Pimpri Chinchwad Education Trust's

Pimpri Chinchwad College of Engineering

Nigdi, Pune - 44

CODE OF CONDUCT FOR RESEARCH ETHICS

Feb 2025: Version 1

Approval

The code of conduct for Research Ethics for Faculty, staff, and students (Researchers) of Pimpri Chinchwad College of Engineering (PCCoE) has been presented before the Trustees of PCET. The 'Code of Conduct' document is approved on 12th February 2025 and adopted for implementation from the date of approval. This document will replace all the previous circulars, documents, procedures, and guidelines related to the 'Code of Conduct' issued to date at PCCoE.

Any revisions, modifications, additions or deletions in this structure may only be done with a prior written approval of the undersigned.

Director
PCCoE

Date: 12/02/2025

Executive Director
PCET

Approved By

Chairman | Vice Chairperson | Secretary | Treasurer

This Code of Conduct document is presented and approved in the meeting of the Board of Governance of PCCoE on _____

Director

PCCOE

Record of Revisions

Date of revision	Description	Executive Director	Secretary, PCCOE

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CODE OF CONDUCT FOR RESEARCH ETHICS

Office of Dean R&D, Pimpri Chinchwad College of Engineering, Nigdi, Pune

1. Preamble:

The Code of Conduct document outlines the ethical standards that researchers at Pimpri Chinchwad College of Engineering (PCCoE) must follow when conducting research. It encompasses principles like conducting research with integrity and honesty, maintaining transparency, respecting intellectual property rights, managing conflicts of interest, and avoiding bias in the design, data collection, and analysis. The Code of Conduct for Research defines the PCCoE's policies and expectations regarding research practices.

"Research is seeing what everybody else has seen and thinking what nobody else has thought"

■ *Albert Szent-Györgyi*

This document should be read with other policies, procedures and recommendations published by PCCoE. Faculty, staff, and students (herein, 'the researcher') must familiarize themselves with this code of conduct. Each member of PCCoE is responsible for his/her actions and should abide by the code of conduct mentioned herein.

The researchers should comply with the following guidelines:

1) Practice high ethical standards in research activities
2) Be honest and transparent while doing research and reporting findings
3) Be aware of PCCoE's code of conduct and policies on good research practices and ensure their research aligns with these policies
4) Get facilitated by the office of Dean R&D for assistance in their research through training, resources and necessary support, if required
5) Provide valuable feedback to the office of Dean R&D to enhance the research environment on campus

2. Definitions:

Terminology	Definitions and Scope
Researcher	**Researcher means:** • All PCCoE faculty and staff, including professors of practice, emeritus professors, and visiting faculty. • UG and PG students enrolled at PCCoE who are involved in research. • Collaborators or coworkers (from external research organizations and industries) having an MoU or undertaking collaborative research at PCCoE, bound by any relevant guidelines provided by their employer. • An individual who collaborates with the PCCoE to conduct research but is not part of the institute will also be expected to abide by these guidelines.
Research Publications	**Research publication includes** • Journal articles, conference papers, monographs, pre-review and post-review manuscripts. • Book chapters, edited chapters or articles formally published with an ISBN.
Research Work	**Work created or developed to report research findings include** • Research publications, copyrights, patents • Dissertation, thesis, reports, or pre-prints authored by the researcher • Synopsis, research summaries, white papers, letters • Trade publications • Learning resources • Any document explicitly published as a research document • Blogs, social media platforms, personal websites, etc. **Exclusions:** • Questionnaires, research tools, surveys, standard operating procedures, databases, etc. • Software and code

3. The Code of Conduct for Research Ethics:

1. Author / Researcher / Inventor responsibilities

The responsibility for ethical research conduct primarily remains with the researcher. The researcher is responsible for the following guidelines and must abide by the Research Ethics/ Code of Conduct when undertaking collaborative research at PCCoE.

1. 1 Define authorship criteria clearly

Ensure author(s) meet the following criteria

a. Make significant contributions to the research study like design, implementation, manufacturing, execution, analysis, etc.
b. Agree to be accountable for the accuracy and integrity of the work.
c. Are involved in drafting or revising the manuscript.
d. Agree on the corresponding authorship and the order of authors.
e. Approve the final manuscript before submission.

