

INTERNATIONAL CONFERENCE ON ENGINEERING PROFESSIONAL ETHICS AND EDUCATION(ICEPEE'22)

Mapping Integration of Sustainable Development Goals for Engineering Programmes at International Islamic University Malaysia (IIUM)

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Abstract—. The International Islamic University Malaysia embarked on the initiative to incorporate the United Nation's Sustainable Development Goals (SDGs) in its curriculum in 2018 with the aim of concretizing its vision and mission statements. The main objective of this study is to examine the integration of SDGs in the curriculum of the Kulliyah (Faculty) of Engineering. Based on 9 Engineering programmes offered by the Kulliyyah (Faculty), students are required to register for 57 to 61 courses or 134 to 139 credits in order to graduate. All 9 Engineering programmes have incorporated 330 contents related to the 17 SDGs. The findings of the study indicate that BEng (Hons) Chemical Engineering Programme has the most number of SDGs contents with 55 occurrences of 39%, followed by BEng (Hons) Aerospace Engineering Programme with 51 (36%) and BEng (Hons) Civil Engineering Programme with 49 occurrence or 13%. As far as specific SDGs are concerned, a total of 116 (35.1%) of the 330 SDGs activities are associated with SDG 9 Industry, Innovation and Infrastructure, followed SDG 11 Sustainable Cities and Communities (59 occurrences or 17.9%), and SDG 12 Responsible Consumption and Production (39 occurrences or 11.8%).

Keywords: sustainable development goals; SDGs; higher education; curriculum, faculty engagement; sustainability

1. Introduction

Extensive research has shown that human behavior on the planet based on the ideas of 'good life' have led to consumption that exceeds what the planet can sustain thus lead to the unsustainability on the planet [1]. Thus, the task for society in the face of impending disaster is to change the way of how human think and behave so the limit of nature can be respected [2]. The member states of the United Nations have adopted the 2030 Agenda for Sustainable Development in 2013 along with 17 Sustainable Development Goals (SDG) that covers

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it is suggested for future studies to employ the proposed framework in combination with other existing methodologies developed by other researchers.

ACKNOWLEDGEMENT

The authors would like to thank Universiti Teknologi MARA for the financial assistance from the Sustainable Research Collaboration Grant 2020 (600-RMC/SRC/5/3 (003/2020)). This research is in collaboration with the Universiti Malaysia Pahang and International Islamic University Malaysia. Our deep gratitude to all the researchers who were involved with this research, entitled: Mapping Course Sustainability For Internationalizing Curriculum In Higher Education Malaysia.

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