

# DOCTOR OF ENGINEERING

## PROGRAM IN MECHANICAL ENGINEERING

### (INTERNATIONAL PROGRAM)

#### D.ENG. (MECHANICAL ENGINEERING)

#### Program Objectives

- To produce doctoral engineers, scholars, or researchers capable of applying advanced mechanical engineering principles in research to advance knowledge and innovation in the field.
- To enhance research output, development, and technology transfer in mechanical engineering and related fields.
- To produce graduates with strong ethical standards and a sense of responsibility toward their duties and society.
- To cultivate self-directed learners who are equipped to continue their education throughout their careers.
- To develop graduates with an entrepreneurial mindset and a solid understanding of technology business management.

#### Eligibility of applicants

##### Plan 2.1 Master's Degree Candidates

- Must hold a Master's degree or be currently studying in the final semester of a Master of Engineering degree, in Mechanical Engineering with GPAX. of not less than 3.25; or
- Must hold a Master's degree in Mechanical Engineering with at least 2 years of experience in industry or research and development; or
- Must have outstanding research qualifications with international publications, subject to the discretion of the Graduate Studies Committee of the Department of Mechanical Engineering.

##### Plan 2.2 Bachelor's Degree Candidates

- Must hold a bachelor's degree or be currently studying in the final semester of a Bachelor of Engineering degree, with GPAX. of not less than 3.25 in Mechanical Engineering or other engineering discipline, or science and technology fields closely related to Mechanical Engineering, subject to the discretion of the Graduate Studies Committee of the Department of Mechanical Engineering; or
- Must hold a Bachelor's degree in Mechanical Engineering and have at least 5 years of experience in industry or in research and development
- Must have outstanding research qualifications with international publications, subject to the discretion of the Graduate Studies Committee of the Department of Mechanical Engineering

All applicants under both Plan 2.1 and Plan 2.2 must meet the English proficiency requirements as outlined in the Announcement of King Mongkut's University of Technology Thonburi English Proficiency Requirement for Doctoral Degree Students B.E. 2564, These requirements may be subject to change based on future announcements by the university.

#### Program Learning Outcome (PLOs)

- PLO 1** : Acquire adequate crucial engineering and scientific knowledges as well as computational skills, while able to apply those knowledges and skills in research leading to generation of new body of knowledge and knowhow that are widely recognized for effectively solve multidisciplinary engineering problems.
- PLO 2** : Able to research on advanced scientific information from various sources and to develop skills necessary for life-long learning.
- PLO 3** : Able to communicate academically and to present academic research at international levels.
- PLO 4** : Behave themselves with professional ethical awareness.
- PLO 5** : Able to leverage mechanical engineering knowledge for practical business applications and communicate with business investors and business owners.

#### Program Structure

##### • Plan 2.1 Master's Degree Candidates (Dissertation 36 Credits)

- Compulsory Courses	7 credits
- Electives Courses	6 credits
- Dissertation	36 credits
<b>Total requires credits</b>	<b>49 credits</b>

##### • Plan 2.2 Bachelor's Degree Candidates (Dissertation 48 Credits)

- Compulsory Courses	7 credits
- Electives Courses	18 credits
- Dissertation	48 credits
<b>Total requires credits</b>	<b>73 credits</b>

#### Career of the Graduates

1. Mechanical Engineer in industry.
2. Researcher in the field of mechanical engineering or related fields such as mechanical design engineering, Fluid and aeronautics engineering, thermal and energy engineering, robotics and automation system engineering, and automotive engineering, etc.
3. Lecturer in Institute of Science and Technology.

<b>Tuition Fee</b>	Regular semester (rate specified in the program)*
• Tuition fee	14,500 THB / semester
• Course fee	1,300 THB / credit
• Thesis fee	2,600 THB / credit

Revised Curriculum B.E. 2568