

RESEARCH AND CONSULTANCY POLICY

Vision

To become a globally recognized Institution in Engineering Education, Research and Entrepreneurship.

Mission

- ❖ Accomplish quality education through improved teaching learning process
- ❖ Enrich technical skills with state-of-the-art laboratories and facilities.
- ❖ Enhance research and entrepreneurship activities to meet the industrial and societal needs.

Promotion of Research

Research centres

- ❖ The institution shall establish recognized research centres of the affiliating University or any other agency/organization in every department.

Research Committee

- ❖ The Institution shall have a research committee to monitor and address the issues of research.
- ❖ The committee shall consist of the Principal, Director-R&D and senior faculty members.

The composition of the Research Committee is given below.

S.No.	Name of the research committee member	Department and position
1.	Dr. M.Venkatesan	Principal
2.	Dr.K.Sathiyasekar	Director-R&D, Professor - EEE
3.	Dr.Sivakumar	Associate Professor - Mechanical Engg.
4.	Dr.A.Murugesan	Associate Professor - EEE
5.	Dr.S.Premalatha	Assistant Professor - ECE
6.	Dr. Sathya	Assistant Professor - CSE
7.	Ms. Dharanya	Assistant Professor - IT
8.	Mr.S.Madhan	Assistant Professor - English
9.	Ms Brindha	Assistant Professor - BME
10.	Dr Mahalakshmi	Professor – CSE (Cyber Security)

- ❖ The committee will encourage the faculty members to enrol for Ph.D. programmes in their fields of interest.
- ❖ They will also be assisted to apply for minor/major research projects.

Objectives of the research committee:

- ❖ To motivate and develop research culture among faculty and students.
- ❖ To establish Research Centre in every department.
- ❖ To submit proposals to the funding agencies for conducting National, International Conferences, Seminars, Research Projects and Workshops.
- ❖ To motivate the members of faculty to register for Ph.D. programme.
- ❖ To assist faculty and students in filing patent applications.
- ❖ To motivate the faculty to take up research and consultancy projects.
- ❖ To motivate faculty and students to publish papers in collaboration with industry.
- ❖ To inculcate entrepreneur culture among students

Research Activities

To impart the research culture in the institution the following measure are planned:

- ❖ Create centers of research in various areas of research.
- ❖ Monitoring of Centres of excellence
- ❖ Establish collaboration with other universities, public and private sectors and identify R&D projects including consultancy services which could be undertaken at the institution.
- ❖ Develop and maintain close ties with industry and government to identify thrust areas for developing projects with significant potential for future growth and value.
- ❖ Establishing MoUs and Agreements with R&D Centres and Institutes for student exchange, faculty exchange, project collaboration.
- ❖ Provides Review for proposals and appoint review committee and scrutiny committee.
- ❖ Establishing Separate clusters for DST, MHRD, DIT, MCIT, DBT, and Industrial sponsored projects to cater to the needs of the PIs.
- ❖ IPR & Patenting Management
- ❖ Organize seminar by the faculty members in an activity called TASKS (Teachers Associated Seminar for Knowledge Sharing) to share and discuss the scope for inter-disciplinary research every fortnight.
- ❖ Sponsor faculty members to attend conferences and workshops on emerging technologies in order to secure research projects in those areas.
- ❖ Promote, by maintaining highest standards of academic integrity, interdisciplinary research, faculty entrepreneurship and formulate related policies
- ❖ Pooling of intellectual wealth viz., faculty, students and research scholars to acquire Institute Research Awards and matching grants
- ❖ Research cultivation and culturing for International Benchmarking to attract International inputs for achieving International outputs

- ❖ Collecting and maintaining the relevant Data - Publishing R&D Report bi-annually
- ❖ Establishing Research lungs, incubation parks, technology lawns, design villages and centres of excellence to house variegated research infrastructure.

Facilitation of smooth progress and implementation of research schemes / Projects.

- ❖ Research is an important critical success factor in grooming the college to the next phase of development.

Autonomy to the principal investigator

- ❖ Principal investigator will enjoy the autonomy as he/ she is the prime person to implement the project.
- ❖ The Head of the departments will cooperate with the principal investigator whenever needed.

Timely availability or release of resources

- ❖ The institution will support and ensure the timely availability of resources for the execution of the projects as per plan.

Adequate infrastructure and human resources

- ❖ The research centres of the college will be equipped with adequate work space and computing facilities with internet connection.
- ❖ Support from administrative staff to the investigators of the research projects will also be provided.

