Mahidol Engineering Launches Doctorate Program of ‘Interdisciplinary Engineering’





The post-COVID-19 world has witnessed drastic changes not only in lifestyles and health of people around the world, but also engineering and technology. Therefore, Faculty of Engineering, Mahidol University – Thailand’s top ranking listed by World University Ranking Bodies – initiates to launch a new program: Doctor of Philosophy Program in Interdisciplinary Engineering in an online-based platform. Aiming to produce ‘New Normal engineers and innovators’, the program has integrated engineering knowledges across the majors, faculties and universities at the international level brilliantly formulated into a three-year international program in online platform. Scheduled for application from August – November 2020 as a disruptive choice to accommodate world-class education and innovative research, Mahidol Engineering expects to feed engineers and innovators of the future to the transformed organizations and disrupted labor market as well as EEC.

Assoc. Prof. Dr. Jackrit Suthakorn, Dean of Faculty of Engineering, Mahidol University, stated that Thailand – situated in strategic location in the heart of ASEAN as hubs of commerce, transportation manufacturing industries and investments for new S-Curve industries – is ranked second in the Global COVID-19 Index (GCI) after Australia, and first in Asia in the same index. The post-COVID-19 pandemic impacts have effectively altered the global and Thailand’s landscapes in various aspects such as public health, economy, commerce, tourism including engineering and technology. The new-normal world needs ‘New Normal Engineers-innovators’ that have creativity, agility, innovative working and management method through analytic mindset, intelligent skills, methodology on digital platform, possessing ‘broad’ and ‘deep’ vision that shall assist in superb decision-making, and ability to integrate deep sciences and technologies into a new concept and eventually innovation. Mahidol University’s Faculty of Engineering mobilized ‘Doctor of Philosophy Program in Interdisciplinary Engineering’ through collaboration with other world-renowned universities such as Aalto University, Liverpool John Moores University, The University of Strathclyde, Instituto Superior Técnico Lisboa, along with other academic departments and faculties within Mahidol University as well as leading businesses and industrial players. This Interdisciplinary Engineering Program would broaden the

worldview and provided comprehensive, high-level science and technology for master's graduates who desire to further self-development into New Normal Engineering for better life, innovative organization, more livable society and world.

Asst. Prof. Dr. Sotarat Thammaboosadee, Chairman of Doctor of Philosophy Program in Interdisciplinary Engineering, Faculty of Engineering, Mahidol University, revealed that the Interdisciplinary Engineering Program is uniquely designed as a three-year Doctor of Philosophy program, of which its strength in being an international program accommodating world-class education and research, integrating knowledge across various engineering disciplines to produce research and innovative work that do not wholly belong to any single one specific discipline. It would prepare professionals to get ready for the world of disruptive innovation. Students in this program shall have opportunity to receive lectures from world-renowned lecturers and do research works with foreign universities. Furthermore, the program specifies each student to have two advisors; main and co-advisors from a different discipline to support interdisciplinary environment in research. Learning is mainly based in a digital learning platform which allows convenience and accessibility to education for the professors and students from anywhere at any time. The students shall learn design thinking, exchange knowledge in online seminars and obtain active research advice. Learning is done in classroom and through practice supported by modern facilities, academic centers, laboratories and learning tools available in the Faculty of Engineering, Mahidol University.

Regarding the target groups, the Interdisciplinary Engineering Program accepts Thai, ASEAN and foreign nationals in various professions such as engineers, managers, researchers, scientists, academia, and master's graduates in engineering or related sciences who desire to go beyond the limit, expand knowledge horizon to other borderless disciplines, or create innovation or research works that are interdisciplinary in nature, which is the objective of "Interdisciplinary Engineering". Applicant requirements must have a master's degree in engineering, science, medicine, computer, logistics or other related fields, along with research works and experience. Application deadlines: August – November 2020 and the first semester is scheduled for opening in December 2020.

The outcoming engineering human resources developed by this program are to feed highly-skilled professionals, specialists and management to the newly disrupted labour market and organizations' transformation in line with the global trend development, Thailand 4.0 and the Eastern Economic Corridor (EEC) such as researchers, innovators, lecturers, executives and managers of research and education in state organizations, privates, education and industrial sectors. For more information, please contact Tel. 081-402-3627, 02-889-2138 or Email: sotarat.tha@mahidol.ac.th