NETAJI SUBHASH ENGINEERING COLLEGE

R&D GUIDELINES

PRINCIPLES

- **Respect -** Students and faculty members participating in research should be treated with respect.
- **Good consequences -** Researchers should pursue for confirming their activities producing great consequences and also any adverse consequences are within limits of acceptability.
- **Fairness -** All research projects should be designed and implemented fairly.
- **Integrity -** Researchers should follow with recognized standards and to behave responsibly, openly and honestly towards their colleagues and the public.

RESPONSIBILITIES

- Journey for Truth
  - Research activity is a quest for new idea, with critical and methodical authentication and peer assessment. Honesty, openness, systematic and documentation are fundamental pre-conditions for achieving this target.
- Academic Freedom
  - Institution should assist in certifying the researchers' liberty in their choice of area and policy, execution of research and publication of results.
- Quality Work
  - The researcher and institution are required to possess the necessary competence, proposal related research queries, commence suitable choices of methodology and confirm comprehensive project implementation. Research should be of high academic quality.
- Voluntary Consent
  - Consent is the main rule in research on individuals or on information and material that could be linked to individuals. This consent should be informed, explicit, voluntary and documentable.
- Confidentiality
  - The researcher should avoid any use and communication of information that might inflict damage on individuals who are the subjects of research. Irrespective of the duty of confidentiality, researchers have a legal obligation to avoid punishable offences.
- Impartiality
  - Impartiality means avoidance of confusing roles and relationships in a way that might give rise to reasonable doubt concerning conflicts of interest.

- Integrity
    - The researcher is accountable for the honesty of his/her own research. Fabrication, falsification, plagiarism and similar serious violations of good academic practice are incommensurate with such trustworthiness.

- Good Reference Practice
    - Researchers must adhere to good reference practices, which fulfil requirements for verifiability and form the basis for further research.

- Collegiality
    - Researchers should express respect to others by maintaining good practices for data ownership and sharing, authorship, publication, peer review and cooperation.
- Institutional responsibility
    - The responsibility for ethical conduct rests not only with the distinct researcher, but also with the institution. The institution is responsible for confirming compliance with good academic practice and for establishing mechanisms that could address cases of suspected violations of ethical research norms.
- Availability of results
    - Openness regarding research findings is vital to ensure verifiability, for returning some benefit to the research participants and society.
- Social responsibility
    - Researchers have an independent responsibility to ensure that their research would be beneficial to research contributors, relevant groups or society in general, and for preventing it from causing harm.
- Global responsibility
    - Institution and researchers have responsibilities for communicating significant knowledge to regions.
- Laws and regulations
    - In the field of research, researchers and the institution should abide by the national & international level laws and regulations.

NSEC PERSPECTIVE

We provide guidance for the students and faculty members to do their research and education. Major focuses are as follows:
- Assist to select the domain, area, topic and problem selection
- Guidance for identified problems
- Documentation of research proposals
- Implementation and analysis of the solution
- Documentation of the finalized solution with international standards
- English correction
- Publish in reputed international journals / conferences
- Plagiarism-free thesis / dissertation writing

BRIEF ON PLAGIARISM

Plagiarism is the act of taking another person's writing, conversation, song, or even idea and passing it off as your own. This includes information from web pages, books, songs, television shows, email messages, interviews, articles, artworks or any other medium. Whenever you paraphrase, summarize, or take words, phrases, or sentences from another person's work, it is necessary to indicate the source of the information within your paper using an internal citation. It is not enough to just list the source in a bibliography at the end of your paper. Failing to properly quote, cite or acknowledge someone else's words or ideas with an internal citation is plagiarism.

PLAGIARISM TYPES

- Reordering the elements of the source text without citation.
- Copying pieces (sentences, key phrases) of the source text without citation.
- Paraphrasing without citation.
- Reproducing information that is not common knowledge or self-evident without citation.
- Incorporating an idea heard in conversation without citation.
- Using your own past material or another student's material as a new idea without citation.
- Paying for another to contribute to your work without citation.
- Using software or online translators to translate material without citation.
- Paying someone else to do your work, purchasing material, or translating from someone else's material (web-based or hard copy).

METHODS FOR AVOIDING PLAGIARISM

- Paraphrase
- Cite
- Quoting
- Citing Quotes
- Citing Own Material
- Referencing

Research: Code of Ethics

Academic researcher is expected to follow a few ethical codes; violation of any of them will be considered as research misconduct. The major research misconducts are as follows:

- Fabrication: reporting faked data or results

- Distortion: manipulation of data and results

- Plagiarism: claiming others' content or language, diagrams, figures, tables, etc. to be the own work.

- Breach of confidentiality: publication of confidential data without permission.

- Interference: deliberate creation of hurdles for co-researchers, destruction of equipment, etc.

- Violation of copyright or patent: dealt as per law of the land.

Plagiarism in an educational institution is the most common form of academic misconduct. Common misconceptions are as follows:

- Copying from Internet without citation / approval

- Changing a few words in the texts

- Copying from published work without citation

- Copying from other's unpublished works.

It is one of the most serious academic offences. Sufficient checks and measures in institutional systems are needed to be adopted as follows:

- Growth of awareness about plagiarism amongst researchers, students, faculty

- Check research articles using Plagiarism software before submission to journals, conferences, symposiums, workshops.

- Declaration by researcher that the work is free from plagiarism.

Penalties introduced for maintaining academic integrity in the institute

(a) Students

- *No credit awarded for the portion of work where plagiarism is detected*

  Authority: Academic Committee of the Department (for B. Tech / M. Tech)

- *Awarding lowest grade if the partial work is copied from others' works*

  Authority: Academic Committee of the Department (for B. Tech / M. Tech)

- *For serious act of plagiarism*

  ✓ Warning along with penal action on grades.

  Authority: Academic Committee of the Department (for B. Tech / M. Tech)

  ✓ Loss of semester

  Authority: Recommendation to the University by Academic Committee of the Department (for B. Tech / M. Tech) through College.

  ✓ Expulsion from the college

  Authority: College Administration on receipt of report from Academic Committee of the Department through College Academic Committee (for B. Tech / M. Tech) and the recommendation from the duly constituted investigation / the Disciplinary Committee of the College.

(b) Faculty and Staff

- To be decided mainly by the College Authority. Penalty may include (a) cautioning by the Departmental Academic Committee for false certification of a work based on plagiarism, (b) penalty related to service conditions.