Time-off, reduced teaching load, special leave etc. to teachers

- ❖ Faculty members who pursue research will be provided with privileges such as on duty, paid leave and permission as required.
- ❖ Their teaching workloads will be adjusted and reduced if necessary, so as to enable them to finish their research work in time.

Support in terms of technology and information needs

- ❖ The departments shall provide facilities such as personal computer with internet connectivity, Wi-Fi, LAN, on-line and digital resources, access to e-journals etc.
- ❖ Faculty members will be encouraged to procure various research related software, technical books, equipment, etc. to facilitate their research activities.

Facilitate timely auditing and submission of utilization certificate to the funding Authorities.

- ❖ The service of the administrative staff will also be extended for the preparation and submission of utilization certificates on time.

Developing research culture and aptitude among students.

- ❖ Research committee will continuously monitor and create opportunities for the students to participate in various research activities.
- ❖ Students will be engaged in the execution of research projects and preparation of Research proposals.
- ❖ Students will be motivated to publish their final year projects in journals / Conferences.
- ❖ College will conduct “Innovative Project Exhibition” annually and encourage Students to form teams design and develop innovative projects and demonstrate during the exhibition. As a result, students can write papers for conferences and file Patents also.
- ❖ KSRIET will organize conferences, workshops and seminars through which students will be motivated to participate actively in research related activities.
- ❖ Students will also be motivated to participate in various technical events and present papers in national conferences organized by other institutions.
- ❖ Research awareness programme will be organized for the students to understand the steps involved in research process.
- ❖ Students will also be encouraged to interact with eminent researchers (Academics and Industry) during the programmes organized.
- ❖ The Institution will encourage faculty members to submit research proposals to various funding agencies.

Development of prioritized research areas and the expertise.

- ❖ The institute will encourage faculty to enrich their knowledge to be experts in their field of interest by providing the required support.
- ❖ Prioritized research areas will be continuously identified and published in various forums.

Attracting researchers of eminence to visit the campus and interact with teachers and students.

- ❖ Institution will invite the researchers of eminence to the campus and arrange to interact with teachers and students.
- ❖ KSRIET faculty members will be permitted to visit the industries and interact with eminent people related to their research issues.

- ❖ KSRIET will conduct seminars, workshops and international conferences frequently and arrange eminent research scholars to interact with students and faculty on research activities during the programme.

Sabbatical Leave for research activities.

- ❖ Members of faculty will be permitted to avail sabbatical leave to continue their research work.

Awareness, advocating/ transfer of relative findings of research of the institution and elsewhere to students and community.

- ❖ Details of research publications and patents of the institution will be uploaded in KSRIET ERP software. Members can login and view the documents related to research contributions.
- ❖ The details of patents applied will also be displayed in the department research centres.
- ❖ The Central Library will increase the subscription to National and International Journals to bring articles related to research outside to KSRIET faculty and students.
- ❖ All the departments will conduct conferences and seminars to gain knowledge on emerging technologies in different sectors and to inculcate research culture among the students.
- ❖ Working models of the projects of students will be displayed in their departments.
- ❖ In all KSRIET labs, students will be encouraged to conduct additional experiments beyond the prescribed syllabus; as an initiative to create awareness on research among students.
- ❖ Department newsletters will be published in regular intervals to advocate research achievements of the departments among students and faculty.
- ❖ Students will be encouraged to shoot videos of their research projects and upload in internet for public viewing. (www.youtube.com).
- ❖ The institution will encourage the faculty members to publish research articles.

Resource Mobilization for Research

Budget for research.

- ❖ The Institution and departments will have an exclusive budget head for research activities and funds will be allocated for purchase of necessary equipment, subscription of research journals and development of research centres.
- ❖ The Management will also provide grants to organize conferences and seminars by various departments.

Seed money for research

- ❖ The Institution will provide with a seed money of Rs. 1,00,000 to each department every year.
- ❖ This seed money is to be used to initiate the research activities or to purchase equipment.
- ❖ Departments shall submit the proposals and the research committee will recommend to the top management for sanctioning of funds, over and above the seed money wherever required.

Financial provisions to support students' research projects.

- ❖ HODs can encourage the students to do innovative research projects by submitting proposals to appropriate funding agencies such as TNSCST.
- ❖ In case of worthwhile projects, the HODs will recommend to the top Management for a share of funding project.
- ❖ Alumni will also be advised to provide financial support for research projects of students.

Inter-disciplinary research.

