

## 1. Introduction:

Ethical practice is essential in every kind of academic activity. Any violation of basic ethics will affect the value and credibility of the activity being carried out.

This document lays down broad guidelines and norms to be followed to ensure ethical practices in Sardar Patel College of Engineering (SPCE), Mumbai.

Different areas of research work, such as work involving human or animal subjects, etc. may have their own, detailed and specific codes of ethics, but the essence of those guidelines should be aligned with the norms mentioned in this document. These guidelines should be required to be read and accepted by every member of the institution.

#### 2. Purpose:

Institute should establish the mechanism as prescribed in these regulations, to enhance awareness about responsible conduct of research activities, to promote integrity and to prevent plagiarism.

This Research Ethics policy sets out the principles for ethical research and the processes by which researchers should seek ethical approval for their research. It is expected that this policy will be read in conjunction with the relevant subject-specific and professional codes and guidance on ethics and research conduct as well as taking into account all relevant norms.

#### 3. Scope:

This Research Ethics Policy applies to all researchers at the SPCE engaged in research, and any individual who is not a member of staff or student at the institute but is undertaking research using institute premises and facilities, and/or in the Institute's name. This also applies to the work done by any faculty or student outside the institute, in collaboration with any external expert or institution/organization.



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#### 4. Objectives:

The Research Ethics Policy is intended to:

- Prevent plagiarism;
- Provide the ethical framework within which the ethical review process will operate across campus;
- Promote exemplary ethical standards in research and scholarship;
- Direct researchers to adhere to best practices relating to the ethical development, implementation and dissemination of research, creating awareness about responsible conduct of research for a thesis/ dissertation, promotion of academic integrity and prevention of misconduct including plagiarism in academic writing among student, faculty, researcher and staff;
- Establish institutional mechanism through education and training to facilitate responsible conduct of research for a thesis/ dissertation, promotion of academic integrity and deterrence from plagiarism;
- Develop systems to detect plagiarism and to set up mechanisms to prevent plagiarism and punish a student, faculty, researcher or staff of institute committing the act of plagiarism.

# 5. Awareness Programs and Trainings:

(a) SPCE shall instruct students, faculty, researcher and staff about proper attribution, seeking permission of the author wherever necessary, acknowledgement of source compatible with the needs and specificities of disciplines and in accordance with rules, international conventions and regulations governing the source.

(b) SPCE shall conduct sensitization seminars/ awareness programs every semester on responsible conduct of research, writing of thesis/ dissertation, promotion of academic integrity and ethics in education for students, faculty, researcher and staff.

(c) SPCE shall:

i. Include the cardinal principles of academic integrity in the curricula of Undergraduate (UG)/Postgraduate (PG)/Master's degree/PhD etc. as a compulsory course work/module.

ii. Include elements of responsible conduct of research and publication ethics as a compulsory course work/module in Master's and Research degree programmes.



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iii. Include elements of responsible conduct of research and publication ethics in Orientation and Refresher Courses organized for faculty and staff members of the SPCE.

iv. Train students, faculty, researchers and staff for using plagiarism detection tools and reference management tools.

v. Establish facility equipped with modern technologies for detection of plagiarism.

vi. Encourage students, faculty, researchers and staff to register on international researcher's Registry systems.

## 6. Principles:

Institute's stance on ethical issues is underpinned by the following key principles:

**Informed consent:** Those involved in research whether as participants or researchers should be informed of the nature and purpose of the research, and any potential benefits, risks, obligations or inconvenience associated with the research before they choose to participate.

**Confidentiality:** Except where explicit written consent is obtained to the contrary, researchers should protect the confidentiality and anonymity of all human participants and their data relating to them at all times.

**Justified:** Researchers should be able to demonstrate that the research they undertake is worthwhile and necessary. They should be able to show that the study will add new knowledge and not simply replicate research that already exists. The value of the new knowledge gained should out weight the potential disruption of existing systems based on old knowledge and inconvenience caused to those involved in the development and usage of such systems.

Three Rs: Research involving animals should aim to conform to the principles of Replacement, Reduction and Refinement.

**Ethical bio-prospecting:** Researching the commercial use of natural resources must be respectful of indigenous territories and cultures, and take account of relevant international agreements.



