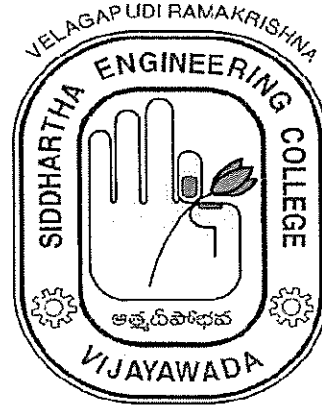


RESEARCH POLICY



**VELAGAPUDI RAMAKRISHNA
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(Autonomous)**

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RESEARCH POLICY

With a view to crystallizing the concepts and standardizing the procedures related to Research & Development, Innovation, etc, this Research policy is developed which enshrines the following

1. Prelude
2. Genesis
3. Awareness Raising
4. Objectives
5. Promotion of Research
6. Fundamental Administrative Procedures of Sponsored / Collaborative Research
7. Bringing forth Outcomes of the Sponsored and Collaborative projects
8. Research Centers and Centres of Excellence
9. Research by Seed Funding
10. Nature of Assistance
11. Incubation Centre
12. Intellectual Property
13. Incentives for Publications
14. Code of Ethics for Research
15. Review of the Policy
- 15A. Post Script
16. Annexure-A

1) Prelude:

The term 'Advanced Research' in the Vision statement complemented by the expression 'a vision for Exploration and an Insight for advanced enquiry' in the Mission of the college not only stand ample testimony for the pronounced awareness almost since inception but also related to a stated/ overt commitment of the institution regarding the high quality research and chaste innovation which are conceptually resourceful and tangibly productive.

2) Genesis:

With the above established ideals, the quintessence of the pedagogic processing has not only envisaged but also embarked on enlisting the potentialities while acquiring the relevant attributes that contribute to Research, Innovation and Extension with considerable standards in technical education. In order to scale greater heights in the domain of research, the college identified the need to put in concerted efforts by bringing the individual, special interest/ thrust area/ group, funded, collaborative and semi-collaborative including commercialization process and product based research under an umbrella which led to the establishment of an R&D cell in the year 2014 with Principal as Chairman, Dean(R&D), two members of faculty and one nominee from industry /research organization as members. The R&D cell promotes and enables the faculty and students to carry out research activities in the respective domains and interdisciplinary areas with a set of guidelines.

3) Awareness Raising:

The institute undertakes a wide range of activities that broaden the horizons of knowledge and expertise in Engineering, Technology, Physical Sciences, Humanities and Social Sciences to create and sustain such environment which is conducive for research and innovative pursuits of the students and faculty including special awareness sessions on research activities.

4) Objectives

This Research policy provides a broad framework to guide and promote research, consultancy and Innovations while upholding the code of ethics.

The main objectives of the research policy are as follows:

- To promote and accelerate quality research within the institute and in collaboration with industry, other institutes and R&D organizations.
- To promote Innovation and consultancy activities through development of Research Centers and Centers of Excellence.

- To integrate Teaching and Research.
- To promote generation of intellectual capital.
- To activate Incubation centres and see that the products so emanate march ahead towards commercialization
- To ensure integrity, quality and ethics in research.

5) Promotion of Research

As has been presented, the institute provides necessary facilities and a promising environment to promote research, consultancy, innovation and intellectual capital. Following are some of the initiatives needed to promote research culture among the students and faculty.

- Taking the quality research undertaken by students and faculty individually/ small internal group/ semi-collaboratively into cognizance and rewarding as per the norms laid down (Details –section-13)
- Thrust area identification in consultation with relevant functionaries and a focused research activity for intra-institutional/ inter-departmental collaborative tasks.
- Up gradation and expansion of areas and arenas of research from time to time based on local, national and global technological changes.
- Fortifying the resource base including advanced books, high rated journals and periodicals in the central library such that exposure of the students and faculty stands at expected level.
- Inclusion and up gradation of research component in the UG and PG curriculum in several forms which include Term paper with dynamic progression, field projects, Research methodology related tasks, etc.
- Encouragement offered to the PG students to involve in academic, industrial and sponsored projects through specific and documented procedures.
- Conceptual and administrative support including academic flexibility offered to the faculty to take up sponsored and collaborative projects as investigators
- Encouraging Intra-institutional research by not only providing necessary facilities but also seed money.
- Extending necessary support through a procedure to apply for Patents

6) Fundamental Administrative procedures for executing Sponsored / Collaborative Research

- The Member(s) of faculty prepare(s) the proposal for undertaking sponsored/ collaborative projects with relevant documents as per the format issued by the relevant agencies
- A departmental committee reviews the proposal and forwards to the principal for approval leading to the submission to the funding agency.
- Consequent on the sanction of the project and release of funds, the principal investigator of the project creates a new bank account and maintains a register with proper entries of purchases and other expenses involved in the project.
- The PI appoints the required number of project associates by means of an advertisement and payment for such associates is made based on the budget approval of the funding agency.
- The PIs present the progress of the project periodically to a Review Committee comprising Principal, Dean R&D, and other subject experts.
- The PIs prepare a draft Utilization Certificate (UC) certified by both the finance officer and the Principal of the college which gets duly audited by a qualified Chartered Accountant and signed before submitting to the funding agency.
- Any expenses for items not covered or permitted in the project are met by the college from the Institute research funds with permission from the principal.

