotics and Artificial Intelligence (AI) to prepare our student to be ready for the twenty-first century which Robotics and AI techniques will become an essential part of the technology industry and daily life. The programme will produce Robotics and AI graduates with a highly relevant skillset in Robotics and AI topics. Students will learn how to use, develop, control, innovate and manipulate the intelligent robots and AI systems that can learn from experience and the programme also places significant emphasis on student learning by doing. It adopts a practical, hands-on, approach to learning, where all modules are fully assessed using continuous assessment methods.

B.ENG. (Robotics and AI Engineering) a four-year multidisciplinary international program

Year 1 - Semester 1
Computer Programming
Introducation To Calculus
Physics 1
(GENED ELECTIVE)
Engnieering Drawing
(ESL) Academic Listening And Speaking

Year 1 - Semester 2
Introduction To Robotics
Engineering Mechanics
Advances Calculus
(GENED) Physics For Rai Life (Physic 2)
(ESL) Academic Reading And

Year 2 - Semester 1
Engineering Materials
(GENED ELECTIVE)
(GENED ELECTIVE)
Differential Equations And Matrix Algebra
Feedback Control 1
(GENED) Interpretation And Arguments

Year 2 - Semester 2
(GENED ELECTIVE)
Safety And Standardization In Rai
Rai Elective Mandatory Subject
Kinematics And Dynamics
Mamufacturing Process

Year 3 - Semester 1
(GENED, SCIENCE & MATHEMATICS ELECTIVE)
ARTIFICIAL INTELLIGENCE TECHNOLOGY
RAI Elective mandatory subject
RAI Elective mandatory subject
RAI Elective subject
RAI Elective mandatory subject

FOR REGULAR STUDENTS

Year 3 - Semester 2
(GENED ELECTIVE)
RAI ELECTIVE
(FREE ELECTIVE)
RAI Elective mandatory subject
RAI Elective mandatory subject
RAI Elective mandatory subject

Year 3 - Semester 3
INDUSTRIAL INTERNSHIP

Year 4 - Semester 1
(FREE ELECTIVE)
RAI Elective subject
RAI Elective mandatory subject
RAI CAPSTONE DESIGN PREPARATION

Year 4 - Semester 2
RAI Elective subject
RAI Elective subject
RAI CAPSTONE DESIGN PREPARATION
RAI Elective mandatory subject

FOR CO-OP/STUDY ABROAD STUDENTS

Year 3 - Semester 2
(GENED ELECTIVE) (FREE ELECTIVE) 1
RAI Elective subject RAI Elective subject
RAI Elective mandatory subject
RAI Elective mandatory subject
RAI Elective mandatory subject

Year 3 - Semester 3
INDUSTRIAL INTERNSHIP

Year 4 - Semester 1
COOPERATIVE EDUCATION
STUDY ABROAD

Year 4 - Semester 2
RAI Elective mandatory subject
RAI Elective mandatory subject
(FREE ELECTIVE) 1
ROBOTICS AND AI ENGINEERING CAPSTONE DESIGN
RAI Elective subject
RAI Elective subject

Collaboration with Other Institutes and Companies

The program is in collaboration with many university according to the memorandum of understanding (MOU) such as the University of South Florida, Imperial College, Chubu University, Kumamoto University, BK Birla Institute of Engineering and Technology, National Formosa University and South Eastern Regional College, etc. In case of industrial, the program is in collaboration and support by the world class companies in elds of robotics and AI such as Seagate, ABB, Mitsubishi, Amazon AWS Education, Delta Electronics, and AutoDesk, etc.

Possible Career Path after Graduation

- Roboticist or Robotic Engineer
- Startup Entrepreneur in High Tech
- Software Engineer for Mechatronics and Machines
- System Engineer
- AI Engineer
- Machine Vision Engineer
- IoT Engineer
- Robotic Security Analyst
- Expert Systems Analyst
- Machine Designer
- Software Architect for AI
- Technology Manager for Robotics and AI
- Solution Engineer
- Solution Architect