The BRITISH UNIVERSITY IN EGYPT

FACULTY OF ENGINEERING

Effective-Innovative-Supportive

Faculty of Engineering Code of Ethics for Scientific Research

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Introduction

The code of ethics for scientific research in the faculty of engineering establishes the major principles of ethically justified scientific practice. Despite the great diversity of subjects and methods of scientific research, there are general principles and standards of behaviour to which researchers are obliged to follow.

The code aims to encourage researchers to think in a responsible manner about the conditions and consequences of the social integration of their research activities as well as the close association between sciences, technologies, economics and ethics.

The code consists of this introduction and three principle parts:

I. Rigour and Caution.
II. Reliability and Verifiability.
III. Independence and impartiality.

I. Rigour and caution

Rigour

A researcher's work is deemed to be rigorous when he/she applies generally acknowledged rules of his/her discipline with precision.

The researcher acts in a precise and nuanced manner when carrying out research and publishing its results.

1. Researchers must conceive and undertake their protocols as precisely as possible.
2. The researcher must check whether the tools s/he intends to use (for instance, laboratory equipment, measuring material, standard questionnaires) are adapted to the work to be undertaken and ready to be used in optimum technical conditions.
3. The person in charge of the research must exercise sufficient control over implementation of the research by his/her team members.
4. In media communications or presentations, the researcher must present his/her results in a truthful and comprehensive way.
5. A researcher assumes his/her responsibilities with regard to the development of his/her discipline and, consequently, commits oneself to participate in peer review.

Caution

A researcher's behaviour is deemed to be cautious when s/he acts with foresight and precaution and is guided by concern to avoid harm to anyone else.

1. Although the researcher's primary concern is to increase his/her knowledge, caution requires him/her not to impose unnecessary or disproportionate risks.
2. The researcher must show respect for the subjects/respondents of experiments, investigations and surveys, all the more so if the subjects are in vulnerable position.
3. As regards experiments with potential impact on the environment, the investigator must take into account the principle of precaution.
4. Responsibility must be taken for any errors or omissions made, as well as any resulting damage to third parties, and maximal compensation should be pursued.

II. Reliability and Verifiability

Reliability

Scientific researchers are to be reliable in the performance of his/her research and in the reporting, and equally in transfer of knowledge through teaching and publication.

1. Researchers will Endeavour to present their expertise, work and results as accurately as possible.
2. Data arising from observations, experiments or existing literature should not be invented nor falsified.
3. The selective omission of research results is reported and justified.
4. In their reports and communications, researchers must establish a clear distinction between the research results and the conclusions on one hand, and hypotheses and speculations on the other.
5. The general principles in terms of intellectual property must be respected.
6. Colleagues' and researchers' beliefs must be respected; ideas must not be wrongly appropriated.
7. Researchers must not simultaneously publish the same test in several peer reviewed international scientific journals.

Verifiability

Presented information is verifiable. Whenever research results are publicized, it is made clear what the data and the conclusions are based on, where they are derived from and how they can be verified.

1. The information given should be verifiable. Research must be replicable in order to verify its accuracy.

2. The publication of results is at the basis of the evaluation by peers.
3. The primary data of research project (raw research data) must be kept and made accessible during a determined and sufficient period of time.
4. The source of all educational material, including oral information transfer, is stated.

III. Independence and Impartiality

Independence

Scientific researchers operate in a context of academic liberty and independence.

1. Researchers must be able to carry out their research in complete freedom and independence since their creativity depends on it.
2. Commissioned scientific research is carried out without interventions from the sponsor during the execution of the scientific work entrusted to the researcher.
3. Commissioners and external sponsors, as well as their relations with the researcher, are mentioned in the publications of the results.
4. Commissioner institutions must elaborate clear contractual conventions, as regards, among other things, the freedom of publications and the ownership of results.
5. If a project is carried out by a team, the rights and obligations of the various parties must be specified.

Impartiality

Researchers are deemed to be impartial when they do not allow themselves to be influenced by their preferences, sympathies, interests or personal prejudices in the execution of their scientific work.

1. Researchers have the right to their opinions and preferences though they should not interfere with their scientific work.
2. If there is a risk that there could be a conflict or a confusion of interests, the researcher can only accept to carry out the research if his/her impartiality will not be jeopardized.
3. In the publication of the research results, especially the conclusions and recommendations for application that could be drawn from them, the researcher must make a clear distinction between his/her scientific judgments and his/her personal preferences.
4. By participating in peer review, the researcher should only be guided by considerations of scientific order. The confidentiality of information should be guaranteed.
5. The assessment of manuscripts for scientific journals must be carried out in an impartial manner and within a reasonable deadline.
6. Any disagreements with the scientific views of other researchers only are discussed on the basis of scientific arguments.

7. Every scientific researcher allied with the faculty publishes an actual and complete list of his side-line activities on, or accessible through, the website of the university.

References:

- Code of ethics for scientific research in Belgium, Politique, scientifique federale, 2009.
- The Netherlands, code of conduct for scientific practice, Association of universities in Netherlands, 2012.