ETHICS OF ENGINEERING EDUCATION

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PREFACE

As the global requirements, duties and demands usher into a new epoch it is imperative to revisit the functions of ethics in engineering education. For some time now, the International Islamic University has introduced engineering ethics courses for engineering students to address the aforementioned requirements and demands.

Beside this, the Faculty of Engineering at IIUM has shouldered the responsibility to regularly organize international seminars, conferences and national workshops on the subject to assess and revisit the position of engineering education and its governing codes of ethics.

In 2008 the Faculty of Engineering organized an international conference on engineering professional ethics and education which has focused on various aspects of engineering ethics and education, with the theme: understanding the importance of professional ethics in engineering education.

The works submitted concentrated on ethics in engineering education, engineering curriculum, the role of religion in engineering studies, philosophy of engineering sciences, social responsibility in engineering and engineering education for sustainable development.

This work, a result of the said conference, consists of ten parts including teaching technologies and engineering education, engineering professional ethics, engineering and society, research in engineering education and integrating ethics into engineering education.

Subsequently the work covers diverse aspects of engineering education such as outcome-based grading System, engineering carrier opportunities, engineer’s responsibility: safety, risk and liability.

It also discusses factors that influences ethical perceptions and practices of professional engineers, internet and Islam, ethical requirement in quality software engineering projects, Prophetic philosophy of pharmaceutics, the concept of Itqan and its role in the Muslim life and cultural factors on engineering codes of ethics in Asia, alongside with religion, environmental ethics and global climate change.

We are indebted to all our colleagues who directly or indirectly contributed to the initial progress of this work.

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