### PSG INSTITUTE OF TECHNOLOGY AND APPLIED RESEARCH

## **Quarterly Report – January to March 2025**

# **Events Organized:**

## **Academics:**

Event Title	Project Exhibition for 2024-2028 Batch (I year) EEE & ICE
	Students
Date and Duration	10 <sup>th</sup> January 2025 & One Day
Department	EEE & ICE
	Dr. Govinda Kumar E, Associate Professor,
Faculty Co-ordinators	Ms. Divya R, Assistant Professor (Sr. Gr),
	Dr. Bavithra K, Assistant Professor (Sr. Gr)
Chief Guest	Proud Alumni (2014 batch): Mr Vignesh Narendran,
	Senior Consultant, Deloitte
No. of Participants	123 students

- 1. Dr. Bavithra K, Asst. Prof. (Sr. Gr.), EEE welcomed the chief guest and the participants. The teams started explaining their projects enthusiastically to the guest and the faculty members
- 2. The projects were done using the Arduino Microcontroller and were very creatively displayed. The best three teams from each department were selected after evaluation by the chief guest and were awarded a cash prize
- 3. All the participants were encouraged to further develop their projects with some real-time modifications by Dr. C. S. Subash Kumar, Associate Professor & HoD (i/c), EEE



Winners are awarded a cash prize by the Chief guest Mr Vignesh Narendran, Senior Consultant, Deloitte

Event Title	IoT Enabled Application Development using ESP32 to address SDGs
Event Category	Value Added Course
Date and Duration	25 <sup>th</sup> & 26 <sup>th</sup> February 2025, Two days
Conducted by	ECE Department
Co-ordinators	Mr. R. RajaRaja, Assistant Professor, ECE
	Ms. N. Iswarya, Assistant Professor, ECE
No. of Participants	62 students

- The Value-Added Course on "IoT Enabled Application Development using ESP32 to Address SDGs"
  was conducted for first-year ECE students to provide hands-on exposure to embedded programming
  and IoT application development.
- 2. The course aimed to equip students with foundational knowledge and skills essential for future coursework and industry applications.
- 3. The Value-Added Course on ESP32 IoT Application Development successfully introduced students to IoT-based embedded systems, providing practical exposure to real-world applications. By bridging the gap between theoretical learning and hands-on implementation, the course prepared students for advanced coursework and industry requirements.



Students actively engaging in application development using ESP32 during the Value-Added Course

Event Title	IoT Enabled Application Development using ESP32 to address SDGs
Event Category	Value Added Course
Date & Duration	25.2.25 and 26.2.25
Conducted by	ECE Department
Coordinators	Dr.G Santhanamari, ASP, ECE
	Ms. N. Susithra, AP (Sr.Gr.), ECE
No. of Participants	63 students

- The value-added course covered the topics such as IR Sensors, Hall sensor, DC motor, Relay and Interfacing LCD, Introduction to IoT, Communication protocols - Wifi and Bluetooth, Introduction thing speak, IoT-enabled embedded application development for monitoring and controlling physical quantity.
- 2. At the end of the course, students completed a quiz and an experimental task. They can be able to explain how basic sketch, functions and libraries are used in simple ESP32 programming and can demonstrate a simple real-time embedded system application by interfacing sensors and actuators.



Students actively engaging in IoT enabled application development during the Value-Added Course

Event Title	AI Wave - Opportunities for budding Electronic Engineers
Event Category	Guest lecture
Date and Duration	15.03.2025
Department	ECE
Co-ordinators	Dr M Jayasanthi, Professor – ECE
	Dr D Selvakumar, ASP – ECE
	Mr R Rajaraja, AP(Sr.Gr) - ECE
	Ms D Archana, AP(Sr.Gr) - ECE
Chief Guest	Dr.J.K.Mukherjee, Director Brahmos Aerospace TL, Maharastra
No. of Participants	31 students

- 1. The inaugural session commenced with a prayer, followed by a warm welcome address delivered by Dr. P. Vijayakumar, HoD ECE who also provided an insightful overview of the seminar's theme.
- 2. The guest lecture primarily focused on the role of Artificial Intelligence (AI) in Electronics and Communication Engineering, with a special emphasis on telecontrol technology for nuclear applications, visual sensing in hot cells, and terrain-based sensing.
- 3. Key discussions included AI-driven automation, classification, and intelligent viewing systems to enhance efficiency and safety in high-risk environments. As a token of appreciation, the guest speaker was presented with a memento for their valuable insights and contribution.
- 4. The event concluded with a vote of thanks by Dr. Selvakumar, marking the successful completion of an enlightening and informative session.



Dr.J.K.Mukherjee, Director Brahmos Aerospace TL, addressing the students

Event Title	Technology Trends- Global and Indian Perspective
Event Category	Guest lecture
Date and Duration	25.03.2025
Department	ECE
Co-ordinators	Dr M Jayasanthi, Professor – ECE
Chief Guest/	Mr Pathy Iyer, Director
Resource Speaker	ELTECH Consulting, Bangalore
No. of Participants	48 students

- 1. The Guest lecture was commenced with a welcome address by ECE Association office bearers Ms.Maria Anto Benita and Ms.M.Samyuktha of III year, ECE.
- 2. The event titled "Technology Trends Global and Indian Perspective" was thought-provoking aimed at exploring the latest advancements, research and their implications on a global and Indian scale. The major points discussed are Technical Education update in India and start-up opportunities, investments made by Telecom and Wireless sector Industries, Opportunities in Aerospace and Defence Industries and the role of AI and Quantum Computing in future and its current relevance.
- 3. The event concluded with a vote of thanks delivered by the ECE Association office bearers marking the completion of an enlightening and informative session.