- ❖ Research and Development Cell of the institution will organize research seminars related to inter-disciplinary research and communicate the information about the topics of presentation to the faculty members through circulars. Faculty members will be permitted to attend the seminars and interact with eminent researchers/ scholars for further knowledge on the subject.
- ❖ The institution will discuss about inter-disciplinary research in the following forums.
- ❖ Weekly seminar by the faculty members in an activity called TASKS (Teachers Associated Seminar for Knowledge Sharing) to share and discusses the scope for inter-disciplinary research.
- ❖ Communication to all the faculty members through group emails.
- ❖ Discussion in Research Committee meetings.
- ❖ During timeline presentation of research scholars.

Optimal use of various equipment and research facilities of the institution by its staff and students.

- ❖ The institution is committed to provide good infrastructural facilities for research related activities. The facility will be freely made available to students and faculty. The optimal usage of facilities will be ensured by effective communication among departments.
- ❖ Seminars and workshops will be conducted by focusing on the application of different types of specialized equipment and software.
- ❖ Training and demonstration will also be carried out using these instruments during workshop for the participants.
- ❖ The laboratory and library facilities available in the campus will be utilized by the faculty and students involved in research with no time restriction.

- ❖ Wi-Fi internet connectivity, software, computing facilities, and electronic equipment will also be used freely by students and faculty members.

Special grants or finances from the industry or other beneficiary agency for developing research facility.

- ❖ The institution will encourage departments and members of faculty to seek support from industry and funding agencies to develop research facility and carry out research projects.

Support provided to the faculty in securing research funds from various funding agencies, industry and other organizations.

- ❖ The faculty members will be given support and assisted in securing research funds from various funding agencies.
- ❖ The research committee will guide about the availability of funding opportunities from DST, AICTE, TNSCST, MHRD, CSIR, DRDO, ISTE etc.
- ❖ Information about the request for proposals will be circulated among all faculty members.
- ❖ Members of faculty will be deputed to workshops and conferences on research proposals and funding agencies.
- ❖ Faculty members will be deputed to other institutions to know about research projects executed by them.
- ❖ Faculty members will also be sponsored for conferences and workshops on emerging technologies in order to secure research projects in those areas.
- ❖ On duty will be provided for industrial visits related to research. Workload will be reduced wherever required to expedite the projects judiciously.
- ❖ Travel and other expenses towards project proposal presentation will be sponsored by the institution.

Research Facilities

Research facilities available to the students and research scholars within the campus.

- ❖ Research centres of the institution.
- ❖ Laboratories in various departments.
- ❖ 'Industry Supported Laboratories (ISL)' established in every department in association with leading industries.
- ❖ High end computer systems.
- ❖ Library facilities. Digital section, E-journal subscription and back Volumes of library.
- ❖ Online access of IEEE journals and E-Journals.
- ❖ Internet connectivity and Wi-Fi facility.
- ❖ Video-conferencing facility.
- ❖ Administrative support will be extended in procurement, servicing and Utilization Certificate submission for the funds received.

Planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research.

- ❖ The areas of research will be identified by the Research Committee and the Budget will be prepared for research activities. In addition, all the departments will be encouraged to submit proposals to funding agencies to obtain research funds.
- ❖ The institution shall develop a strong relationship with leading industries which contribute to its efforts in establishing research facilities.
- ❖ Long term plan will be put in place to establish Centres of Excellence in emerging areas.
- ❖ Faculty members will be encouraged to apply for financial assistance from the government and other funding agencies which would help to improve the existing infrastructure.
- ❖ Faculty and students will be encouraged to interact with industries for exploring the avenues of collaborative research.

Research facilities made available to the students and research scholars outside the campus/ other research laboratories.

- ❖ Industries will be requested to permit KSRIET students to do research-oriented projects in their premises.
- ❖ Faculty members registered for Ph.D. programme may avail the Anna University's research facilities.
- ❖ KSRIET has signed MOUs with industries and they permit KSRIET members of faculty to carry out research using their facility.

Library/ information resource centre facilities available specifically for the researchers.

- ❖ OPAC software search facility to find out the availability of books in library.
- ❖ The Central library furnished with specialized collections of Books, Journals covering Engineering, Technology, Science and Humanities.
- ❖ National, International and IEEE e-Journals subscribed by library.
- ❖ Books available in department library.
- ❖ Library facility available in hostel.
- ❖ NPTEL video lectures available in NPTEL Server.
- ❖ DELNET facility available in library. The readers can search and obtain learning resources required for research.
- ❖ High speed internet connectivity and good number of PCs provided in the digital library.

Collaborative research facilities developed / created by the college.

- ❖ ABE Semiconductor and Texas Instruments have contributed substantially towards establishing research facilities in our Industry Supported Laboratories.

❖ Efforts will be made by the institution to obtain supports from other external institutions.

