INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500 043

RESEARCH POLICY

The purpose of the research policy is to create a vibrant research atmosphere among the faculty and researchers at institute. The aim is to inspire, guide and coordinate the initiatives of the faculty and students towards research and consultancy project works in the sciences, technology and the humanities, includes major and minor research projects, towards organizing of national and international conferences, towards presentation of research papers and their publication in reputed journals, and similar other research-related matters.

1. RESEARCH AND INDUSTRY CONSULTANCY POLICY:

This research policy provides a broad framework to guide scholarly research:

1. The faculty members are encouraged to conduct research / industry consultancy work in the focused as well as interdisciplinary areas of research.

2. Identify research areas and specify research topics of academic, practical and socially relevant significance.

3. Ensure quality, integrity and ethics in research.

4. Faculty members should utilize Turnitin plagiarism software before submitting the research publication /project proposals and its similarity index should be less than 5%.

5. Full administrative and financial support is provided to all faculty/staff/students for filling of patents/other IPR related activities.

6. The seed money for internal projects is provided by the institution to encourage initial research related activities for all young potential faculty with an aim to apply for external funding also.

7. The faculty should motivate the students towards participation in industry consultancy projects.

8. The overhead charges of the grant received from the funding agency can be utilized for the purchase of equipment, partly for travel expenses pertaining to attending conferences abroad etc.

9. Every faculty member with Ph.D. qualification shall apply for a minimum of one funded research project per year.

10. Faculty members with masters degree qualification should compulsorily register for Ph.D. and are permitted to pursue Ph.D. under part time mode in any University with full salary.

11. Stipend for full time research scholars is provided by the Institution.

12. Faculty member with Ph.D. qualification should publish minimum two SCI papers per year and Faculty with masters degree qualification should publish a minimum of two Scopus indexed paper's per year.

13. Faculty members are appreciated with appropriate monitory incentives for their Web of Science (SCI/SCIE/SSCI) & Scopus indexed journal publications.

14. The UG and PG projects are research focused and that should be published either in the SCI/SCIE/SSCI or Scopus indexed journals / Conferences.

15. Encourages faculty members to establish network with other higher institutions of learning and research organizations within India and abroad and go for MOU.

16. Registration Fee, travel, boarding and lodging expenses to participate in conferences/workshops/seminars and other professional development activities is provided by the Institution rules in vogue.

17. The Institution supports with funding to organize conferences/workshops/seminars.

18. Annual awards to the faculty members for the excellence in research grants, publications, outside world interaction is provided by the Institution.

19. Performance incentives is provided to all eligible faculty members with PhD or without PhD qualification per year based on their research performance evaluation i.e. research publications, patents and extramural funded projects.

20. Support for any other activity that can be justified by the faculty member to be of significance to carry out their research work will be provided.

2. CONDUCT OF RESEARCH:

The Institute affirms the following principles concerning research:

1. Individual researchers should be free to select the subject matter of their research, to seek support from any legal financial source for their work and to arrive at their own findings and conclusions. These findings and conclusions should be available for scrutiny and criticism of peers.

2. Research techniques should not violate established professional ethics pertaining to the health, safety, privacy, and other personal rights of human beings or to the infliction of injury or pain on animals.

3. Create an environment conducive to research by providing suitable infrastructural facilities such as space, library, lab facilities, and funding if available, based on the educational merit of the proposed research.

4. Initiate, promote and monitor the research activities in the institution by constituting an Office of the Dean of Research – consisting of the Heads of the different Departments and two members of the faculty designated by the Management. The Principal shall appoint the Dean from among this team.

3. SCOPE OF THE POLICY:

The policy and procedures aim to describe the steps instituted by the institute to curb academic dishonesty and research misconduct in the form of the following:

1. **Plagiarism:** Includes incorporating quotation(s) or paraphrasing from the work of another person(s) without acknowledgment and copying or representing or submitting the work of another person as one's own.

2. **Misinterpretation of research and publication:** Fabrication, falsification of research work, research publications as book chapters, journal articles and/or conference publications.

3. **Utilizing previously submitted work (self-plagiarism):** Submitting academic/ research related material that has been previously submitted in whole or in substantial part in another course without prior and expressed consent of the mentor/supervisor.

4. **Policy inclusion:** Documents that are included in this policy are research papers, thesis, dissertations, project reports, term papers, chapters in books, full-fledged books and any other similar work submitted for assessment/opinion leading to the award of UG / PG / PhD degree or publication

in print or electronic media by students / faculty / researchers / staff. This will, however, exclude assignments course work/essays and answer scripts.

4. AWARENESS PROGRAMMES AND TRAININGS:

Institute shall conduct sensitization seminars and awareness programmes on responsible conduct of research, thesis, dissertation and promote academic integrity and ethics among students, faculty, researchers and staff.

5. CURBING PLAGIARISM:

1. 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 plagiarism-free at the time of their submission.

