

6. Code of Ethics and Conduct

6.1 At the time of admission, each student must sign a statement accepting the code of ethics and conduct, and giving an undertaking that:

- (a) he/she will complete his/her studies in the Institute; and
- (b) if he/she is forced to discontinue studies for any legitimate reasons, it will be done only with permission from the Deans.

6.2 If a student commits a breach of the code of conduct, he/she will be asked to leave the Institute and will not be eligible for the following:

6.2.1 Re-admission for a period of three years; and

6.2.2 Issue of grade card or certificate for the courses studied or work carried out.

6.3 On account of misconduct or unsatisfactory work, the Deans may withdraw the scholarship at any time and/or decide that the scholarship has to be refunded from the date of the last award.

6.4 In various phases, one is faced with issues of integrity and conflict of interest. Behaviour of all Institute faculty, students and research workers must be in conformance with the Academic Integrity policy that is given in the next Section.

7. Academic Integrity

7.1 Cases of ethical lapses within institutions of scientific research are increasingly being reported in the news. In this context, we need to create awareness and come up with a set of clear guidelines to maintain academic integrity. A flourishing academic environment entails individual and community responsibility for doing so. The three broad categories of improper academic behaviour to be considered are: I) plagiarism, II) cheating and III) conflict of interest.

7.2 Cases of plagiarism are the use of material, ideas, figures, code or data without appropriate acknowledgement or permission (in some cases) of the original source. This may involve submission of material, verbatim or paraphrased, that is authored by another person or published earlier by oneself. Examples of plagiarism include:

- (a) Reproducing, in whole or part, text/sentences from a report, book, thesis, publication or the internet.
- (b) Reproducing one's own previously published data, illustrations, figures, images, or someone else's data, etc.
- (c) Taking material from class-notes or downloading material from internet sites, and incorporating it in one's class reports, presentations, manuscripts or thesis without citing the original source.
- (d) Self plagiarism which constitutes copying verbatim from one's own earlier published work in a journal or conference proceedings without appropriate citations.

The resources given in Subsection 7.7 explain how to carry out proper referencing, as well as examples of plagiarism and how to avoid it.

7.3 Cheating is another form of unacceptable academic behaviour and may be classified into different categories:

- (a) Copying during exams, and copying of homework assignments, term papers or manuscripts.
- (b) Allowing or facilitating copying, or writing a report or exam for someone else.
- (c) Using unauthorized material, copying, collaborating when not authorized, and purchasing or borrowing papers or material from various sources
- (d) Fabricating (making up) or falsifying (manipulating) data and reporting them in thesis and publications.

7.4 Guidelines for academic conduct are provided below to guard against negligence as well as deliberate dishonesty:

- (a) Use proper methodology for experiments and computational work. Accurately describe and compile data.
- (b) Carefully record and save primary and secondary data such as original pictures, instrument data readouts, laboratory notebooks, and computer folders. There should be minimal digital manipulation of images/photos; the original version should be saved for later scrutiny, if required, and the changes made should be clearly described.

- (c) Ensure robust reproducibility and statistical analysis of experiments and simulations. It is important to be truthful about the data and not to omit some data points to make an impressive figure (commonly known as “cherry picking”).
- (d) Lab notebooks must be well maintained in bound notebooks with printed page numbers to enable checking later during publications or patent. Date should be indicated on each page.
- (e) Write clearly in your own words. It is necessary to resist the temptation to “copy and paste” from the Internet or other sources for class assignments, manuscripts and thesis.
- (f) Give due credit to previous reports, methods, computer programs, etc. with appropriate citations. Material taken from your own published work should also be cited; as mentioned above, it will be considered self-plagiarism otherwise.

7.5 Conflict of Interest: A clash of personal or private interests with professional activities can lead to a potential conflict of interest, in diverse activities such as teaching, research, publication, work on committees, research funding and consultancy. It is necessary to protect actual professional independence, objectivity and commitment, and also to avoid an appearance of any impropriety arising from conflicts of interest. Conflict of interest is not restricted to personal financial gain; it extends to a large gamut of professional academic activities including peer reviewing, serving on various committees, which may, for example, oversee funding or give recognition, as well as influencing public policy. To promote transparency and enhance credibility, potential conflicts of interests must be disclosed in writing to appropriate authorities, so that a considered decision can be made on a case-by-case basis. Some additional information is available also in the section below dealing with resources.

7.6 Individual and Collective Responsibility: The responsibility varies with the role one plays.

7.6.1 Student roles: Before submitting a thesis (M.E., M.Sc., or Ph.D.) to the department, the student is responsible for checking the thesis for plagiarism using software that is available on the web (see resources below). In addition, the student should certify that they are aware of the academic guidelines of the Institute, have checked their document for plagiarism, and that the thesis is original work. A web-check does not necessarily rule out plagiarism.

7.6.2 Faculty roles: Faculty should ensure that proper methods are followed for experiments, computations and theoretical developments, and that data are properly recorded and saved for future reference. In addition, they should review manuscripts and theses carefully. Apart from the student certification regarding a web-check for plagiarism for theses, the Institute will provide some commercial software at SERC for plagiarism checking. Faculty members are encouraged to use this facility for checking reports, theses and manuscripts. Faculty members are also responsible for ensuring personal compliance with the above broad issues relating to academic integrity

7.6.3 Institutional roles: A breach of academic integrity is a serious offence with long lasting consequences for both the individual and the institute, and this can lead to various sanctions. In the case of a student the first violation of academic breach will lead to a warning and/or an “F” course grade. A repeat offence, if deemed sufficiently serious, could lead to expulsion. It is recommended that faculty bring any academic violations to the notice of the department chairman. Upon receipt of reports of scientific misconduct, the Director may appoint a committee to investigate the matter and suggest appropriate measures on a case to case basis.

7.7 References:

- [1] National Academy of Sciences article “On being a scientist,”
http://www.nap.edu/openbook.php?record_id=4917&page=R1
 - [2] <http://www.admin.cam.ac.uk/univ/plagiarism/>
 - [3] <http://www.aresearchguide.com/6plagiar.html>
 - [4] <https://www.indiana.edu/~tedfrick/plagiarism>
 - [5] <http://www.files.chem.vt.edu/chem-ed/ethics/index.html>
 - [6] http://www.ncusd203.org/central/html/where/plagiarism_stoppers.html
 - [7] <http://sja.ucdavis.edu/files/plagiarism.pdf>
 - [8] <http://web.mit.edu/academicintegrity/>
 - [9] <http://www.northwestern.edu/provost/students/integrity/>
 - [10] <http://www.ais.up.ac.za/plagiarism/websources.htm#info>
 - [11] <http://ori.dhhs.gov/>
 - [12] <http://www.scientificvalues.org/cases.html>
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