Research Financial Support and Incentives

Financial Support:

S.No	List of Activities	Amount
1.	FDP/STTP/Workshop/ Participation in Tier-1 institutions /year <ul style="list-style-type: none"> ❖ Faculty above 10 Years experience ❖ Faculty Between 5-10 Years experience ❖ Faculty Less than 5 Years - 	50% of registration (or) Rs.3000 whichever is minimum. 50% of (or) Rs.2000 whichever is minimum. 50% of (or) Rs.1000 whichever is minimum
2.	IEEE/ACM Conference Publications in Tier-1 Institutions <ul style="list-style-type: none"> ❖ Faculty above 10 Years experience ❖ Faculty Between 5-10 Years experience ❖ Faculty Less than 5 Years experience 	50% of registration (or) Rs.3000 whichever is minimum. 50% of (or) Rs.2000 whichever is minimum. 50% of (or) Rs.1000 whichever is minimum
3.	Incentive for Publishing articles in SCI indexed (Q1, Q2, Q3 and Q4) Journals.	Rs.10,000
4.	Incentives for proposal (or) grant received	5 to 10% based on fund received
5.	Obtaining research awards from reputed organizations	Rs 2,000
6.	Research paper publication jointly with industry that satisfies the following conditions <ul style="list-style-type: none"> ❖ Listed in Google Scholar citations page 	Rs 1,000
7.	Online Courses Certification (NPTEL) Gold Medal Elite	Rs.1,000
8.	Obtaining research projects from funding agencies/industries	10% cash award of the project value (Shared among the contributors)
9.	PhD Completion and after award of Degree certificate	As per service rule

10.	Incentives for IPR ❖ Incentives for Students ❖ Incentives for Faculty	Rs.1,000
11.	TA & DA to resource persons from ❖ Industry ❖ R & D centre ,Tier-1 Government Institutions Academic ❖ Academic	• Rs.5000 • Rs.5000 • Rs.3000

Highlight of the major research achievements of the staff and students.

“Research outcomes” will be highlighted as listed below.

- ❖ Patents obtained and filed (process and product)
- ❖ Original research contributing to product improvement
- ❖ Research studies or surveys benefiting the community or improving the services
- ❖ Research inputs contributing to new initiatives and social development
- ❖ Publication per faculty
- ❖ Number of papers published by faculty and students in peer reviewed journals (national/ international)
- ❖ Monographs
- ❖ Chapter in Books
- ❖ Books Edited
- ❖ Books with ISBN/ISSN numbers with details of publishers
- ❖ Citation Index of publications.
- ❖ SJR of publications
- ❖ Impact factor of publications
- ❖ h-index of publications
- ❖ Google. Scholar Citations page.

Consultancy

Systems and strategies for establishing Institute Industry Interface.

KSRIET wants to maintain strong Institute Industry Interface and will continue to strengthen. Following forums will be used to enhance the institute Industry Interface.

KSRIET Industry Connect Programme

- ❖ KSRIET, has been hosting its annual Industrial Seminar event in association with ICT Academy of Tamil Nadu,” Power Seminar” on latest trends to nurture the young minds.

Industry Supported laboratories (ISL)

- ❖ KSRIET has made a significant step forward in its quest to train their students on emerging technologies. So far, the college has established around 10 industry supported laboratories in various departments and additional ISL labs will be established in the future. Following activities conducted under ISL will be enhanced in future.
- ❖ Faculty training by industry.
- ❖ Visiting faculty from industry.
- ❖ Industry projects, Industrial visits and internships.
- ❖ Industry consultancy and Research

Guest lectures by Industry personnel.

- ❖ The institution organizes guest lecturers by industry personnel for the benefit of students and faculty with industry personnel as resource persons.

Policy of the institution to promote consultancy.

The stated policy of the Institution to promote consultancy is as follows.

- ❖ Consultancy is work of a professional nature, undertaken by the staff in their field of expertise, for external clients, for which financial and other benefits are received.
- ❖ Consultancy work produces some form of contracted output which may be partly or wholly owned by the client.
- ❖ The Institution normally does not have freedom of publication over the results of consultancy; unless authorized by the concerned client.
- ❖ Institution resources can be made use of and the extra work required and support will be provided by the existing staff. The institution becomes a solution provider of industrial problems.
- ❖ Income generated is shared with the team members who worked on the project. Cash award of the project value will be given by the institution and the amount will be shared among the contributors as per the details given below.