2. The software used is Turnitin.

3. The mechanism as defined above (point ii) shall be made accessible to all engaged in research work including students, faculty and researchers.

4. Every student submitting a thesis, dissertation, or any other such documents, shall submit an undertaking certifying that the document has been prepared by them and it is their original work and free of plagiarism. The same must be duly certified by the supervisor too.

5. The undertaking shall include the fact that the document has been duly checked through a plagiarism detection tool.

5.1 Research Ethics:

Research ethics are important for a number of reasons. They promote the aims of research, such as expanding knowledge. They support the values required for collaborative work, such as mutual respect and fairness. They support important social and moral values, such as the principle of doing no harm to others.

5.2 Ethical Guidelines:

Researchers should be fully aware of the ethical issues involved in their work and adhere to the following basic principles:

1. Responsibility for all procedures and ethical issues related to the project rests with the principal investigators.

2. Research should be conducted in such a way that the integrity of the research enterprise is maintained, and negative after-effects which might diminish the potential for future research should be avoided.

3. The choice of research issues should be based on the best scientific judgement and on an assessment of the potential benefit to the participants and society in relation to the risk to be borne by the participants. Studies should relate to an important intellectual issue.

4. The researcher should consider the effects of his/her work, including the consequences or misuse, both for the individuals and groups among whom they do their fieldwork, and for their colleagues and for the wider society.

5. The researcher should be aware of any potential harmful effects; in such circumstances, the chosen method should be used only if no alternative methods can be found after consultation with colleagues and other experts. Full justification for the method chosen should be given.

6. The research should be conducted in a competent fashion, as an objective scientific project and without bias. All research personnel should be qualified to use all of the procedures employed by them.

7. The research should be carried out in full compliance with, and awareness of, local customs, standards, laws and regulations.

8. All researchers should be familiar with, and respect, the host culture. Researchers undertaking research on cultures, countries and ethnic groups other than their own should make their research objectives particularly clear and remain aware of the concerns and welfare of the individuals or communities to be studied.

9. The principal investigators' own ethical principles should be made clear to all those involved in the research to allow informed collaboration with other researchers. Potential conflicts should be resolved before the research begins.

10. The research should avoid undue intrusion into the lives of the individuals or communities they study. The welfare of the informants should have the highest priority; their dignity, privacy and interests should be protected at all times.

5.3 Ethical Principles:

The following is a rough and general summary of some ethical principles that various codes address:

1. **Honesty:** Strive for honesty in all scientific communications. Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data. Do not deceive colleagues, research sponsors, or the public.

2. **Objectivity:** Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity is expected or required. Avoid or minimize bias or self-deception. Disclose personal or financial interests that may affect research.

3. **Integrity:** Keep your promises and agreements; act with sincerity; strive for consistency of thought and action.

4. **Carefulness:** Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities, such as data collection, research design, and correspondence with agencies or journals.

5. **Openness:** Share data, results, ideas, tools, resources. Be open to criticism and new ideas.

6. **Transparency:** Disclose methods, materials, assumptions, analyses, and other information needed to evaluate your research.

7. **Accountability:** Take responsibility for your part in research and be prepared to give an account (i.e. an explanation or justification) of what you did on a research project and why.

8. **Intellectual Property:** Honor patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give proper acknowledgement or credit for all contributions to research. Never plagiarize.

9. **Confidentiality:** Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

10. **Responsible Publication:** Publish in order to advance research, not to advance just your own career.Avoid wasteful and duplicative publication.

11. **Responsible Mentoring:** Help to educate, mentor, and advise students. Promote their welfare andallow them to make their own decisions.

12. **Social Responsibility:** Strive to promote social good and prevent or mitigate social harms throughresearch, public education, and advocacy.

13. **Non-Discrimination:** Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors not related to scientific competence and integrity.

14. **Competence:** Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in science as a whole.

15. **Legality:** Know and obey relevant laws and institutional and governmental policies.

16. **Human Subjects protection:** When conducting research on human subjects minimize harms and risks and maximize benefits; respect human dignity, privacy, and autonomy; take special precautions with vulnerable populations; and strive to distribute the benefits and burdens of research fairly.

6. RESEARCH SEED MONEY:

The Purpose of the Research Seed Money is to create a vibrant atmosphere of research among young faculty and researchers.

Objectives of Seed Money Policy:

1. To create an enabling environment in order to foster a research.

2. To nurture an environment of undertaking socially useful research with potential for commercialization.

3. For creating opportunities for teachers of the institute to involve themselves in real life research projects and obtaining sponsorships.

4. To development a strong and successful external proposal to the targeted funding opportunity.

5. To test a novel idea and to generate preliminary results before submitting proposals to external agencies.

6. To promote inter-faculty collaboration in emerging areas.

7. To promote generation of IPR and product/process development.

8. To attract and retain talent.

Seed Grant Proposal submitted should include the following:

- Research Plan (upto, eight pages).