Dr P Vijayakumar, HoD – ECE presenting a memento to the chief guest

### Research:

Event Title	Visit of Prof Prasad Yarlagadda
Event Category	Discussion
Date and Duration	19 <sup>th</sup> February 2025
Co-ordinators	Dr Manoj Kumar P (Lead Research)
Resource Person	Prof Prasad Yarlagadda, Dean, School of Engineering, University of
	Southern Queensland, Australia

- 1. Prof. Prasad Yarlagadda (Dean, School of Engineering, University of Southern Queensland, Australia) discussed about the academic and research collaborations with the Principal, the Secretary, HoD, Mechanical and other PSG iTech faculty during his visit to PSG iTech.
- 2. Dr Prasad Yarlagadda also addressed the faculty members about the various focus research areas of the University. Possibility of faculty exchange and twinning programs were also discussed during the meeting.



Dr Prasad Yarlagadda while discussing about the academic and research collaborations on 19th Feb 2025

Event Title	Lets Talk Research
Event Category	Research
Date and Duration	24 <sup>th</sup> February 2025
Co-ordinators	Dr Manoj Kumar P (Lead Research)
Research Scholars	Mr Vivek V G (Mechanical), Mr Mohamed Riazudeen R (Civil)
	and
	Ms Janapriya M (Chemistry)

- 1. As a part of 'Lets Talk Research Scholar Talks' lecture series, the research scholars Mr Vivek V G (Mechanical), Mr Mohamed Riazudeen R (Civil) and Ms Janapriya M gave presentations on 24th February 2025.
- 2. Mr Vivek, Research Scholar presented the effect of gasket thickness and compression load on the performance of PEM fuel cells.
- 3. Mr Riazudeen, Research Scholar presented a study on GFRP link beam RC column system for seismic resistance of reinforced concrete structures.
- 4. Ms Janapriya, Research Scholar presented the synthases of Bio-based plybenzoxazines and its characterization studies.



The research scholar, Mr Mohamed Riazudeen R (Civil) presenting a study on GFRP link beam on  $24^{th}$  Feb 2025

Event Title	Visit of Delegates from University of Toledo
Event Category	Research
Date and Duration	06.03.2025
Co-ordinator	Dr Manoj Kumar P (Lead Research)
Resource Person	Prof. Matt Franchetti (Associate Dean, UG Studies) and Dr.
	Ahmad Y. Javaid (Associate Chair and UG Program Director)
	from University of Toledo

- 1. Prof. Matt Franchetti (Associate Dean, UG Studies) and Dr. Ahmad Y. Javaid (Associate Chair and UG Program Director) from University of Toledo visited PSG iTech on 06.03.2025.
- 2. They interacted with the Principal Dr N Saravanakumar, Dr C L Vasu (Dean Academics) and Dr Manoj Kumar P (Lead Research) on the academics, recent admission trends, job opportunities and possibility of student exchange.



Visit of Delegates from University of Toledo on 6th March 2025

Event Title	Visit of Dr. Kamachi Mudali, Vice Chancellor,
	Homi Bhabha National Institute (HBNI), Mumbai
Event Category	Research
Date and Duration	10.03.2025
Co-ordinator	Dr Manoj Kumar P (Lead Research)
Resource Person	Dr. Kamachi Mudali

- 1. Dr. Kamachi Mudali (Vice Chancellor, Homi Bhabha National Institute (HBNI), Mumbai) visited PSG iTech on 10-03-2025 (Monday).
- 2. He had a brief interaction with the Principal Dr N Saravanakumar and Dr C L Vasu (Dean Academics) regarding engineering education.
- 3. He also met a group of faculty members to whom he briefed about the various laboratories under Department of Atomic Energy (DAE), funding opportunities from BRNS and the possible areas of mutual collaborations. Dr Kamachi Mudali also visited few research laboratories at PSG iTech.



Research Meeting with the PSG iTech faculty members

Event Title	Avenues of Institutional Collaborations & Association with DAE
	R&D Programmes
Event Category	Talk
Date and Duration	15.03.2025
Co-ordinator	Dr Manoj Kumar P (Lead Research)
Resource Person	Dr. Jaya Mukherjee (Dy - Head, NCPW & Member Secretary,
	National Board of Higher Mathematics, Department of Atomic
	Energy

- Dr. Jaya Mukherjee (Dy Head, NCPW & Member Secretary, National Board of Higher Mathematics, Department of Atomic Energy (Govt. of India) Mumbai, delivered a talk on "Avenues of Institutional Collaborations & Association with DAE R&D Programmes" on 15<sup>th</sup> March, 2025.
- 2. She highlighted the outreach research activities carried out by Department of Atomic Energy (DAE) for societal benefits.
- 3. She also briefed about the funding and other opportunities available in DAE and also in National Board of Higher Mathematics (NBHM).