**Independence:** Researchers should not distort research design and/or findings to suit funder requirements.

Reciprocity: Research should be based on the creation of outcomes for the common good.

Accessibility: Researchers should aim wherever possible to disseminate their findings in the public domain and through learning and teaching roles at the Institute.

7. Research misconduct:

Non-compliance with the Research Ethics Policy, whether deliberate, reckless or negligent, will usually be deemed as research misconduct.

**Plagiarism:** Copying information word for word from a source, including cutting and pasting information from an electronic text, without using quotation marks and giving proper acknowledgment of the source or providing a proper citation.

- Paraphrasing, or putting into one's own words, the text of a source without providing proper acknowledgment of the source or providing a proper citation. Paraphrasing extensive portions of another source, even with citation.
- Presenting any work or part of a work or assignment that has been prepared by someone else as one's own.
- Reproducing, without proper citation, any other form of work of another person such as a graph, experimental data or results, laboratory reports, a proof, or a problem solution, in full or in part.

**Fabrication:** Fabrication means falsifying or misusing data including presenting falsified data in a paper, manuscript, or presentation and making up a source for a citation.

Cheating: Cheating is the use or attempt to use of any unauthorized assistance in any academic exercise.

**Impeding fair and equal access to the educational and research process:** including tampering with, damaging, impeding access to academic resources.

**Misrepresentation :** includes Falsifying, misusing, or tampering with information such as test scores, transcripts, letters of recommendation or other materials required for admission to and continued enrollment and access in the Institute's programs or facilities.

- Altering, forging or misusing academic records or any official Institute form regarding self or others.
- Presenting false information at an academic proceeding or intentionally destroying evidence important to an academic proceeding.
- Making a bad faith report of an academic integrity violation.

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• Offering bribes to any Institute representative in exchange for special favors or consideration in an academic proceeding.

**Facilitation:** Facilitation occurs when one knowingly or intentionally assists another person in committing a violation of any of the previous sections of Research Ethics policy.

**Role of whistleblowers:** Individuals who complain about unethical practices may find themselves in a difficult or sensitive position. A negative impact on their career is one among many possible risks following their actions. It is important to safeguard the interests of the whistleblowers against any retaliatory repercussions.

On the other hand, deliberately making false accusations is itself highly unethical and must be dealt with the norms laid by UGC/ AICTE.

# 8. Conduct of Research:

**Ethical responsibilities:** In experimental research projects there is usually a Principal Investigator (PI) mostly along with a set of co-PIs who lead the project. They should specially ensure the supervision and appropriate mentoring of researchers. Research supervisors should display the highest ethical standards when dealing with researchers and students. Potentially troublesome issues should be identified and dealt with as soon as possible with fairness and clarity.

Despite the above, all individuals participating in a research project are responsible for their own actions and should make sure these are consistent with, and uphold, high ethical standards. Unethical behavior on their part cannot be justified by the claim that they were following a mentor's instructions.

**Data management:** Steps must be taken to retain all research materials gathered (including physical and visual data), in a safe and confidential space. Particularly with experimental work, defending the publication requires properly recorded raw data to be produced. Its absence will typically be treated as suspicious. A well maintained lab notebook provides not only a permanent record of results and protocols for future publications, but also serves as critical evidence for a claim of priority in the case of patent applications and as proof of adherence to appropriate ethical standards. Tampering with or manipulating records in a laboratory notebook is unacceptable. Through the informed consent process, participants should be informed about how study data should be managed and how long it will be retained.



**Ownership:** Physical materials including lab notebooks, data sets etc. arising out of research performed at SPCE, will remain the property of Institute unless explicitly decided otherwise. The same holds for software and processes having commercial value.

**Responsible use of funds:** Efforts should be made to ensure reasonable and efficient use of resources following transparent and fair processes. Researchers must not use funding for purposes other than that specified in their grant award.

**Sharing of facilities:** Equipments installed at SPCE are expected to be shared in a collegial spirit with colleagues who require access for their own research, as long as such access does not impede the original purpose for which the equipment was purchased. In such situations, the PI can decide on details such as who actually operates the equipment and at what times, as long as sharing is willingly facilitated and transparent procedures are in place.

**Experiments involving animals:** All experiments that involve use of animal and human research subjects require ethical permission and approval. Experiments involving animals come under the purview of the guidelines of CPCSEA (Committee for the Purpose of Control and Supervision of Experiments on Animals, http://cpcsea.nic.in).

