



# PSG COLLEGE OF TECHNOLOGY, COIMBATORE

## RESEARCH POLICY

### **Aims of the Research Policy**

The research policy of PSG College of Technology aims to create and support a research culture among its teachers and students and leverage it for enriching and enhancing the professional competence of the faculty members. It also promotes the scientific temper and research attitudes of all learners leading to the realization of the vision and mission of the college. It also aims to ensure that the research and development activities of the college conform to all applicable rules and regulations as well as to the established standards and norms relating to safe and ethical conduct of research.

### **Scope of the Research policy**

This policy is applicable to all the research and development activities of the college carried out by faculty members as well as students including the following:

- Research and development activities related to the basic and applied research undertaken for fulfilling academic requirements or for solving industrial problems
- Publication, presentation and communication of the research outcomes and related activities.
- Filing of patents based on the research outcomes
- Creative activities involving the generation of new ideas and innovations leading to the development of new knowledge and expertise.
- Compilation and communication initiatives for keeping abreast of academic developments in any knowledge domain such as writing of text books, chapters of textbooks, laboratory manuals, monographs including the process of updating curriculum.
- Sponsored research projects funded by various central as well as state government funding agencies and industries.
- Offering consultancy to industries including process improvement and product development.

## **Promotion of Research**

PSG College of Technology strives to promote/sustain research culture among its students and faculty. Having achieved a reputation as an excellent academic institute, there has been a paradigm shift to achieve excellence in research. As a measure to create a forum to discuss emerging research trends in various domains of engineering and to promote interdisciplinary research, **Research Council** has been established at the institute level. The constitution of the research council is

1. Principal & Chairman
2. Dean IR&D,CSRC
3. Dean, Research
4. Dean, Administration
5. Dean, Academics
6. Dean, Autonomous Functioning
7. Dean, Computing and Networking
8. Dean, Placement and Training
9. Dean, Students Affairs
10. Controller of Examinations
11. Heads of Departments and Programme Coordinators from every department

The Research Council aims to encourage an active and vibrant research culture in PSG College of Technology. The Council meets twice in a year to discuss the research plans of individual departments and introduce research based elective courses and research-related one-credit courses to inculcate research culture in the students. The Council also aims to establish additional research facilities to promote multidisciplinary research across its departments and subsequently elevate research work across PSG institutions.

A **Research Advisory Committee (RAC)** has been established consisting of external mentors from government scientific bodies, visiting professors and experts from India and abroad. The aim of the RAC is to devise strategic plans to make the Research Council's plans come true. The RAC members meet quarterly to update on the new proposals that are invited by different funding

agencies and advise the faculty on the nascent fields of research to submit project proposals. The members of RAC strive to streamline the application process of a project proposal and / or conference presentation. Every department has a research coordinator whose role is to monitor the progress of research proposals of their faculty members and report to the RAC quarterly on the number of publications by students and faculty members, the number of applied and ongoing projects and the number of interdisciplinary research works carried out by their department students / faculty members.

Faculty members are encouraged to get engaged in industrial consultancy and research. PSG College of Technology financially supports faculty in filing patents for their innovative ideas. Seed money is provided to faculty members of the institution to support the initial activities of research. Few commercially successful technology transfers were also made.

The research potential of the faculty members is evident by their publications in journals of repute, conferences conducted, funded projects and patents earned by them, etc. PSG College of Technology has established itself as a recognized **Research Centre** of Anna University for doing independent research leading to M.S or Ph.D. degrees. More than 500 research students are currently working full-time or part-time for their Ph.D. degrees. To monitor the progress of research of a doctoral research scholar, periodic reviews are conducted and suggestions/support are provided to improve their research work.

In order to inculcate research in the minds of students, a **Student Research Council (SRC)** is established with the objective of using the knowledge gained by students through their course and unconventional thinking in creating innovations. Students are motivated to implement their conceived idea through appropriate funding.

### **Facilities**

The **PSG-PRICOL** Centre of Excellence was established in 2022. Pricol Ltd, a manufacturer of auto parts and precision-engineered products has identified several new technology products and innovative processes to meet demand from automotive Original Equipment Manufacturers (OEMs) in India and abroad. The Centre of Excellence in PSG has been conceptualized to develop high-efficiency micro motors and robotics and artificial intelligence-based processes and equipment. The CoE is expected to come out with new technology products and processes, supported by Pricol's strong footprint in product domain and customer connect and PSG Institutions' expertise.

PSG Centre for Sponsored Research and Consultancy (**PSG-CSRC**) was established in 1989 in order to foster industrial consultancy and research. Consultancy work and testing of materials / products are being carried out for several Government and private industries and organizations by all the departments of the college through the centre.

PSG-Science & Technology Entrepreneurial Park (**PSG-STEP**) was established in the year 1998 with the support from Department of Science & Technology, Government of India, IDBI and ICICI at PSG College of Technology to promote technology based enterprises in the areas of software, electronic products, hi-tech mechanical products, and eco-friendly textile products and bio-technology using the core strengths of PSG College of Technology. Incubation centre is available to accommodate 45 startups at one point of time and so far, have assisted more than 130 start-ups.

PSG - Industry-Institute Partnership Cell (**PSG-IIPC**) serves as a liaison between our institution and industries that are willing to collaborate in addressing the challenges in the thrust areas of research. Faculty members guide the students during their internship in industry to solve specific industrial problems.

PSG - Industrial Research and Development (**PSG-IR&D**) centre has a mission of bringing Industry and Institution together by providing technical R&D services to the industries. Full time engineers guided by the faculty do the R&D service to industry.

There are about 23 Centers of Excellences at PSG College of Technology established in collaboration with industries of repute, spanning over a wide spectrum covering almost all the domains in engineering and technology.

**Other basic facilities** available for research are

- High speed internet facility with a bandwidth of 380 Mbps.
- Library with a collection of more than two lakhs book volumes and about 1300 journal subscriptions.
- Updated computing facility (including high-speed computing facility) with a good support system. Licensed software are available for research use.
- High quality machining facilities and rapid prototyping facilities are available.
- 24 hours power supply with the provision of a generator backup of 2010 kVA, 560 kVA UPS backup
- Generic and specialized software tools for simulation and modeling
- Turnitin iThenticate software for similarity check