Dr P Vijayakumar, Dean (Electrical and Computer Engineering) is honouring Dr. Jaya Mukherjee as a token of appreciation

Event Title	Let's Talk Research
Event Category	Lecture Series
Date and Duration	17.03.2025 & 2 hours
Co-ordinator	Dr Manoj Kumar P (Lead Research)
Resource Person	Dr D Sathia Narayanan (Scientist F, Deep Sea Technologies,
	NIOT Chennai)

- 1. Dr D Sathia Narayanan (Scientist F, Deep Sea Technologies, NIOT Chennai) addressed the faculty and research scholars of PSG iTech on 17<sup>th</sup> March 2025 as a part of Lets Talk Research lecture series.
- 2. The speaker discussed about manned submersibles, emphasizing their role in deep-sea exploration and scientific research. Ocean observation systems were examined for their ability to monitor marine ecosystems, track climate change effects, and enhance disaster prediction.
- 3. The talk also covered Ocean Electronics, focusing on sensors, data acquisition systems, and their integration into autonomous platforms. It then delved into the fundamental principles of hydrostatics and hydrodynamics, explaining their impact on vehicle stability, buoyancy, and propulsion efficiency.
- 4. He also discussed key issues in subsea robotics, including hydrodynamics, propulsion, power, control, transmission, launching, recovery, and navigation. The session concluded with a discussion on the future of subsea robotics, emphasizing the need for interdisciplinary research and technological innovation to enhance deep-sea exploration capabilities.



Lets Talk Research lecture series held on 17th March 2025

Event title	Leeds Beckett University: Degrees & Research Opportunities
Event Category	Discussion
Date and Duration	26 <sup>th</sup> March 2025 & 02.30 PM to 03.30 PM (1 hour)
Department	CSE
Faculty Coordinator	Dr B Gomathi, ASP/CSE
Resource Person	Dr. Amar Aggoun, Professor, Head of Computing, Leeds Beckett University
Faculty Convenor	Dr B Gomathy, HOD/CSE
No. of Participants	10 faculty members

- 1. The discussion aimed to provide an in-depth overview of the various degree programs offered by the university, along with the significant research opportunities available for students and faculty. Dr. Amar Aggoun began the session by giving a detailed presentation on the various degrees offered by Leeds Beckett University, focusing on undergraduate and postgraduate programs.
- 2. In the second part of the discussion, Dr. Aggoun shifted focus to the research opportunities at Leeds Beckett University, particularly in areas like Artificial Intelligence, Cybersecurity, and Smart Computing. Dr. Aggoun also emphasized the university's commitment to fostering research through substantial funding opportunities and support for doctoral candidates.
- 3. He highlighted the strong collaboration between the university and industry leaders, providing real-world exposure and practical applications for research projects. Following the presentation, the floor was opened for a Q&A session, where attendees had the opportunity to ask Dr. Aggoun questions.



Visit of delegates from Leeds Beckett University on 26th March 2025

## **Professional Society and Club Activity:**

Event Title	Resume Building
Event Category	Association Activity
Date and Duration	6 <sup>th</sup> February 2025 & 2:30 PM – 4:30 PM
Department	EEE
Co-ordinators	Dr. Suresh B, Assistant Professor (Sl. Gr.) / EEE
Resource Person	Mr. Arnesh S, IV-EEE,
	Mr. Survesh K S, IV-EEE
No. of Participants	65 students

- 1. Dr Suresh B, Assistant Professor (Sl. Gr.) / EEE, welcomed the speakers and the gathering.
- 2. The Resume Building Session for third year students was an insightful event aimed at enhancing resume-building skills. The session provided in-depth guidance on crafting both hardware (core) and software resumes.
- 3. Students learned the key components of a well-structured resume, with Mr Arnesh and Mr Survesh covering hardware resumes, emphasizing technical skills and certifications, while software resumes highlighted through programming languages and project experiences. Common mistakes were addressed, and personalized feedback allowed students to refine their resumes effectively.
- 4. The session was a great success, offering valuable insights, practical tips, and real-world resume-building strategies. Mr. S. Akshayakannaa thanked the speakers and the participants.



Presentation by Mr. S. Arnesh, IV-EEE during the session on "Resume Building"

Event Title	NSS Camp
Event Category	Community outreach
Date and Duration	11.02.2025 to 17.02.2025 & 7 days
Department	College
Event Coordinator	Dr.P.Chinnaraj/ Dr.D.Thangaraju
No. of. Participants	96 NSS Volunteers

- 1. Under the motto of "NOT ME BUT YOU", the NSS volunteers of PSG iTech conducted a seven-day NSS Special Camp at Devarayan Palayam village from 11.02.2025 to 17.02.2025, under the guidance of NSS Programme Officers, Dr. P.Chinnaraj and Dr. D.Thangaraju.
- 2. The theme for the camp was "Youth for Clean India". Guest lectures, medical camp, plumbing training, computer training, school painting, games for school students, awareness rally, etc., were conducted during the camp.
- 3. Ninety-six active volunteers participated in the camp with great enthusiasm and worked diligently.