1. 2 Communicate roles and responsibilities at the beginning

a. Discuss and decide the research collaborations and authorship criteria.
b. Discuss and define roles and contributions among collaborators at the beginning of the project/publication.
c. All research collaborators must agree and abide by the mutually decided terms.
d. If project/publication roles evolve, unanimously revisit and update the agreement.
e. Unanimously decide on the corresponding author or appoint a team leader to monitor progress and ensure fair authorship practices.
f. Maintain regular communication between collaborators.

1. 3 Specify the contribution statements of each author

a. To ensure transparency, many journals now require contribution statements.
b. Specify individual contributions to the research in the manuscript (e.g., introduction, conceptualization, methodology, data collection, design, implementation, experimental or numerical investigation, writing, etc.).

c. During the research process, keep written records of each research collaborator's role and contribution. There should be a written agreement on authorship which should be communicated effectively among collaborators.

1. 4 Know journal policies

a. Visit the journal homepage and read the instructions carefully.

b. Read the journal policies on corresponding authorship and order of authors.

c. Follow the author's instructions and strictly adhere to the manuscript template guidelines.

d. Understand and follow the acknowledgment guidelines of the target journal.

1. 5 Avoid unethical practices

a. Do not include individuals who have not contributed significantly.

b. Avoid assigning authorship due to pressure or seniority without merit.

c. Ensure all contributors are appropriately acknowledged.

1. 6 Misconduct in research: The researcher's responsibility

a. Unethical and inappropriate practices compromising the integrity, reliability and credibility of research will be treated as misconduct in research. Such practices may result in retraction of the articles and/or damage to the personal and institutional reputation. Engaging in misconduct can lead to loss of research funding and may result in disciplinary or legal action. Some of the misconduct practices to be strictly avoided by researchers, are listed below:

(1) Gifting or ghost authorship: Avoid crediting individuals as authors who did not contribute significantly to the article or exclude individuals who made significant contributions.

(2) Order of authors: Ensure clarity on roles, contributions and order of authors. The first author should ensure his/her highest contribution to the research work.

(3) Plagiarism, citations: Avoid using other researcher's ideas, words or work without proper acknowledgment or citation.

(4) Data manipulation: Avoid altering figures, graphs or images, manipulating data, findings or results and presenting them as genuine and authentic.

(5) Proofread: Use high resolution figures and tables with suitable labels. Check the article for spelling, grammatical and punctuation errors.

(6) Process manipulation: Avoid manipulating research materials, equipment or processes, changing or omitting data or results and misrepresenting the research.

(7) Unnecessary content: Do not include irrelevant information that does not contribute to the research; keep the article focused.

(8) Misrepresenting facts and misleading claims: Avoid exaggerating the findings and do not claim conclusions that are not supported by the study or data.

(9) Slicing research: Avoid dividing your research into smaller parts and publishing them as separate papers to increase the publication count.

(10) Self-plagiarism: Avoid self-plagiarism, i.e., reusing previously published work without proper citation.

(11) Excessive Citation: Avoid using misleading or irrelevant citations and excessive self-citations to enhance the author's or journal's impact.

(12) Inadequate acknowledgment: Failing to credit funding or sponsoring agencies, contributors, or collaborators who played a role in the research.

(13) Avoiding author's guidelines: Strictly follow author's guidelines provided by the publishing house or respective publishers. Ensure that the manuscript is formatted as per guidelines, as non compliance will result in article rejection.

(14) Reviewers Comments: Do not ignore the reviewer's or editor's comments during the review process and ensure addressing every query comprehensively.

(15) Misleading practices: Use logical structure in the article, e.g., Introduction, Methods, Analysis (experimental, numerical, or both), Results and Discussion, Conclusions, and Acknowledgment. Do not conduct research without proper approvals or consent from participants. Disclose personal, professional, or financial interests that could bias the research. Misrepresenting facts or failure to comply with the publication standards must be avoided.

1. 7 Equal access to manuscript development

a. Share drafts and revisions with all authors.

b. All authors must review and approve the manuscript before submission.

1. 8 Avoid potential conflicts of interest and address disputes fairly

a. All authors must declare any potential conflicts of interest, financial or otherwise, that may influence the research process or authorship.

b. For any dispute, resolve authorship disputes within the research team.

c. In case of failure to reach a mutual understanding or agreement on the dispute, refer to the PCCoE policies before submitting the manuscript.

