

Islamabad Expressway, Kahuta Road, Zone-V, Islamabad Phone: +92 51 111 555 666, Fax: 92 51 4486705 Email: info@cust.edu.pk, Website: https://www.cust.edu.pk

# **Research Ethical Review Policy**

#### 1. Preamble

Research integrity and ethics refers to the ethical and responsible conduct of research activities, such as data collection, analysis, experimentation and reporting. It includes principles such as honesty, transparency, and respect for the rights of research participants and the integrity of research data and scholarly writing. Research ethics also deals with the concerns related to environment, wellbeing of animals or human subjects if their biological samples or medical data are used in research.

Capital University of Science and Technology (CUST) as a leading institution of higher education is committed to provide its students the academic and learning environment of highest quality following international best practices. As outlined in the University Mission statement, providing an ethical environment is crucial to achieve this goal both in academic activities as well as in research activities.

Research Ethical Review Policy is designed to ensure that academic and research activities at CUST are conducted in an ethical and responsible manner. This policy is intended to promote honesty, transparency, fairness, and accountability in all research activities, including teaching, learning, and scholarly research.

CUST has highly reputed graduate programs including Master and PhD programs wherein several mature research groups are conducting research in a variety of fields. Broad theme areas of research include:

- Engineering
- Computing
- Management Sciences
- Biosciences and Biotechnology
- Social Sciences
- Pharmaceutical Sciences

**CUST** Research Ethical Review Policy outlines the standards of conduct that researchers whether students or faculty members are expected to follow. In order to administrate the policy, it provides supportive system having essential processes to undertake all sort of researches in an effective and responsive manner abiding adherence to ethical standards (in general and to a particular subject) which are pre-requisite before the research is being allowed to proceed.

## 2. Applicability

The policy is applicable to all students, teachers, researchers and staff of CUST, who are involved in writing or publishing their research work or are involved in a research project / study that requires a pre-qualification in terms of ethical concerns

In this context a "Student" is a person who is a registered student of CUST, on the date of submission of his/her paper/work, or during the duration of a research project /study under the University umbrella in which is he/she is a participant. "Teachers and Researchers" include CUST faculty members or affiliated researchers. "Staff" is any CUST employee involved in research work.



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#### 3. Research Misconduct: Definition

All types of research misconducts are strictly forbidden. Research misconduct refers to any intentional or reckless action that deviates from accepted ethical and scientific norms in research, whether in the design, conduct, reporting, or communication of research results. The following are some examples of research misconduct:

**Fabrication:** Making up data or results that were not obtained through experiments or research.

**Falsification:** Manipulating research data or results to fit a predetermined outcome.

**Plagiarism:** Presenting someone else's ideas, words, or work as one's own without giving proper credit or citation. It can take various forms, including:

- i. Copying and pasting passages from sources without proper attribution
- ii. Paraphrasing or summarizing someone else's work without citing the source
- iii. Using images, graphs, or charts without permission or proper citation
- iv. Submitting someone else's work as one's own

**Misrepresentation:** Misleading others about the nature, scope, or significance of research findings or results.

**Redundant Publication or Self-Plagiarism:** Publishing the same results or findings in multiple publications without appropriate citation or acknowledgement. It also involves submitting one's own previously published work without acknowledging the earlier publication

**Ethical violations:** Failing to obtain informed consent from research subjects, breaching confidentiality or privacy, or engaging in other unethical behavior. Mistreatment of animals, if used in research, is also included.

**Conflict of interest:** Failing to disclose financial or other interests that may influence research findings or results.

**Failure to follow research protocols:** Ignoring established research protocols, procedures, or guidelines.

**Data manipulation:** Altering or modifying data to achieve desired results or outcomes.

**Obstruction of research:** Interfering with the research process, such as by withholding data, results, or funding.

Research misconduct is a serious offense under the rules of the University and Plagiarism Policy of the HEC. It can result in severe consequences including legal action, loss of reputation, and/or termination from service for faculty members, and academic penalties for students such as failing a course or losing a degree.

#### 4. Ethical Review Board

The implementation of Ethical Review Policy is overseen by the Ethical Review Board (ERB) which will work in coordination with the Office of Research, Innovation and Commercialization (ORIC) which will be responsible to manage all activities under this policy and keep their records. ERB is a centralized body composed of Senior Professors from different departments to tackle ethical issues from different research areas and to maintain impartiality as per international best practices. The main functions of the ERB include:



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#### 4.1. Formulation and Review of Policy and Guidelines

The ERB shall develop and review the policy, procedures and guidelines for ethical review of all kinds of research in the University. It may involve relevant experts and form sub committees to formulate and review individual components of the policy.

#### 4.2. Dissemination of Knowledge

The Board shall take steps to ensure that all University students, teachers, researchers and staff involved in research activities are aware of their ethical responsibilities while doing research along with the consequences of any misconduct. For this purpose workshops and seminars for prospective researchers and research groups shall be arranged from time to time by ORIC. Moreover, information about this Policy and the Plagiarism Policy by HEC will be readily available on University website and other University forums.

#### 4.3. Investigations into Cases of Ethical Misconduct

The board will thoroughly investigate each case of ethical misconduct or violation to this policy reported to the Board directly or forwarded to the Board by other University authorities. This also includes cases reported to HEC under the Plagiarism Policy. All types of ethical misconducts are strictly prohibited including fabrication, falsification, unauthorized use, or plagiarism of research data, as well as other forms of serious deviation from accepted research practices.

