CAPITAL UNIVERSITY
OF SCIENCE AND TECHNOLOGY

RESEARCH ETHICS REVIEW POLICY

RESEARCH

INNOVATION

COMMERCIALIZATION

ORIC

OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION

Contents

CUST Research Ethics Review Policy

1. Introduction

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 personal 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 but not limited to Engineering, Computing, Management Sciences, Health and Life Sciences, 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.

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:

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

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

(c) **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

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

(e) **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

(f) **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.

(g) **Conflict of Interest:** Failing to disclose financial or other interests that may influence research findings or results.

(h) **Failure to follow Research Policy:** Ignoring the research policy, procedures, or guidelines.

(i) **Data Manipulation:** Altering or modifying data to achieve desired results or outcomes.

(j) **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. Institutional Ethical Review Board (IERB)

The implementation of Ethics Review Policy is overseen by the Institutional Ethical Review Board (IERB) 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. IERB 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 IERB include:

4.1 Formulation and Review of Policy and Guidelines

The IERB 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 [1] 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 new projects/studies in the University will be liable for ethical review and audit by the Board and/or its affiliated Departmental Ethics Review Committees before their commencement. For timely processing, applications must be submitted at least 2 weeks before the commencement of the project or funding application deadlines. The ethics review will consider the ethical implications of research studies and determine whether or not they are acceptable on ethical grounds as defined in this policy as well as guidelines and norms of respective field of the study. The ethics review shall ensure the following:

(a) For Project/Studies requiring Informed Consent
An informed consent will be required from concerned parties if research involves the following:

(i) 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

(ii) Using human biological materials and if the sample comes from a human body

(iii) Dealing with the vulnerable population, which is defined by the Council for International Organizations of Medical Sciences (CIOMS) in its 2016 guidelines [2] as:

- Individuals with limited capacity to consent
- Economically or socially disadvantaged groups
- Institutionalized persons
- Pregnant women and fetuses
- Children
- Refugees and displaced persons

- Patients with incurable diseases

(iv) Using data about people previously collected by someone else (for example students records, commercial records)

(v) When research involves secondary data (publicly available data, publicly not available and data based on paid subscriptions)

(vi) Collecting or using health information

(vii) Collaboration with someone who is doing any of the above

(b) For Project/Studies leading to Commercialization or Patent
It will be ensured that the CUST Intellectual Property (IP) Policy [3] is fully followed in such cases.

(c) For Project/Studies on Animal Subjects
When research involves animals ethical considerations must follow the core principles defined in the 3Rs Framework (Replace, Reduce, Refine) by Russell and Burch (1959), which defines 3Rs as:

- Replace animals with non-animal alternatives whenever possible,
- Reduce the number of animals used,
- Refine procedures to minimize pain, suffering, and distress.

While dealing with the animals, the national guidelines by National Bioethics Committee (NBC) Pakistan [4] and the internationally recognized "Guide for the Care and Use of Laboratory Animals (NRC, U.S., 2011) by National Research Council US [5], will be followed. The research on vertebrates (e.g., mice, rats, frogs, rabbits, fish, birds etc), should include humane endpoints, proper housing and environmental enrichment, to reduce suffering, use of anesthesia or analgesia where needed and personal approval who carries out procedures on vertebrates.

(d) 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. The impact on the overall health and safety environment of the university may also include adverse impacts of experimenting with animals and bio-chemicals used in the relevant research. Therefore, compliance to the national and international standards is mandatory.

(e) 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. A Turnitin originality report

must be submitted by the applicant along with other materials. The review will also involve investigation in case plagiarized work/data is reported in any project/study.

4.5 Offering Help/Advice to Researchers

The Board may 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 [1] 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.

4.7 Acknowledgement and Use of AI Tools in Research Outputs

In any research output/proposal use of AI tools must be limited to elements such as language and expression (including clarity, grammar, and spelling), completeness and consistency. AI tools cannot be used for content and structure of the scholarly writing as this can only be provided by the supervisors. Furthermore, researchers should do their due diligence to ensure the veracity of the quoted materials in their texts. In acknowledgement of the use of AI it is mandatory to include information about which tool and version was used, the date on which it was used and prompting text. In this regard, the regulations of HEC regarding the use of AI tools in research will be fully complied.

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 Departmental Ethics Review Committee:

Each department/faculty shall have a departmental ethics review committee (DERC). These DERCs shall be responsible for research ethics review at level 1 and 2 as defined in the following section. They shall collaborate with IERB and ORIC for facilitating level 3 review and all other ethics related procedures and documentation development.

5.2 Ethics Review Application Process:

(a) All projects/thesis/research studies being conducted by faculty members/researchers/ students affiliated with CUST must go through the Ethics review process.

(b) The PI of the project must submit the ethical review form duly filled with all the required details of the study for its review & approval.

(i) Level 1 pertains to self-assessment by the researcher/faculty member/research supervisor. A checklist provided by each department for its researchers will help in determining whether the research should proceed to level 2. In case it is determined by the checklist that no risk or harm to humans, other living beings and environment is involved a certificate shall be issued by the concerned DERC.