1. 9 Training on research ethics facilitated by the office of the Dean R&D and peers

a. The researcher must attend the training sessions or workshops on ethical research and publication practices organized by the office of the Dean R&D and departments at PCCoE.

b. Sensitize all team members about misconduct and its consequences to create awareness.

1. 10 Record keeping

a. After the publication of the article in a peer-reviewed journal, the corresponding author must communicate the research article details to the research coordinator of the parent department and the office of Dean R&D for necessary record keeping.

b. Use standard formats, if any, and provide all the necessary information, e.g., the quartile, indexed article, year of publication, page numbers, number of authors, etc.

c. Maintain publication details in the department office and the office of Dean R&D and provide necessary information when asked.

d. Faculty members are expected to update the list of publications in their personal file and on PCCoE ERP.

1. 11 PCCoE role

a. Office of the Dean R&D shall implement and enforce policies on authorship ethics.

2. Guide / Supervisor / Research Advisor / Mentor / Principal Investigator

The role of a Guide / Supervisor / Research Advisor / Mentor / Principal Investigator (PI) is critical in fostering a culture of ethical research and ensuring adherence to the Code of Conduct for research ethics. As a research mentor, he/she must act as a role model and emphasize the importance of ethical conduct in all aspects of research. The following code of conduct outlines ethical principles and policies that researchers must adhere to under his / her guidance.

2. 1 Set standards for ethical research

a. Demonstrate ethical behavior in all aspects of research, including hypothesis design, literature review, data collection, analysis, experimental and numerical investigation, authorship, and collaboration.

b. Encourage transparency, honesty, and accountability in the research group.

2. 2 Set clear goals and expectations

a. Clearly outline the expectations from the individual researcher or the team and define roles and responsibilities for individual team members regarding research conduct, authorship and collaboration.

b. Conduct fair and transparent discussions about authorship and ensure mutual agreements about authorship. Document these discussions and communicate them to the individual or team.

c. Develop a conducive environment where researchers feel comfortable discussing ethical concerns.

2. 3 Facilitate training and guidance and ensure compliance with policies

a. Make yourself and researchers aware of ethical principles in research and the research policy of PCCoE.

b. Equip researchers with technical, analytical and communication skills required to conduct effective research.

c. Make researcher(s) aware of his/her responsibilities, as discussed in Clause 1.1 to 1.11, and educate them on misconduct, as mentioned in Clause 1.6 a.

d. Ensure compliance with SOPs, data security and protection.

e. Adhere to non-disclosure agreements, if any.

f. Strictly adhere to funding agency requirements, accurately monitoring and communicating project outcomes.

2. 4 Supervise research activities

a. Schedule timely review discussions/presentations to set the standard practices in the research group.

b. Regularly monitor research progress and guide researchers on literature survey, data collection and analysis to ensure ethical compliance. Review data to ensure that there is no manipulation.

c. Support professional development of researchers by helping them enhance their skill sets.

d. Provide suggestions/feedback/corrections on manuscripts, ensuring clarity, accuracy, and adherence to ethical writing practices.

e. It is strongly advisable to maintain a research diary for keeping records.

f. Identify and manage potential conflicts of interest within the research team.

g. Strengthen the research culture in the group by fostering open discussions about research challenges.

h. Celebrate small outcomes and success and appropriately acknowledge contributions to build a positive research culture.

i. Encourage a healthy work-life balance and provide support during challenges.

j. Ensure proper documentation of research activities, including data management, decisions, and approvals, if any. Share the data responsibly for due cognizance and research contribution acknowledgment at the department and institute level. Also share the accurate data for various reports, ranking frameworks, statutory bodies, etc., whenever required.

2. 5 Research beyond the boundaries of the lab

a. Create awareness among researchers about various online platforms such as LinkedIn, Blogs, personal websites, etc., and encourage researchers to use these platforms ethically.

b. Support publishing in open-access journals and sharing data in repositories.

c. Promote cross-disciplinary and international collaborations.

d. Share findings with the Stakeholders and promote the use of research outcomes through real-life applications that benefit society.