7) Bringing forth Outcomes of the Sponsored and Collaborative projects

- The outcomes in the form of formulae put forward / observations made/ products/ prototypes developed / process invented in/ through Sponsored and Collaborative projects are published in high rated journals and relevant endeavors are made for patents necessary support gets extended by the institute.
- As far intra-institutional research is concerned, the Faculty are encouraged to come up with upgraded proposals to work in collaboration with premier institutes like IITs, Central universities and other engineering institutions having research interest.

8). Research Centers and Centres of Excellence

- Putting in sincere endeavours by each of the degree awarding departments to get recognized by the affiliating university as Research Centre with PhD scholars being admitted and making sustained efforts for fruitful research outcomes
- Institute provides necessary facilities required to carry out the non-funded research work in the research centers.
- Relevant efforts are made by each department to excel in one focused area and get recognized as 'Center of Excellence'. The institute supports in this process through research funds.
- The institution encourages both Unitary and Hub-and Spoke Model Multi-specialization Centres as far as the Sponsored Centres of Excellence are concerned. Permissible infrastructural and such other support systems are arranged / offered for the purposeful running of the said centres.

9). Research by Seed Funding

- The seed funding is the system in which Young faculty are encouraged to undertake research with certain basic grant released by the institution to procure new equipment / instruments, etc or to meet expenses on fabrication .
- The very concept or process is to offer a fundamental hand-holding in research in order that the young faculty expand their proposal and obtain funded projects.
- In addition, Student projects leading to innovative model development are financially supported either partially or fully based on a departmental project review committee report.
- Separate budgetary proposals are made to meet the above financial requirements in the form of 'Seed Funding for Research'.

10). Nature of Assistance

It is proposed to allocate the interest accrued on the research foundation deposits per year for R&D in the following manner and can be enhanced in future depending upon funds.

- a. Major Research Project pursued by a group of teachers in Engineering & Technology/Sciences/Humanities – upto Rs. 5.0) lakhs per annum. (Minimum project assistance of Rs. 100,000/- per annum is envisaged under this head and up to 5 such projects are possible). Preference shall be given to projects for Rural Development and product oriented R&D.

- b. **Minor Research Project** pursued by a group of teachers/students in Engineering & Technology/Sciences/Humanities – upto Rs. 1.5) lakhs per annum. (Minimum project assistance of Rs. 10,000/- per annum is envisaged under this head and up to 15 such projects are possible. For students there should be a Faculty supervisor who will be responsible for the grant)
- c. **A Teacher/Student Presenting a paper** abroad in a reputed International conference supported by IEEE,ASME,ASCE or any other equivalent reputed professional societies approved by R&D committee, VRSEC – upto Rs. 50,000/- per annum. (Minimum funding of Rs. 25,000/- per annum is envisaged and at the most two faculty members can avail this opportunity).
- d. **Project work Leading to Patents** – Up to Rs.2.0 lakhs per patent research project per annum and this should lead to product development and patent application.

11). **Incubation Centre**

Incubation Centre of the college endeavours to enable the young minds to transform their innovative ideas with multidisciplinary expertise into viable business propositions which serve the local problems. The alumni and local industries are invited to come up with their ideas which lead to the startups .The primary objectives of the Incubation Center are:

- To create physical infrastructure, space and support systems necessary for business incubation activities.
- To facilitate networking with professional resources, which include mentors, experts, consultants and advisors for the incubate companies.
- Introduction of new value added courses and conducting workshops and training programs that promotes students towards innovation and entrepreneurship.
- Providing links to higher education resources that help promote and facilitate knowledge creation, innovation and entrepreneurship activities.
- Flexible innovation and incubation policy that meet the sudden changes in commerciality of the product.
- Awarding new and innovative ideas and rewarding participation in commercialization of product.

12). **Intellectual Property**

The college aims at strengthening its research leading to filing patents.

- Submission of Patent application to the relevant registry by the faculty and/or students is undertaken consequent on screening by select committees constituted by

the respective Heads and Principal at the Department and institute levels, respectively.

- Incorporating Institutional affiliation is mandatory for submission of Patent claims/proposals either to Indian offices or to overseas establishments/ registries
- The institute bears all the expenses for filing application.
- Patent filing by researcher is rewarded.
- In case of Commercialization of the patent, the revenue so generated is shared by the college and the Researcher on a ratio fixed from time to time.
- The institute IPR policy is given in **Appendix A**.

13). Incentives for Publications

The institute encourages quality research in different fields of engineering and in particular, the thrust areas identified by the departments. As part of this, the quality research work done by faculty, scholars and students is recognized and the institute prepared a scheme for providing incentives to quality research publications and involvement in sponsored projects and other related research activities. The details of the incentives are given in **Appendix B**.

14). Code Of Ethics For Research

- To ensure academic honesty, the institute doesn't entertain fabrication, falsification and misrepresentation of data.
- It is the social responsibility of the researcher to strive to promote social good and prevent or mitigate social harm through research and public education.
- Faculty and students are encouraged to acquire awareness about government policies, relevant laws and institutional rules related to the research work.
- The intellectual property is respected by honoring copyrights, patents and other intellectual property.
- Plagiarism is checked with relevant tools and curbed. A maximum of 30% match/similarity in the plagiarism check is allowed in the student project reports/ theses
- The institute anti plagiarism policy report is given in **Appendix C**

15). Review of The Policy

- Policies regarding Research, IPR, and Innovation and Incubation are reviewed once in 3 years to incorporate global changes and also for improvements in the process.

15 A . Post script:

This policy stands recommendatory but not sacrosanct pertaining to incorporating dynamic changes and need based modifications.



Principal

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