Students doing field work during NSS camp on 12th Feb 2025

Event Title	GDG's Hackatonic
Event Category	Inter-College Hackathon
Date and Duration	28.02.2025 & 1 day
Department	CSE & Google Developer Groups, in collaboration with the Institution
Department	Innovation Council (IIC)
Co-ordinators	Dr S Vaishnavi, AP (Sr Gr)/CSE
	Dr Mahavishnu VC, AP (Sr Gr)/CSE
Chief Guest	Mr Sairam Prabhu SG, Development Team Lead, Exterro R&D
	Mr Habeeburrahman Hakeem, System Administrator Senior Associate, NTT
	Data
No. of Participants	60 students

- 1. Dr Gomathy, HoD i/c, CSE delivered the welcome address, and Dr S Vaishnavi introduced the jury members.
- 2. The final round of GDG's Hackatonic Inter-College Hackathon was organized on 28<sup>th</sup> February 2025. The problem statements for the hackathon were released in December 2024, and the first round of online sessions was completed by January 2025, and finalists of the top 25 teams were announced.
- 3. The selected teams were from various institutions, including Velammal College of Engineering and Technology, Amrita Vishwa Vidyapeetham, Shiv Nadar University, Chennai, Coimbatore Institute of Technology, Sri Krishna College of Engineering and Technology, along with six teams from PSG iTech.
- 4. The shortlisted teams presented their working prototypes to an esteemed panel of judges. Their insights and feedback helped shape the direction of the event and provided valuable guidance to participants. Dr Mahavishnu V.C. delivered the vote of thanks.



Participants showcasing their prototypes

Event Title	She Leads – The Ultimate Challenge
Event Category	Talk
Date and Duration	8 <sup>th</sup> March 2025
Department	Rotaract Club & Women Empowerment Cell
Co-ordinators	Mr C P Shabariram & Dr R Manimegalai
Resource Person	Rtr. Shreeneka Dhanapal and Rtr. PP. Karthik Govindaraj
No. of Participants	50 students

- 1. "The She Leads The Ultimate Challenge", conducted on the occasion of International Women's Day 2025, was a dynamic and engaging event organized by the Rotaract Club in association with the Women Empowerment Cell.
- 2. The event commenced with a formal welcome by President Rtr. Yogeshwaran, who set the tone for the celebration by emphasizing the importance of women's empowerment and leadership. A talk on entrepreneurship was delivered by District Trainers Rtr. Shreeneka Dhanapal and Rtr. Karthik Govindaraj
- 3. The competition was structured into three rounds, each designed to test the knowledge, creativity, and teamwork of the participants. The top-performing teams demonstrated remarkable awareness and creativity, making the challenge an exciting spectacle for the audience.
- 4. A cash prize pool of ₹3000 was awarded to the winners, encouraging participation and recognizing excellence. The event concluded with a vote of thanks delivered by Joint Secretary, Rtr. Dharshana, who expressed heartfelt gratitude to the participants, organizers, and judges.



Winners were honoured with the cash prize and certificate on 8th March 2025

Event Title	Advanced CAD Modeling Techniques
Event Category	Workshop
Date and Duration	21st and 22nd March 2025
Department	Mechanical Engg.
Resource Person	Dr J Nagarjun and Dr X Ajay Vasanth, Mech Engg.
No. of Participants	15 students (other colleges)

- 1. An upskilling workshop was organized by the Department of Mechanical Engineering on 21<sup>st</sup> and 22<sup>nd</sup> March 2025, with the primary objective of upskilling the final year undergraduate students from other institutions towards enhancing their chances in their placements and higher studies.
- 2. The workshop offered the participants with hands-on experience and insights into emerging tools and applications relevant to modern mechanical engineering practices. The sessions were handled by Dr Ajay Vasanth X and Dr Nagarjun J.
- 3. A total of 15 participants from various engineering colleges participated in the workshop. The event was well-received by the attendees, who appreciated the practical orientation and depth of content delivered during the sessions. Feedback from the participants indicated a high level of satisfaction, particularly with the relevance of the topics covered.



Dr Nagarjun J handling a session on Design for Additive Manufacturing (DFAM)

Event Title	Introduction to Competitive Programming
Event Category	Club Activity
Date & Duration	08.03.2025 & 3.30 pm to 4.45pm
Club	Coding Club
Faculty Coordinator	Mr. C. P. Shabariram, AP / CSE
Students Coordinators	Karthikeyan S (III CS&BS) HariKrishna (II AI & DS)
Resource Person	Shiva V & Jai Akash (III CSE) Karthikeyan S & Mythribala L (III CSBS)
No. of Participants	22 students

- 1. Faculty coordinator Mr. C.P. Shabariram addressed the gathering. Mr. Karthikeyan gave an introduction to the session and raised a few questions, making the students engaged and interactive.
- 2. Mr. Mythribala explained programming languages and various coding platforms, including LeetCode, CodeChef, Codeforces, AtCoder, and others.
- 3. Following the lecture, Mr. Shiva and Jai Akash briefed the students on how to participate in contests on different platforms, explaining the rules and guidelines that need to be followed while competing.
- 4. Resources for learning and solving contests, such as TLE Eliminators, TUF, and ICPC, along with major coding competitions like ICPC and Meta Hacker Cup, were discussed.
- 5. The event concluded with a discussion on maintaining a healthy coding environment among students. Throughout the session, students were actively engaged and had hands-on experience with the topics discussed.