4. Code of Conduct for IPR Process

The code of conduct applies to all members of the PCCoE community (inventors), including faculty, researchers, students, and administrative staff involved in research and innovation activities. The inventor plays a key role in the IPR process, which involves filing patents/copyrights and publishing, granting, and commercializing patents and registering copyrights. The inventor shall prepare detailed documentation incorporating the invention's details, with thorough descriptions, drawings, and other necessary information.

This code ensures transparency, integrity, and compliance in IPR related processes and activities. Adhering to these principles safeguards the interests of the PCCoE inventors, institutions, and society while promoting innovation ethically and responsibly. The code can be applied to several key areas in the IPR process to ensure ethical, legal, and professional integrity. The following code of conduct outlines ethical principles and policies in the IPR process that inventors must adhere to.

4.1 Prerequisite for filing patent/copyright

a. Prior art search: Conduct comprehensive searches to avoid conflicts and infringement. Ensure novelty and non-obviousness of the invention.
b. Honesty and integrity: Practice the highest standards of honesty and integrity in all research and innovation activities.
c. Inventor recognition and ethics: Provide appropriate credit to all contributors while maintaining accurate and truthful representation of research findings and contributions
d. Confidentiality and disclosure: Prevent premature public disclosure of the research or invention that may impact the intellectual property.

4.2 Patent or copyright filing and related procedures

a. **Application process:**
   (1) Accuracy: Provide truthful and complete technical details.
   (2) No misrepresentation: Avoid exaggerated claims or omissions that could mislead examiners.
   (3) Legal and institutional compliance: Adhere to national and international IPR laws and policies.

(4) Novelty and originality: Ensure the invention is novel and has not been disclosed publicly before filing the patent or copyright.

b. **Disclosure of inventions**

(1) Researchers must promptly disclose any potentially patentable or copyright inventions to the institution's Patent Facilitation Cell (PFC).

(2) Disclosures should include detailed information about the invention, potential applications, and supporting data.

c. **Evaluation and decision-making**

(1) The PFC shall evaluate the disclosed invention to determine its intellectual property and commercial potential.

(2) The decision to file a patent or copyright shall be made collaboratively with input from the inventors, the PFC, and relevant stakeholders.

d. **Patent and copyright filing process**

(1) The inventor and patent agent assigned by the institute shall be responsible for preparing and filing patent or copyright applications with the appropriate patent office.

(2) Researchers shall provide the patent agent with all necessary information and support to facilitate the patent/copyright filing process.

4.3 Patent grant, post-grant and copyright registration

a. Ethical licensing and use: Ensure fair and transparent licensing agreements, avoid monopoly abuse, and comply with Fair, Reasonable, and Nondiscriminatory (FRAND) terms if applicable.

b. No fraud or misrepresentation: Any falsification during the process can lead to rejection or revocation of the patent, copyright idea, or innovation.

c. Honest prosecution: Respond truthfully to patent office queries during the examination process.

d. Responsible enforcement: Assert rights ethically without engaging in baseless patent litigation (patent trolling) and avoid abusive litigation.

e. Renewal and maintenance of patents: Keep patents active or in force responsibly by timely renewal fee payments.

4.4 Commercialization and usage

a. Responsible and fair market practices: Prevent monopolistic abuse and ensure public accessibility wherever applicable.

b. Compliance with industry standards: Align with sector-specific regulations.

c. Technology transfer ethics: Ensure fair agreements in the academic or corporate framework.

4.5 Ownership and revenue sharing

a. **Ownership:**

(1) Patents or copyrights resulting from research conducted within the institution shall be owned by the institution unless otherwise agreed upon in writing.

(2) Inventors shall be recognized and credited for their contributions as Inventors.

b. **Revenue sharing**

(1) Revenue generated from patented inventions or intellectual properties shall be shared between the institution and the inventors as per the institution's policy.

(2) A fair and transparent mechanism for revenue distribution shall be established.

4.6 Compliance and enforcement

a. The institution shall establish a committee to monitor compliance with this code of conduct.

b. Regular audits and reviews shall be conducted to ensure adherence to the principles and guidelines mentioned in the code of conduct.

4.7 Review and amendments

a. This code of conduct shall be reviewed periodically to ensure its relevance and effectiveness.

b. Amendments to this code shall be made in consultation with stakeholders and approved by the institution's governing body.