SMART MATERIALS TECHNOLOGY

ROBOTICS & AI ENGINEERING

DUAL DEGREE

King Mongkut's Institute of Technology Ladkrabang

01

DUAL-DEGREE

Receive 2 diplomas from College of Nanotechnology and Faculty of Engineering, KMITL

02

INTERNATIONAL PROGRAM

4-year study
152 credits
120,000 baht per semester

03

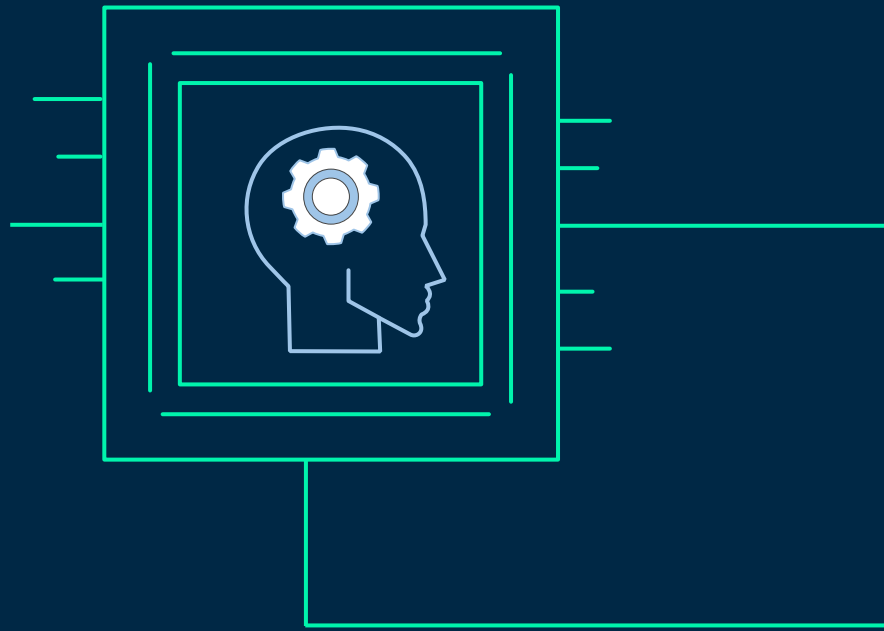
FACILITIES

4 co-working area
4 laboratory
and more...

CAREER PATH

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

and more...



MAIN SUBJECTS

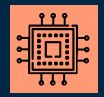
Robotics Laboratory

Artificial Intelligence Technology

Manufacturing Process

Energy Storage

Micro and Nano Fabrication



Nanosensors

and more...

CURRICULUM (apart from Robotics & AI)

Year 1:

- CHEMISTRY
- INTRODUCTION TO NANOTECHNOLOGY

Year 2:

- SENSOR TECHNOLOGY
- INTRODUCTION TO PROBABILITY AND STATISTICS
- MICRO AND NANOFABRICATION
- ELECTIVE MANDATORY SUBJECT FOR SMART MATERIALS TECHNOLOGY

Year 3:

- QUANTUM AND NANOELECTRONIC DEVICES
- APPLICATIONS AND TRENDS OF SMART MATERIALS
- ELECTIVE SUBJECT FOR SMART MATERIALS TECHNOLOGY
- ELECTIVE MANDATORY SUBJECT FOR SMART MATERIALS TECHNOLOGY

Year 4:

- MOST OF ELECTIVE SUBJECT

IN COLLABORATION WITH ROBOTICS & AI

With the help of smart material (nanotechnology), it can:

- Improve the structure, built, and coating of the object
  - Phone: lightweight, waterproof, rigid body
- The stability of the robot
  - Improve the precision and develop the sensors
    - Improve LiDAR to work in greater distance
- Extends the limits of electronics
  - Improve processors and circuit board by making it smaller and decrease energy consumption while improving its performance
    - Apple's iPhone 12 using 5 nm A14 Bionic processor

and such...

Not just robotics and AI, it can also use to applied in any other field such as biotechnology, energy, photonics, and more!

REQUIREMENTS

Education background

- Obtained or expected to receive a qualification equivalent to Matthayom 6
- Graduated from or studying in Matthayom 6 or equivalent

Academic record

- GPA (at least 4 semesters) 75 percentile
- SAT / GSAT 1020+
- ACT 19+
- IB diploma 29+
- A-level, GAT/PAT, gaokao, depending on professor

English score

- IELTS 6.0+
- TOEFL 550+
- KMITL-TEP 82+

APPLY NOW!

Until Nov 24, 2020

TCAS Admission

FACILITIES

LAB & CLASSROOM

FABRICATION LAB

ROBOTICS LAB

CO-WORKING 1

CO-WORKING 2

NANO LAB

and more...

PARTNERSHIP WITH...

and many more...

MORE INFO:

FB: College of Nanotechnology (@nano.kmitl)

www.nano.kmitl.ac.th/dual-degree/

Line: @546djgqi

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