Mr Mythribala explaining various coding concepts during the session

Event Title	Women's Day Challenge
Event Category	Club Activity
Date & Duration	08-March 2025 & 3.05 pm to 4.45 pm
Venue	CSE Seminar Hall
Department	Cooking Club
Co-Ordinator	Dr G Santhanamari
No. of. Participants	56 students

- 1. In connection with the Women's Day 2025 celebration, student coordinators of cooking club Samyuktha M (3<sup>rd</sup> year ECE), Sowmiya B (3<sup>rd</sup> year ECE), and Vishalkanth S (2<sup>nd</sup> Year ECE), organized a competition for faculty and students on 08.03.2025.
- 2. The event comprised three exciting rounds namely Cook and Connect, Sense and Touch, and Taste of Victory.
- 3. In the final round, three teams were tasked with crafting a delicious vegetable soup within the given time. The final scores were determined by adding individual scores from the first two rounds to the team scores from Round 3 and prize winners were selected.
- 4. Prize winners are Mr Ram Naren Gowtham CSE (1<sup>st</sup> Prize), Mr Viswaa. G. S CSE (2<sup>nd</sup> Prize) and Ms Sathya- Assistant Professor, AI&DS (3<sup>rd</sup> Prize)



Participants preparing Soup

Event Title	Empowering Embedded Systems: DSP, memory and Imaging Innovations
Event Category	Technical Talk
Date and Duration	29 <sup>th</sup> March 2025, 1.30 pm to 3.30 pm
Department	Electronics and Communication Engineering
Co-ordinators	Dr G Santhanamari, Asso Prof, ECE
	Ms N Susithra, Assistant Professor (Sr.Gr.), ECE
Resource Person	Mr M Jagathaguru, Embedded Product Development Engineer,
	Illuminen Technologies Pvt Ltd
No. of Participants	40 Students

- 1. The Department of ECE, IETE Students' Forum (ISF), and Industry Institute Interaction Cell (IIIC) organised a technical talk on "Empowering Embedded Systems: DSP, Memory and Imaging Innovations" on 29.03.2025.
- 2. The session included demonstrations on how QT Technology is used to create interactive user interfaces in applications such as a Robotic Arm Controller, and explored how embedded systems enable precise robotic arm control. Real-Time applications of Embedded Systems such as off-road vehicle intelligent systems for navigation and control, were also shown.
- 3. In his talk, Mr Jagath discussed various controllers, including the MP25 dual-core processor by Renesas with 2.5D graphics for advanced graphical rendering, the RH850 Family (32-bit Microcontrollers), and the Tri-Core TC179E, widely used in automotive applications. He highlighted the importance of CAN (Controller Area Network) and applications such as Ethernet DDP, Audio over Ethernet, etc.
- 4. Mr Jagath was accompanied by Mr Kasimraja I, Python Developer, and Ms Priyadharshini S, Embedded Software Developer. They demonstrated the embedded systems products to the students.
- 5. Overall, the Technical Talk and Demonstration offered students insights into real-time applications of embedded systems in various industries, especially textiles and automotive design.



Students are interacting with the team from Illuminen Technologies about their embedded system products designed for industrial and automotive applications

### **Capacity Building:**

Event Title	Outcome-Based Education (OBE)	
Event Category	Five-Day Faculty Development Program (FDP)	
Date and Duration	20 <sup>th</sup> to 24 <sup>th</sup> January, 2025	
Co-ordinators	Dr V Chitra, Associate Professor, Mathematics	
	Dr Jothibasu M, Assistant Professor (Sl.Gr), ECE Department	
Chief Guest	<ol> <li>Dr. Sivakumar Krishnan, IGIP Certified Educator, Faculty Developer, and Director (VEDIC) - Learning and Innovation</li> <li>Dr. Krishnan Murugesan, IIT Roorkee.</li> <li>Dr. P. Manojkumar, Professor/Mechanical, PSG iTech</li> </ol>	
No. of Participants	35 faculty	

- 1. The Five-Day Faculty Development Program (FDP) on Outcome-Based Education (OBE) along with the Faculty Induction Program 2024-25, was conducted by CTLP at PSG iTech in collaboration with PSG CARE, from 20<sup>th</sup> to 24<sup>th</sup> January 2025.
- 2. The program aimed to equip faculty members with a comprehensive understanding of OBE and its effective implementation in higher education institutions.
- 3. The sessions delved into critical topics such as Understanding the fundamentals of OBE, Formulating Program Outcomes (POs), and Course Outcomes (COs), mapping them effectively, and Developing assessment rubrics and tools for evaluating learning outcomes.



Dr P V Mohanram , Secretary PSGiTech, Dr N Saravanakumar, Principal, Dr. Sivakumar Krishnan, IGIP Certified Educator, Faculty Developer, and Director (VEDIC) - Learning and Innovation and Dr R Rudramoorthy, Director, PSG CARE were present during the inaugural address

Event Title	Engineering Mathem	atics	
Event Category	FDP		
Date and Duration	January 23-25, 2025		
CTI D C 1'	Dr Chitra V, Associate Professor, Mathematics		
CTLP Coordinators	Dr Jothibasu M, Assistant Professor (Sl.Gr), ECE Department		
	Dr. Thirupathi Gudi Professor	Dr. R. Venkatesh Associate Professor	Dr. G.Arunkumar Assistant Professor
	Department of	Department of	Department of
Experts	Mathematics	Mathematics	Mathematics
	Indian Institute of	Indian Institute of	Indian Institute of
	Science	Science, Bangalore.	Technology Madras
	Bangalore.		Chennai, Tamilnadu.
No. of Participants	11 (Mathematics department Faculty members)		

- 1. The Faculty Development Program (FDP) titled "Engineering Mathematics" was organized by the Centre for Teaching Learning Practices (CTLP) at PSG iTech from 23<sup>rd</sup> to 25<sup>th</sup> January 2025.
- 2. The FDP was aimed at enriching faculty members' knowledge and teaching capabilities in the domain of applied mathematics for engineering disciplines.
- 3. It provided an invaluable opportunity for participants to deepen their understanding of engineering mathematics and explore advanced methods that can enhance their teaching approach.



