



MEDICAL ENGINEERING (MDE) INDUSTRIAL SYSTEMS ENGINEERING

ABOUT THE PROGRAM

Medical Engineering (MDE) is a new interdisciplinary academic program merging robotics, biological, and medical sciences, tailored for students with scientific backgrounds in chemistry, biology, health & life sciences, medicine, nursing, engineering fields, and biomedical fields. Housed under the School of Engineering and Technology (SET) and launched within the Industrial Systems Engineering (ISE) department, the Master program is designed to train future professionals who will play a crucial role in the regional medical sector in the coming years. Medical Engineering, broadly defined, seeks to enhance health quality by delivering technologically advanced solutions customized for clients, innovating modern medicine through engineering methods and tools; this approach addresses healthcare challenges and creates new opportunities in both academia and industry.

KEY COURSES

- Biomaterials for Medical Engineers (Required)
- Physiology for Medical Engineering (Required)
- Biomechanics
- Tissue Engineering and Prosthetics
- Medical Instrumentation and Imaging

RESEARCH FOCUS AREA

- Biomaterials for Medical Engineers
- Physiology for Medical Engineers
- Biomechanics
- Tissue Engineering and Prosthetics
- Medical Instrumentation and Imaging
- Human Anatomy and Physiology

DEGREE PROGRAMS

- Master's degree program





ELIGIBILITY REQUIREMENTS

To be eligible for admission to the regular *Master's program*, an applicant must:

- Hold a Bachelor's degree (normally from a four-year program), or its equivalent, in an appropriate field of study from an institution of good standing acceptable to AIT;
- Have undergraduate grades significantly above average; the minimum cGPA requirement for admission to the Master's Program is 2.75 or equivalent, at the Bachelor's degree level;
- English Proficiency Requirement: AIT-EET:6 or IELTS-Academic:6 (writing 6) or TOEFL Paper: 550 (writing 59-61) or TOEFL CBT: 213 (writing 25-26); TOEFL IBT: 80 (writing 21-23);
- Be in satisfactory physical and mental health, and have a record of good conduct;

HIGHLIGHT

"Our program is designed to uniquely enhance students' education and careers. Unlike traditional biomedical courses, it emphasizes a dynamic, hands-on approach, blending classroom instruction with practical experiences. The curriculum focuses on real-world applications, ensuring that students not only grasp theoretical concepts but also develop practical skills."

PREFERRED BACKGROUND

Master Program (currently we offer only master's degree)

The program is open to all Sciences and Engineering student who are currently studying or working or doing research in any of the following fields:

Sciences: Any fields in chemistry, biology, health and life sciences, medicine, nursing, biochemistry, natural sciences, material sciences, physics.

Engineering: biomedical engineering, chemical engineering, mechanical engineering, and robotics or electronic engineering.

CONTACT US

Ms. Chaowaret Sudsaweang
(Administrative Secretary)
Industrial Systems Engineering
School of Engineering and
Technology (SET)
Asian Institute of Technology (AIT)
Email: chowaret@ait.ac.th
Tel: +66 2524 6601



DEPARTMENT OF
INDUSTRIAL SYSTEMS
ENGINEERING