(ii) Level 2 is for research where a review is warranted by DERC as defined in the relevant field of specialization or indicated by the departmental check list wherever applicable. These may include cases where personal/biological/behavioral data (medical or psychological) of humans and animals is required for research.

(iii) Level 3 is for research projects where high risk of harm is involved for participating humans and animals as per checklist provided by the department. Level 3 applications will be assessed by IERB. Level 3 applications shall be submitted through the concerned DERC for review by IERB.

5.3 Research Project/Study Initiation Process

At the start of any research project or study, the researchers must obtain a certificate of ethics approval, and a written 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 IERB until the requirements are fulfilled.

5.4 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 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 IERB. The Committee will recommend the action regarding the project according to University rules and the case will be discussed in the next IERB meeting.

5.5 Process for Handling Cases of Misconduct

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

(a) Upon receipt of each case, an initial scrutiny of the case will be done by the IERB Chair who will then assign the case to at least three members review committee of relevant field.

(b) The review committee will submit its findings to IERB Chair.

(c) IERB Chair shall call the meeting of IERB.

(d) The IERB 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.

(e) 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 HEC.

(f) The decision/minutes of IERB will be submitted to the Board of Advance Studies and Research (BASR) for final approval.

(g) 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.

5.6 Use of Similarity Detection Software

Similarity detection software, such as Turnitin service, will be extensively used to check plagiarism and AI similarity 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.

(a) License of similarity detection software will be acquired and procedures to ensure its productive use shall be developed.

(b) Students/faculty members will be regularly apprised about the HEC Anti-Plagiarism Policy.

(c) 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.

(d) 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.

6. References:

[1] Higher Education Commission (HEC) Pakistan, HEC Plagiarism Policy, Islamabad, Pakistan: HEC, 2020.

[2] CIOMS (Council for International Organizations of Medical Sciences). International Ethical Guidelines for Health-related Research Involving Humans. Geneva: CIOMS; 2016.

[3] Capital University of Science and Technology, CUST Intellectual Property (IP) Policy, 2025.

[4] National Bioethics Committee (NBC) Pakistan, Research Ethics-Guidance Document, published by Health Research Institute, National Institutes of Health, Government of Pakistan.

[5] National Research Council, Guide for the Care and Use of Laboratory Animals, 8th ed. Washington, DC, USA: National Academies Press, 2011.

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Ethical Review Form (ERF) for Research Projects/Theses

Submission of Ethical Review form (ERF) duly filled by PI is mandatory for all projects, MS/PhD theses and FYPs at the time of proposal defense. Submission of any additional information may also be required if decided so by the concerned Departmental Ethical Review Committee (DERC).

General Information			
Date of submission			
Name of Principal Investigator/Researcher (PI) (*In case of FYPs names of all group members*)			
Contact Information (Email, Phone Number)			
Category of Researcher (*tick a box or fill*) ☐ Faculty ☐ Research Associate ☐ Ph.D. Scholar ☐ Graduate Student ☐ Undergrad. Student ☐ Other (Please specify):_____			
Project/thesis Information			
Project/thesis Title (*Summary of the Project/Thesis should be attached*)			
Department/ Degree Program			
Module Name/Number (if applicable)			
Name of supervisor for dissertations; module Convenor (if applicable)			
Ethical Commitment (*Additional details, if required in following points, should be attached as Annexures***)**			
Human participants	1. Does your research involve human participants or primary data collections from human participants? (Ref. CRERP Section 4.4(a))	Yes ☐	No ☐
	1a. Will personal information of participants be kept confidential and secure? (*If yes provide further details of how confidentiality will be ensured*)	Yes ☐	No ☐
	1b. Will participants provide informed consent before taking part in your research? (*If yes, describe the process of obtaining informed consent, including specimen of any specific consent forms used*)	Yes ☐	No ☐
	1c. Will your research involve any risks or discomforts to participants? including Health, Safety or Environmental concerns? (*If yes, describe the steps you will take to minimize these risks*)	Yes ☐	No ☐
	1d. Will you be working with vulnerable populations? (*If yes, describe how will you address ethical concerns related to this group*)	Yes ☐	No ☐
Involvement of Animals	2. Does your research involve experimentation on animals? (*If yes provide details, how will you ensure euthanasia &animal rights?*) (Ref. CRERP Section 4.4(c))	Yes ☐	No ☐
Data Collection	3. Does your research involve secondary data collection from other archives/ datasets? (*If yes, how will you ensure legal use of data and obtain informed consent of data sources*)	Yes ☐	No ☐
	3a. Does your research involve primary data collection by visiting or accessing field sites? (*If yes, how will you ensure informed consents of stakeholders*)	Yes ☐	No ☐
	Data collection Method: Interview☐ Questionnaire☐ Survey☐ Experiment ☐ Field Experiment ☐ Observation ☐ Other (Please Specify):_____		
4. What is your subjective judgment, does your project need Ethical Approval? If Yes why?			
Undertaking: I have read the CUST Research Ethical Review Policy (CRERP) and undertake to comply with the rules defined in the policy throughout the project/thesis. I further undertake that all the information given through this form is correct. (*For FYPs, all group members must sign*) **Signature(s) of the PI:**			
Official Approval:_____ **Signature and Stamp:**_____			

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