Dr. Thirupathi Gudi, Professor, IISc Bangalore - lecture session in FDP

Event title	Holistic Pedagogical Approach to Develop Contributors	
Event Category	OBE Session	
Date and Duration	25.1.2025, 2.30 pm to 4.45 pm	
Department	CTLP & Mechanical Engineering	
	Dr. R. Ramesh, Professor, Mechanical Engineering	
Coordinators	Dr V Chitra, Associate Professor, Mathematics	
	Dr M Jothibasu, Assistant Professor (Sl.Gr), ECE Department	
	Dr. V. Kovaichelvan	
Chief Guest/ Experts	Director (TVS Institute for Quality and Leadership)	
	TVS Motor Company Limited	
No. of Participants	16 faculty	

- 1. The session started with an introduction to the speaker, Dr. V. Kovaichelvan, by Dr. P.V. Mohanram, Secretary, PSG iTech, and Dr.R.Rudramoorthy, Director, PSG CARE.
- 2. Dr. N. Saravanakumar, Principal, PSG iTech, welcomed the participants to the session. Dr. V. Kovaichelvan, currently serving as the Director of the TVS Institute for Quality and Leadership at TVS Motor Company Limited, shared his views and important attributes of learning, and the key skills required for engineers to successfully transition into the corporate world.
- 3. The HoD of Mechanical Engineering and the Director of PSG CARE presented a memento to the speaker and thanked him for his valuable insights, marking the conclusion of the session.



Interactive session by Dr V Kovaichelvan, Director, TVS Motor Company Limited on 25<sup>th</sup> Jan 2025

Event Category	Workshop
Event Title	Happiness, Habits, and Success
Organizing Body	PSG Tech and PSG iTech
Duration and Date	31.01.2025
Resource Person	Prof. M.S. Sivakumar (IIT Madras)
Coordinators	Dr K Suresh Kumar (PSG STEP), Dr D Thangaraju (ASP, PSG iTech), Dr G Swaminathan (AP, PSG iTech)

- 1. The session was led by Prof. M.S. Sivakumar, Head of the Department of Applied Mechanics and Biomedical Engineering, IIT Madras.
- 2. The event highlighted the importance of mental health, stress management, and personal growth in both academic and professional life. Prof. Sivakumar shared his experiences and strategies for developing habits that contribute to long-term success and well-being. His engaging talk was well received, with active participation from attendees who gained a deeper understanding of achieving the balance between professional aspirations and personal fulfilment.
- 3. The lecture was concluded with an interactive Q&A session, during which faculty members had the opportunity to discuss their concerns and seek guidance from Prof. Sivakumar.
- 4. The event served as an enlightening experience for everyone present, reinforcing the institute's commitment to holistic education and student well-being.



Principal and Secretary, PSG iTech presenting a memento to the guest Prof. M.S. Sivakumar, IIT M on 31st Jan 2025

Event Title	Integrating MATLAB in Engineering Mathematics Education
Event Category	Faculty Development Program
Date and Duration	6-2-2025, 13-2-2025, 14-2-2025, 25-2-2025 (4 days)
Department	MECH & EEE
Co-ordinators	Centre for Teaching Learning Practices (CTLP)
Resource Persons	Mr M Sentilvel AP, Mech Department
	Mr S Ravikrishna AP, EEE Department
No. of Participants	12

- 1. Dr N Saravanakumar, Principal, of PSG iTech delivered the welcome address, emphasizing the significance of Integrating MATLAB in Engineering Mathematics Education.
- 2. His address provided the perfect motivation for all attendees. The technical sessions were conducted by Mr M Sentilvel (Sl. Gr.), Mech, and Mr S Ravikrishna, Asst Prof (Sl. Gr.), EEE, PSG iTech.
- 3. The participants gained hands-on experience using MATLAB for engineering applications, with a focus on mathematical concepts and future teaching objectives.