- Introduction and Seed Grant Project Description.

- Describe the proposed research or creative activity

- Include a summary of relevant literature, specific objectives / primary questions to be addressed, expected outcomes / products, procedures and methods utilized, novel / cutting-edge aspects of the project, and broader impacts of the research. Provide an explanation of possible pitfalls / risks of the project and how these will be mitigated

- Relevance of the Proposed Research or Creative Activity to the PI's Career

- Include a statement about how the seed grant and the external proposal will advance the career of the PI.

- Relationship of Seed Grant Project to External Funding Goal.

- Explain how the seed grant's project outcomes / products are relevant and necessary to the development of a strong and successful external proposal to the targeted funding opportunity. Describe how the seed grant work will enhance or be incorporated into the external proposal. In addition, describe how a less than satisfactory outcome of the project will be mitigated in the external proposal. Seed projects targeting DST/AICTE/ISRO/DRDOetc., may want to consider involving Extension specialists to help improve the Broader Impacts requirement of the external proposal

- Management Plan.

- Describe the scope of work and responsibilities of the key personnel of the seed grant project. If the project includes multi- or interdisciplinary partnerships, describe how data, responsibilities, and information will be coordinated and how communication will be managed. Provide a timeline for major activities, including the preparation and submission of the external proposal. Data management is also needed.

- References (required, no page limitation).

- Budget.

S. No	Item	Amount (Rs)	Justification
1	Consumables (Donotexceed20% of the total amount)		
2	Equipment		
3	Travel (Donot exceed the 10% of the total amount)		
4	ResearchLiterature		
5	Other(specify) (Donotexceed10% of the total amount)		
6	Contingency		
Total			

- Appendices (required, no page limitation).

- Appendix A: Curriculum/Curricula Vitae (required, 2-page maximum per person). CV information is required for the PI and any co-Is. Include as part of the CV a record of grant writing experience and role (PI or co-I).

- Appendix B: Conflict of Interest (required) Disclosure of any potential conflicts of interest is required for the PI and any co-Is

- Appendix C: Results of Previous Seed Funding (if applicable). Provide a one-page description of the results of any previous research seed funding the PI has received.

7. INCENTIVES FOR SPONSORED RESEARCH PROJECTS AND INDUSTRY CONSULTANCY PROJECTS:

Research & Development is imperative for the inclusive intellectual growth. It is often the first critical step in innovation and drives technological improvements which lead to Science and Technology (S&T) growth. The Institute of Aeronautical Engineering is continuously encouraging, supporting and promoting R&D activities towards the achievements by establishing incentive policy as follows:

1. An incentive of Rs. 30,000/- shall be granted for the publication in both unpaid refereed Scopus and SCI/ESCI/SCIE indexed journal.

2. An incentive of Rs. 20,000/- shall be granted for the publication in unpaid refereed Scopus indexed Journal.

3. In case of paid refereed Scopus indexed journal, the incentive is equivalent to the publication fee subjected to the maximum of Rs. 15,000/-.

4. Rs.2000/- shall be granted per faculty for every citation in journals indexed SCI/ESCI/SCIE/Scopus with an impact factor greater than or equal to 0.5.

5. A registration fee subjected to a maximum of Rs. 10,000/- is granted along with Rs. 10,000/- as incentive for Scopus/SCI Indexed conference.

6. For book publications, the first author gets incentive of Rs. 5000/-.

7. The faculty who gets sponsored research project from any funding agency like DST / AICTE / UGC etc., will be given 7% (3% on submission of first utilization certificate, another 2% on second utilization certificate and 2% on third utilization certificate) as incentive during ongoing period. In addition, 5% of sanctioned grant after successful completion and submission of project completion report to the respective funding agency.

8. The faculty who got sanctioned with the Government funded scheme will be given a overall incentive of 3% of the total grant received, after successful submission of utilization certificate along with the scheme completion report to the respective funding agency.

9. In the case of Utility Patent, faculty and students shall get incentive of Rs. 30,000/- each after their patent get published, granted, and commercialized. The overall incentive granted to the faculty during patent grant process for institute owned utility patent is Rs. 90,000/-.

10. In the case of Design Patent, the incentive of Rs.30,000/- is given after patent gets published, granted and commercialized.

11. In the case of Copyrights, Institute grants copyright incentive for computer software only. The incentive of Rs.10,000/- is provided after the copyright gets published, granted and commercialized.

12. Seed money for internal project leading to innovation / product development / external funding will be sanctioned to an individual / team to the tune of upto Rs. 5,00,000/-.

13. Revenue generated through consultancy and testing services is shared between institution and individual / team in the ratio of 60:40 respectively.

14. Revenue generated through commercialization of the Patent is shared between institution and author(s) in the ratio of 60:40 respectively.

15. TA / DA for project presentation is given to every faculty, if not given by funding agencies.