Promotion of Research

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 institute level. The constitution of 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 meets twice in a year to discuss on the research plans of individual departments, research electives/research related one credit courses to be introduced, and additional research facilities to be established and multidisciplinary research that could be taken up.

A team of Visiting Professors and experts from India and abroad serve as R&D advisors and advise the faculty on the nascent fields of research and also keep updating on the new proposals that are invited by different funding agencies.
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. 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 600 research students are currently working full-time or part-time for their Ph.D. degrees.

To monitor the research activities of doctoral research scholars, a student research committee has been constituted to conduct periodic review and support in furthering the research work.

Seed money is provided to faculty members of the institution to support the initial activities of research.

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

Facilities

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.

The 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 &
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 43 Centre’s of Excellences at PSG College of Technology established in collaboration with industry of repute spanning over a wider spectrum covering almost all the domains in Engineering. The following is the list of CoE at PSG College of Technology:

- PSG - NI Virtual Instrumentation Centre
- PSG - Festo centre for Pneumatic automation & Control Engineering
- PSG – Siemens Centre of Excellence in Automation
- PSG - LAPP Centre for excellence in Cable Technology
- PSG – Heidenhain CNC Centre
- PSG – Lectra Apprael CAD Centre
- PSG – SIRUBA-MEHALA Apparel Machinery & Equipments Centre
- PSG – ELMAQ ERP Training Centre
- PSG – Cognizant Open source Software Centre
- PSG – Juniper Centre of Excellence in Networking
- PSG – Freescale Embedded Systems Lab
- Karivardhan centre of Excellence in Automobile engineering
- PSG – Adept Centre for Robotics
- PSG – Ranal Centre for Software Testing
- PSG – Ashok Leyland Automotive Research Centre
• PSG – Techtronics Centre for Excellence in Robotics
• PSG – IBM Centre for Excellence in Operating Systems
• PSG – Cypress – PSoC Design Centre
• PSG – Siemens PLM Training Centre
• PSG – Exilant Textile ERP Centre
• TIFAC – CORE in Rapid Prototyping and Manufacturing
• PSG – Yuken Hydraulic Automation centre
• PSG – Rockwell Centre for Excellence in Industrial Automation
• PSG – L&T Centre for Excellence in Low Voltage Switchgears
• PSG – Premier Textile Technology Centre
• PSG – ASSYST BULLMER – MEHALA Fashion Studio
• PSG – Kawabata Centre for Fabrics
• PSG – Infineon Embedded Systems Centre
• PSG – Agilent Centre for Advanced RF Design
• PSG – TCS Centre of Excellence in Software Engineering
• PSG – Intel Multi Core Lab
• PSG – DRDO LSRB Wireless Telemetry Lab
• PSG – Fanuc Centre for Advanced CNC and Robotics
• PSG – Eplan Centre for Electrical CAD
• PSG – Rane Automotive Test Centre
• PSG – GENERAL MOTORS - PACE Centre
• PSG – DANFOSS Centre of Excellence for Energy & Climate Change
• PSG – Supra SAE Lab
• PSG – Juniper Networking Lab
• National MEMS Design centre
• PSG – SIMA Textile Technical Training Institute
• PSG – Welding Research Centre

**Other basic facilities** available for research are

- High speed internet facility with a bandwidth of 380 Mbps.
- Library with a collection 1, 87,874 book volume covering the book titles of about 1, 23,997 and 2438 journal subscriptions.
- Updated computing facility (including high speed computing facility) with good support system. Licensed software’s are available for research use.
- High quality machining facility and rapid prototyping facility 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

I Aims of the 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.

II 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 the 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 a 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 text books, lab manuals, monographs including the process of updating curriculum.
- Sponsored research projects funded by various central as well as state governments funding agencies and industries.
- Offering consultancy to industries including process improvement and product development.