

# Islamization, Ethics and Values in Science and Technology

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# **Islamization, Ethics and Values in Science and Technology**

**By**

*Islamic Values and Ethics in Engineering Sciences Research Group  
(IVEES-RG)*

**International Islamic University Malaysia (IIUM)**

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# ISSUES ON ETHICS AND VALUES IN ENGINEERING PRACTICES

Abdi . O. Shuriye

## Introduction

This chapter elucidates confidentiality, conflict of interest and engineering corruption. In corruption practices, it sketches problems associated with illegitimate personal or organizational gains in engineering workplace. It further highlights the causes and implications of these actions, both from ethical and religious perspectives. Another ethical issue is confidentiality, which indicates the practice of ensuring clandestine information is accessible only to those who have the rightful access. Confidentiality is seen as a mechanism to maintain security of information. In relation to engineers dealing with others, confidentiality is the idea that no information should be revealed without the prior consent of the concerned except as required by law. The concept of Conflict of interest in engineering workplace is one of the ethical problems faced by engineers worldwide. It present it self when a person has influence on official decisions where the outcomes of those decisions might affect his or her personal interests. This paper sees conflict of interest as a condition rather than a behavior. This means the existence of it alone does not entail a person will act in a biased manner.

## Characterization of Confidentiality in Engineering Practices

I have said in the introduction that confidentiality is the process of ensuring that information is accessible only to those authorized to have access; so as to maintain information security. It is also emphasized here as an ethical principle associated with engineering profession and practice. Thus, confidentiality is the idea that no facts, data, or information should be revealed without the prior consent of the client or employer except as authorized by law.

As part of the process of self-definition, members of engineering profession must agree on an internal code of practice and negotiate the relationship between the profession and society. Kovac<sup>309</sup> emphasized that most professions developed formal code of ethics with well-defined standards enforced by their boards. Confidentiality is a main ethical theme and always remains on the top af any lists of ethical premise. In fact, the nine categories of ethical themes, listed by Gaumnitz and Lere, confidentiality is the fist on the list. These are:

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<sup>309</sup> Kovac, J., Professional ethics in Science. In: D. Baird et al. (eds.), *Philosophy of Chemistry*, (Netherlands: Springer, 2006), 157–169