**Safety and environment:** Research activity must not endanger other people or the environment in any way. SPCE expects all its members to incorporate safety and environmental concerns into their research practices. Environmental guidelines, regulations and laws must be followed and appropriate licenses/permits and clearances obtained for the handling, storage or disposal of hazardous material. Within experimental laboratories the Institute and PIs have joint responsibility for ensuring that the work area is safe, and that research practices of the group do not endanger the research team, visitors or the public.

**Publication of research findings:** Researchers must share all research findings with appropriate parties, unless major confidentiality issues arise and subject to the guidelines mentioned above or contractual provisions.

When publishing research all reasonable steps must be taken to ensure that published reports, statistics and public statements about research activities and performance are complete, accurate and unambiguous. Researchers are responsible and accountable for the accuracy and completeness of their reports.

The nature of financial support must be acknowledged in all reports of research outcomes, both to acknowledge the support and ensure transparency.

Institute is committed to adhering to the expectations of regulatory bodies relating to open access data of publicly funded research and expects all researchers to duly comply.

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All researchers who have contributed to the development of results and dissemination should be appropriately acknowledged in accordance with the particular publication's definition of authorship.

#### Similarity checks for exclusion from Plagiarism:

The similarity checks for plagiarism shall exclude the following:

i. All quoted work reproduced with all necessary permission and/or attribution.

ii. All references, bibliography, table of content, preface and acknowledgements.

iii. All generic terms, laws, standard symbols and standards equations.
Note:

The research work carried out by the student, faculty, researcher and staff shall be based on original ideas, which shall include abstract, summary, hypothesis, observations, results, conclusions and recommendations only and shall not have any similarities. It shall exclude a common knowledge or coincidental terms, up to fourteen (14) consecutive words.

## Levels of Plagiarism:

Plagiarism would be quantified into following levels in ascending order of severity for the purpose of its definition:

- i. Level 0: Similarities upto 10% Minor similarities, no penalty
- ii. Level 1: Similarities above 10% to 40%
- iii. Level 2: Similarities above 40% to 60%
- iv. Level 3: Similarities above 60%

(action should be proposed for different level of plagiarism)

## 9. Regulatory norms: implementation, handling policy violation

## **Curbing Plagiarism**

a) SPCE shall declare and implement the technology based mechanism using appropriate software so as to ensure that documents such as thesis, dissertation, publications or any other such documents are free of plagiarism at the time of their submission.

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b) The mechanism as defined at (a) above shall be made accessible to faculty.

c) Every student submitting a thesis, dissertation, or any other such documents to the Institute shall submit an undertaking indicating that the document has been prepared by him or her and that the document is his/her original work and free of any plagiarism.

d) The undertaking shall include the fact that the document has been duly checked through a Plagiarism detection tool approved by the SPCE.

e) Each supervisor shall submit a certificate indicating that the work done by the researcher under him / her is plagiarism free.

f) SPCE shall submit to INFLIBNET soft copies of all Master's, Research program's dissertations and thesis within a month after the award of degrees for hosting in the digital repository under the "Shodh Ganga e-repository".

g) SPCE shall create Institutional Repository on institute website which shall include dissertations / thesis / papers /publications and other in-house publications.

**Implementation:** It is essential to prevent unethical practices in the first place by suitable ethical training, promoting a culture of professionalism and a clear statement that unethical behavior is not tolerated in the institution. To this end, the institution must create or adopt suitable ethics documents and impart direct ethical training to its staff through lectures and interactive workshops on a regular basis, so that the community is fully aware of these issues.

Despite all this, if ethical violations are found then they must necessarily be addressed on an urgent basis and for this purpose, it is recommended that the institution should set up a standing committee which ensures timely and impartial redressal of all grievances alleged to arise out of policy violations.

**Handling policy violations:** Institution should employ formal mechanisms and procedures for dealing with allegations of research misconduct, as well as any other kind of misconduct as described in this document, against its staff and students based on the following fundamental principles:

**Corrective action:** If a publication is found to contain plagiarism or manipulated data, the institution must ensure that a correction or retraction is published in the same place as the original paper. On the administrative side, if a decision is found to have been made based on a bias or conflict of interest, then it should be overturned and the process repeated if necessary. In general, every effort must be made to ensure that an unethical action does not succeed in propagating false knowledge or incorrect decisions.