**Table: 1 Applicable to departments where Institution has exclusively purchased equipments and machines required for the consultancy activities
(Total amount shared with the department is 40%)**

S.No	Member of the consultancy team	Amount of revenue distributed as % of total value of order	Remarks
1.	Member who gets the order	10%	Order may be obtained by any member of our college
2.	HOD – Department	5%	
3.	Lead Auditor (or) Project head	15%	
4.	All other members	10%	
	Total	40%	

**Table: 2 Applicable to departments who conduct consultancy activities using the existing lab equipment's only
(Total amount shared with the department is 50%)**

S.No	Member of the consultancy team	Amount of revenue distributed as % of total value of order	Remarks
1.	Member who gets the order	10%	Order may be obtained by any member of our college
2.	HOD – Department	5%	
3.	Lead Auditor (or) Project head	20%	
4.	All other members	15%	
	Total	50%	

Advocating and publicizing of expertise

- ❖ Periodically the updated literature about the institution will be sent to prospective companies highlighting the consultancy expertise including the facilities available with the departments.
- ❖ Major areas of expertise will also be advertised through department homepage in the college website.
- ❖ Faculty members can network with industry and understand the problems faced and offer them consultancy services.
- ❖ During various industry related programmes conducted at the campus, presentation about KSRIET consultancy expertise will also be shown.

Encouragement of the staff to utilize their expertise for consultancy services.

- ❖ The institution will identify the members of faculty who have adequate exposure to industrial applications and encourage them to utilize their expertise for consultancy services.
- ❖ Due importance and a share of revenue will be given to faculty members who provide consultancy services.
- ❖ On-duty will be provided wherever required.
- ❖ KSRIET will encourage the faculty to visit the industries and supervise the project work carried out by the students in industries.

Broad areas where major consultancy services provided by the institution.

Broad Areas, where major consultancy services provided by the institution presently are as follows; and additional areas will be added as when the capability is created.

- ❖ Factory Automation
- ❖ Internet of Things (IOT)
- ❖ Embedded systems
- ❖ Computer Aided Design
- ❖ Renewable Energy
- ❖ Energy Audit
- ❖ Automobile Engineering
- ❖ Cloud technology

Policy on Innovations, Incubations and Entrepreneurial Development

KSRIET strives to promote Innovations, Incubations, and Entrepreneur Development among teachers and students leading to development of innovative, commercially viable and socially relevant products / materials which shall lead to Patents and Copyrights. The Policy adopted by the college in this respect is as follows:

- a) KSRIET shall establish a Centre for Innovation & Incubation to inculcate the culture of innovation in the young and budding researchers in the institution.
- b) The innovation centre may be instrumental by organizing various kinds of programmes such as ideation programs, collection of innovations from research undertaken in respect of academic research, funded research, consultancy projects and innovations / incubations.
- c) Necessary steps shall be taken to ensure that every major invention achieved out of conducting research shall be incubated in the incubation centre which will be augmented from time to time.
- d) Potential Student Innovators may be identified and allowed to select an incubated product and use the same to be developed in large scale through separately established start-up.

e) The Entrepreneur cell of the College shall take steps to plan for providing training to the Incubates. The training imparted shall be designed in such a way that it may prepare the students to become successful entrepreneurs.

f) The student start-up companies shall be promoted in the campus by way of extending financial support to every innovation shall lead to filing a Patent.

g) The college shall provide support required for filing the patents and also for completing the ground work required to get the patents registered and licensed.

h) The college shall also encourage the teachers and researchers to apply and acquire Copyrights for their publications / Books / Monographs.

i) Rewards shall be instituted and given to the faculty and student achievers in appropriate monetary and non-monetary format.

Recognition

KSRIET will encourage the department towards research contribution by awarding points to their effort on each activity as shown in the Table 3

Table 3 Recognition to Department

S.No.	Activities	Points
1.	Publications in SCI indexed (or) Thomson Reuters Journal	10
2.	Other Scopus indexed Journal	5
3.	Publications in Reputed Conferences (organized by Tier-1 Institutions)	3
	International	
	National	2
4.	Funding Proposals applied	
	<=1 lakh	1
	<=5 lakhs	2
	>5 to 10 lakhs	3
	>10 lakhs	4
5.	Patent/Copyright	
	Filing	5
	Acquiring	10
6.	Online Courses Certification	10
	Gold Medal	5

S.No.	Activities	Points
	Elite	
7.	Consultancy Acquiring	2 points for every one lakh (subject to maximum of 10 points)
8.	Book Publication	2
9.	Funding grant received	2 points for every one lakh (subject to maximum of 20 points)
10.	Research awards from reputed organizations	5

Awards:

- ❖ At the end of academic year, “**Best Contributors to R & D**” award will be given to the department with the highest Total point index.

Total Point index = Total points gained by the dept /N.

N – No. of Faculty Members