Participants from Department of Mathematics along with the Resource persons Mr. S Ravikrishna and Mr. M Senthilvel

Event Title	Intelligent IoT Computing
Event Category	Faculty Development Programme
Date and Duration	3-02-2025 to 8-02-2025
Department	ECE
Co-ordinators	Dr.D.Selvakumar and Dr M.Jayasanthi
	Dr. K. Krishna Naik, ASP, IIITDM Kurnool
	Dr. K. Sathya Babu, Prof, IIITDM Kurnool
	Dr. M. Rajesh, Scientist/Er 'D', NIELIT Calicut
	Dr. Bibin Francis, ASP, NIT Trichy
Chief Guest/	Dr. M. Naresh Babu, ASP, IIITDM Kurnool
	Dr. P. Ranga Babu, ASP, IIITDM Kurnool
Resource Person/ Keynote Speaker	Mr. S. Karthikeyan, Tech Head, eDigiM Research Pvt Ltd, Chennai
	Mr. R. Sivasubramaniam, CoreEL Tech, Bangalore.
	Dr. P. Vijayakumar, Dean, Electrical and Computer Engg, PSGiTech
	Dr. M. Jayasanthi, Professor, ECE, PSGiTech
	Dr. D. Selvakumar, ASP, ECE, PSGiTech
	Dr. P. V. Mohanram, Secretary, PSGiTech
No. of Participants	44

- 1. The Department of ECE in association with Electronics & ICT Academy (Hub), NIT Warangal and E&ICT Academy, IIITDM Kurnool, Andhra Pradesh organized an FDP from 3 to 8-02-2025.
- 2. The major topics covered during the training program included Intelligent Computing and IoT, IoT Protocols and Standards, IoT and AI, Neural Networks, Threats and Security in IoT, and Building Intelligent Edge Solutions with AI and IoT using FPGA.
- 3. To provide insights into NEP and teaching skills, sessions on framing course outcomes for the effective implementation of OBE, as well as pedagogy and soft skills, were conducted.
- 4. An industrial visit was organized in association with SIERRA ODC's eFACiLiTY, Coimbatore, to witness advanced real-time IoT applications.
- 5. On the last day of the program, a test was conducted for the participants, and feedback was obtained. A panel discussion was also organized as part of this program on the topic 'AI-Driven IoT,' moderated by Dr. P. Vijayakumar, Dean of Electrical and Computer Engineering. After the panel discussion, Dr. D. Selvakumar concluded the FDP with a valedictory note.



Hands-on Training on Interfacing ESP32 with Cloud

Event Category	Workshop
Event Title	Happiness, Habits, and Success
Organizing Body	PSG Tech and PSG iTech
Duration and Dates	02 Days – 07 & 08 February 2025
Resource Person	Dr. Gargi Sandilya and Dr. Prasanna Gunturi from IIT Madras
No. of Participants	104
Coordinators	Dr K Suresh Kumar (PSG STEP), Dr D Thangaraju (ASP, PSG iTech), Dr G Swaminathan (AP, PSG iTech)

- 1. The workshop aimed to help faculty members develop positive habits, emotional resilience, and a balanced approach to both personal and professional success.
- 2. The event provided a platform for educators to reflect on their personal growth, enhance their emotional well-being, and implement strategies for fostering a more fulfilling and productive academic environment.
- 3. Led by Dr. Gargi Sandilya and Dr. Prasanna Gunturi, Guest Faculty from IIT Madras, the sessions were designed to be interactive and engaging. Key topics included Happiness vs. Success, Habit Formation, Gratitude & Kindness, Healing Your Past, and Slow Down to Speed Up.
- 4. The workshop concluded with a valedictory session, where four faculty members shared their experiences, key takeaways, and reflections on how they planned to integrate the insights gained from the workshop into their professional and personal lives.
- 5. The event successfully equipped faculty members with practical tools to enhance their psychological well-being, strengthen their teaching effectiveness, and create a positive, supportive work environment.



Presenting a memento to the resource person Ms Prasanna Gunturi, by Prof N C Nandagopalan, Secretary of PSG Schools

Event Title	Closed-Loop Control Algorithm Development for Power Converters using WAVECT
Event Category	Faculty Training
Academic Year	2024-2025
Period of Course	February 10 & 12, 2025
Department	EEE
Co-ordinator	Dr. M. Sathiyanathan, Associate Professor, Dept. of EEE
Chief Guest/	Mr. P Dharanidharan, Application Engineer - Power Electronics
Resource Person/	and Control, Entuple Technologies Pvt. Ltd. Bangalore
Keynote Speaker	and Control, Entuple Technologies Pvt. Ltd. Bangalore
No. of Participants	20 faculty

- 1. Dr. C. S. Subashkumar, HoD (i/c)- EEE welcomed the gathering. Mr. P Dharanidharan, Application Engineer Power Electronics and Control, Entuple Technologies Pvt. Ltd. Bangalore explained the various features of WAVECT FPGA based real-time controller.
- 2. The topics covered included an introduction to the WAVECT real-time controller, software installation, model-based algorithm development, WAVECT library specifications, HDL code generation and binary generation, I/O specifications and features, and WAVECT Suite (GUI). Hands-on training was provided to enhance the hands-on experience and theoretical knowledge on closed-loop control algorithm development for power converters using the WAVECT (FPGA) controller.
- 3. The training provided a platform for knowledge exchange and collaboration in power electronics research
- 4. Dr. M. Sathiyanathan, Associate Professor-EEE, coordinator of this training program thanked the resource person and participants for attending this two-day training program.