**Punitive action:** This covers not just misconduct involving data and publication, but also harassment, discrimination and other issues covered in this document. Punitive action communicates not just to the violator, but also to society at large, that unethical behavior is unacceptable. The degree of punishment should be carefully calibrated in proportion to the offence. First-time offenders, particularly if the offence is minor or unintentional and the offender is inexperienced, may be let off with a warning. Serious, multiple or repeat offences must be treated with utmost seriousness. Large-scale ethical violations should be met with severe disciplinary action and, if appropriate, dismissal.

SPCE should endorse the following principles when implementing disciplinary procedures:

- The responsibilities of those dealing with the allegation should be clear and understood by all concerned parties.
- Measures should be in place to ensure an impartial and independent investigation and to ensure that interests of those dealing with the allegation do not conflict with these procedures.
- SPCE should safeguard the rights to confidentiality of the concerned parties.
- All concerned parties should be informed of the allegation at an appropriate stage in the proceedings.
- Anyone accused of misconduct should have the right to respond.
- SPCE to ensure that no employee who makes an allegation in good faith against another employee shall suffer a detriment, but equally that disciplinary procedures are in place to deal with malicious allegations.
- The allegation should be dealt with in a fair and timely manner.
- Proper records of the proceedings should be kept.
- The outcome should be made known as quickly as possible to all concerned parties.
- Anyone found guilty of misconduct should have the right to an appeal.
- Appropriate sanctions and disciplinary procedures should be in place for cases when the allegation is upheld.
- If appropriate, efforts should be made to restore the reputation of the accused party if the allegation is dismissed.

#### 10. Detection/Reporting/Handling of Plagiarism:

If any member of the academic community suspects with appropriate proof that a case of plagiarism has happened in any document, he or she shall report it to the Departmental Academic Integrity Panel (DAIP). Upon receipt of such a complaint or allegation the DAIP shall investigate the matter and submit its recommendations to the Institutional Academic Integrity Panel (IAIP) of the IISU.



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The authorities of SPCE can also take suo-motu notice of an act of plagiarism and initiate proceedings under these regulations. Similarly, proceedings can also be initiated by SPCE on the basis of findings of an examiner. All such cases will be investigated by the IAIP.

# 11. Departmental Academic Integrity Panel (DAIP)

i. All Departments in SPCE shall notify a DAIP whose composition shall be as given below:

a. Chairman Chairperson - Head of the Department or Nomination from Head of the Department

b. Member - Faculty from outside the any other department of SPCE, to be nominated by the head of the institute of SPCE.

c. Member - A person well versed with anti plagiarism tools, from within or outside the department to be nominated by the Head of the Institute on the recommendation of the Head of the Department.

The tenure of the members at points 'b' and 'c' shall be two years. The quorum for the meetings shall be 2 out of 3 members (including Chairman Chairperson).

ii. The DAIP shall follow the principles of natural justice while deciding about the allegation of plagiarism against the student, faculty, researcher and staff.

iii. The DAIP shall have the power to assess the level of plagiarism and recommend penalty(ies) accordingly.

iv. The DAIP after investigation shall submit its report with the recommendation on penalties to be imposed to the IAIP within a period of 45 days from the date of receipt of complaint / initiation of the proceedings.

# 12. Institutional Academic Integrity Panel (IAIP)

i. SPCE shall notify an IAIP whose composition shall be as given below:

a. Chairman – Head of the Institute.



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b. Member – Faculty other than Chairpersons of DAIP, to be nominated by the Head of the Institute.

c. Member - One member nominated by the Head of the Institute from outside the SPCE.

d. One of the Chairpersons of DAIP to be nominated by the Head of the Institute (also to act as member-secretary)

e. Member - A person well versed with anti-plagiarism tools, to be nominated by the Head of the Institute

The Chairman of IAIP shall be a different person from those of DAIP Chairpersons. The tenure of the Committee members including its Chairman shall be three years. The quorum for the meetings shall be 3 out of 5 members (including Chairman).

ii. The IAIP shall consider the recommendations of DAIP.

iii. The IAIP shall also investigate cases of plagiarism as per the provisions mentioned in these regulations

iv. The IAIP shall follow the principles of natural justice while deciding about the allegation of plagiarism against the students, faculty, researcher and staff of SPCE.

v. The IAIP shall have the power to review the recommendations of DAIP including penalties with due justification.

vi. The IAIP shall send the report after investigation and the recommendation on penalties to be imposed to the Head of the Institute or appropriate authority for further necessary action within a period of 45 days from the date of receipt of recommendation of DAIP/complaint / initiation of the proceedings.

vii. The IAIP shall provide a copy of the report to the person(s) against whom inquiry report is submitted.