For each case of misconduct the Board will also decide about the penalty imposed on the involved researcher(s) which may include academic sanctions, loss of research funding, or other disciplinary action according to the rules of the University and Plagiarism Policy defined by HEC.

#### 4.4. Ethical Review/Audit of Research Projects / Studies

All projects / studies being conducted in the University will be liable for ethical review and audit by the Board. The ethical review will consider the ethical implications of research studies conducted at the University and determine whether or not they are acceptable on ethical grounds. The ethical review shall ensure the following:

#### i. For Project / Studies requiring Informed Consent

An informed consent will be required from concerned parties if research involves the following:

- a. Collecting input and/or information from people (responses, reaction, measurements, opinions, experiences) or input collected by someone else, including in person, online, in writing, on the phone or by any other means
- b. Using human biological materials and if the sample comes from a human body
- c. Using data about people previously collected by someone else (for example students records, commercial records)
- d. When research involves secondary data (publicly available data, publicly not available and data based on paid subscriptions)
- e. Collecting or using health information
- f. Collaboration with someone who is doing any of the above



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#### ii. For Project / Studies leading to Commercialization or Patent

It will be ensured that the Intellectual Property (IP) Policy of the University is fully followed in such cases.

#### iii. For Project / Studies on Animal Subjects

When research involves animals or animal parts, ethical considerations should be addressed such as minimizing animal pain and suffering, providing proper care and housing, and using alternative methods when possible.

#### iv. For Project / Studies impacting environment

When research has the potential impact on environment, a clearance from the University Directorate of Sustainability and Environment (DSE) will be required.

#### v. To check plagiarism in all Project / Studies

All research projects /studies and their outputs in terms of publications will be subject to plagiarism check according to the HEC Plagiarism Policy. The review will also involve investigation in the case if plagiarized work / data is reported in any project / study.

#### 4.5. Offering Help/Advice to Researchers:

The Board shall advise the researchers seeking its advice, on all matters pertaining to ethical research issues.

#### 4.6. Ensuring compliance to the Plagiarism Policy:

The Plagiarism Policy defined by the University and the Plagiarism Policy defined by HEC both will be followed in letter and spirit. ERB will also monitor and review the progress on any pending cases pending cases with the HEC or within the University in its periodic meetings.

#### 5. Administrative Procedures

The ORIC will administratively look after all the activities in connection to the procedures laid down in this policy under the guidance of ERB. All data related to this policy will be maintained by ORIC and it will ensure the confidentiality of the record.

#### 5.1. Research Project / Study Initiation Process

At the start of any research project or study, the researchers must obtain informed consent from all participants before their participation in a project/study. For this purpose a research project initiation form will be used and the Project / Study Principal Investigator (PI) (or Co-PI in case of collaborative project where PI is not from CUST) will be required to submit the form with the consents of participating parties (if required) before the commencement of the project/study. The Initiation Form will clearly explain the nature of the research work, potential risks and benefits, confidentiality, IP issues, issues related to conflict of interest and the right to withdraw from the study. If the imitation form is not properly submitted or if the requirements are not fully complied, the project approval by the University may be halted /postponed by ERB until the requirements are fulfilled.

#### 5.2. Research Project / Study Closure Process

At the conclusion of a research project / study, a project PI /Co-PI shall submit the Project completion form along with the completion report of the project. The completion report of



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the project / study, along with the research achievements, will clearly detail the source of data used in the project / study. An undertaking will also be given that misconducts regarding data collection, plagiarism of any sort, use of resources, treatment of experimental subjects (animals) and informed consent in case of Biological human parts or medical data, have not been committed.

In case of any violation observed, the case will be forwarded to an investigation sub-committee constituted by the Convener ERB. The Committee will recommend the action regarding the project according to University rules and the case will be discussed in the next ERB meeting.

#### 5.3. Process for Handling Cases of Misconduct

The cases of ethical misconduct in research shall either be reported directly of ERB or shall be forwarded to ERB by other offices / authorities of the University.

- i. Upon receipt of each case, an initial scrutiny of the case will be done by the ERB Chair who will then assign the case to at least three members review committee of relevant field.
- ii. The review committee will submit its findings to ERB Chair.
- iii. ERB Chair shall call the meeting of ERB.
- iv. The ERB Chair may invite an individual to attend a particular meeting/s to give specialist advice to the Board. Such individuals should not participate in the final decision of the Board.
- v. If misconduct is proven, the Board shall impose penalty on the guilty party which may include academic sanctions, loss of research funding, or other disciplinary action according to the rules of the University and Plagiarism Policy defined by HFC
- vi. The decision / minutes of ERB will be submitted to the Board of Advance Studies and Research (BASR) for final approval.
- vii. A researcher who is penalized by the Board due to any misconduct will have the right to appeal with in the two weeks of decision.

#### 5.4. Use of Similarity Detection Software

Similarity detection software, such as Turnitin service, will be extensively used to check plagiarism in all research theses, publications, project/study reports, and other research documents created by researchers/students of the university. Following guidelines shall be followed in the use of similarity detection software.

- i. License of similarity detection software will be acquired and procedures to ensure its productive use shall be developed.
- ii. Students/faculty members will be regularly apprised about the HEC Anti-Plagiarism Policy.
- iii. The administrator account for the similarity detection software will be held with the librarian of the University who will manage the accounts under the license.
- iv. Generally the privacy and confidentiality of the reports shall be maintained and any report shall not be disclosed to anyone except the concerned person and to the concerned authorities, if required. Only for predefined cases like similarity report of research thesis, it will be made part of thesis according to the university rules.