## 13. Penalties:

Penalties in the cases of plagiarism shall be imposed on students pursuing studies at the level of Master's and Research degree programs and on researcher, faculty & staff of the



SPCE only after academic misconduct on the part of the individual has been established without doubt, when all avenues of appeal have been exhausted and individual in question has been provided enough opportunity to defend himself or herself in a fair or transparent manner.

# Penalties in case of plagiarism in submission of thesis and dissertations:

Institutional Academic Integrity Panel (IAIP) shall impose penalty considering the severity of the Plagiarism.

i. Level 0: Similarities upto 10% - Minor Similarities, no penalty.

ii. Level 1: Similarities above 10% to 40% - Such students shall be asked to submit a revised script within a stipulated time period not exceeding 6 months.

iii. Level 2: Similarities above 40% to 60% - Such student shall be debarred from submitting a revised script for a period of one year.

iv. Level 3: Similarities above 60% -Such student registration for that programme shall be cancelled however only after giving a opportunity to improve.

Note 1: Penalty on repeated plagiarism- Such student shall be punished for the plagiarism of one level higher than the previous level committed by him/her. In case where plagiarism of highest level is committed then the punishment for the same shall be operative.

Note 2: Penalty in case where the degree/credit has already been obtained - If plagiarism is proved on a date later than the date of award of degree or credit as the case may be then his/her degree or credit shall be put in abeyance for a period recommended by the IAIP.

Researcher shall strictly follow the ethical norms as laid by peer reviewed publishers for publishing their articles.

Note 1: Penalty on repeated plagiarism - Shall be asked to withdraw manuscript and shall be punished for the plagiarism of one level higher than the lower level committed by him/her. In case where plagiarism of highest level is committed then the punishment for the same shall be operative.

Note 2: Penalty in case where the benefit or credit has already been obtained - If plagiarism is proved on a date later than the date of benefit or credit obtained as the case may be then his/her benefit or credit shall be put in abeyance for a period recommended by IAIP.



Note 3: SPCE shall create a mechanism so as to ensure that each of the thesis/dissertation by the student, faculty, researcher or staff of the SPCE is checked for plagiarism at the time of forwarding/submission.

Note 4: If there is any complaint of plagiarism against a Head of the Department at SPCE, the matter shall be dealt with by the IAIP and a suitable action, in line with these regulations, shall be taken by the Head of the Institute after approval by the Board of Governance (BoG).

Note 5: If there is any complaint of plagiarism against the Head of Department the Chairperson or any member of DAIP or IAIP/or any of the Authorities of the Institute at the institutional level the matter shall be dealt with by the Standing Committee, and a suitable action, in line with these regulations, shall be recommended by the IAIP and being approved by the Competent Authority BoG

Note 6: If there is any complaint of plagiarism against any member of DAIP or IAIP, then such member shall excuse himself / herself from the meeting(s) where his/her case is being discussed/investigated.

## 14. Removal of Difficulty:

SPCE reserves the right to remove difficulty/difficulties in the course of implementations of these Regulations in consultation with the Deans. Interpretation to any provision of these rules as given by the Head of the Institute shall be final and binding to all.

If there is any contradiction in any of policy of the Institute, a later policy may prevail over the earlier policy.

### 15. Amendment

Institute shall review its research ethics policy from time to time so as to amend the policy whenever required to suit to the national level policies / directives issued by appropriate apex bodies.

#### 16. Publication of the Research Ethics Policy:

Institute shall to publicize the Research Ethics Policy by circulating among the research guides / supervisors, registered research candidates, teaching staff of the Institute as well as published on the Institute website in a prominent manner so as to attract the attention of the interested persons.

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