Resource person, Mr. P Dharanidharan, Demonstrating the control features of the WAVECT and integration with three-phase inverter module to the faculty, staff and students

Event Title	ANSYS
Event Category	FDTP
Date and Duration	14.02.2025 to 20.02.2025
Department	Civil Engineering
Coordinators	Dr.Durai Eswaran S R, Dr.K.Karthick, Department of Civil Engineering
No. of Participants	9 faculty

- 1. The Department of Civil Engineering conducted a seven-day faculty training program on "ANSYS" from 14/02/2025 to 20/02/2025 in the Structural Engineering Laboratory of Civil Engineering Department.
- 2. Ms. Kruthika, a software trainer at CUBIKSOFT Technologies Private Limited, Coimbatore, conducted the training. The sessions covered geometry development in Space Claim and Design Modeler. Hands-on training was provided in various modules, including static structural, modal, harmonic, response spectrum, and rigid dynamics.
- 3. The training provided to the faculty will be useful in guiding M.E. Structural Engineering students for their lab course, 'Numerical and Finite Element Analysis Laboratory (ST4211).'"

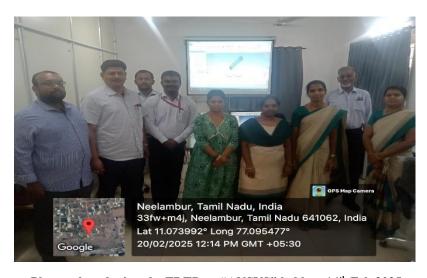


Photo taken during the FDTP on "ANSYS" held on 14th Feb 2025

Event Title	Outcome Based Education
Event Category	Workshop
Date and duration	25 <sup>th</sup> February 2025, One day
Conducted By	Tamil Nadu State Council for Higher Education in association with IEEE
	India Council Educational Activities Committee and IEEE Student Branch
	of PSG iTech
Resource Person	Dr Kanmani Buddhi, Dr Ganeshkumar, Dr Kottilingam, Dr. Sree Sharmila
	from Anna University Chennai and Dr. Jacophine Susmi from University
	College of Engineering, Tindivanam
Co-ordinators	Dr. P. Vijayakumar, IEEE Student Branch Counselor
	Dr. C V Pavithra, Assistant Professor (Sel. Gr.), IEEE Member
	Mr. R. Rajaraja, Assistant Professor (Sr. Gr.), IEEE Member
No. of participants	90

- 1. The event was inaugurated by Dr. M. P. Vijayakumar, Vice-Chairman of the Tamil Nadu State Council for Higher Education (TANSCHE). The keynote speaker for the event, Dr. Kanmani Buddhi from BMS College of Engineering, Bengaluru, discussed the importance of aligning assessment methods with OBE principles. She provided insights into how various academic activities, such as assignments, presentations, quizzes, and lab work, can be strategically mapped to specific Course Outcomes (COs).
- 2. Following Dr. Kanmani Buddhi's session, Dr. Ganeshkumar, Dr. Kottilingam, and Dr. Sree Sharmila from Anna University, Chennai, along with Dr. Jacophine Susmi from the University College of Engineering, Tindivanam, shared their experiences in preparing COs and question papers.
- 3. Subsequently, participants were given exercises to draft COs for their respective courses and map them to POs. This exercise facilitated an interactive discussion among attendees, fostering a deeper understanding of course outcomes and CO-PO mapping. The program had a strong impact on the faculty participants. Towards the end of the program, participants were awarded certificates of participation.



OBE Workshop held on 25th February 2025

	"Insights from Agastya Maharishi's Classical Work on Health, Science and
Event Title	Technology" in association with "Bharatiya Bhasha Samiti & Anaadi
	Foundation"
Event Category	Seminar
Date and Duration	11 <sup>th</sup> January 2025, One day (9 am to 4.45 pm)
Institutions	The Programme is jointly organized by PSGiTech and PSG IAP
Spansors	The Programme was sponsored by Bharatiya Bhasha Samiti, New Delhi and
Sponsors	the Management of PSG Institutions.
	Dr. S. Lokesh, Professor - AI&DS, PSG iTech
Co-ordinators	Dr. S. Maruthamuthu, Professor & HoD (i/c) - Physics PSG iTech
	Dr. S. Devaraju, Associate Professor - Chemistry, PSG iTech
	Ar. K. Rajagopalan, Assistant Professor - PSG IAP
	1. Shriman Adinarayanan, Founder, Anaadi Foundation, Palani
	2. Dr. Selva Shunmugam P, Secretary and Siddha Consultant Health India
	Foundation, Chennai.
Resource Persons	3. Mr O. Shama Bhat, Advocate, Mysuru
	4. Prof. Ravinder Pal Singh, Chief Innovation & Strategy Officer, Rishihood University, Mumbai
	5. Dr. J. S. Bhuvaneswaran, Professor & Director Department of Cardiology
	& Preventive Cardiology PSG Hospitals, Coimbatore
	6. Dr. Venkatapathy Subramanian, Director, Anaadi Rural AI Center, Palani
No. of Participants	165 participants

#### **Other Major Events:**

- 1. Dr. P.V. Mohanram, Secretary, PSG iTech, welcomed the gathering and the distinguished resource persons.
- 2. Dr. N. Saravanakumar, Principal, PSG iTech, honoured Shriman Adinarayanan, Founder of Anaadi Foundation, with a traditional vasthra and a memento as a token of appreciation
- 3. Shriman Adinarayanan, Founder of Anaadi Foundation, highlighted the profound legacy of Agastya Maharishi, a revered sage whose influence spans a vast spectrum of ancient Indian knowledge systems. He emphasized Agastya Maharishi's pivotal role not only in spiritual traditions but also as a pioneer in various disciplines, including science, health, linguistics, and metaphysics.
- 4. Dr. Selva Shunmugam P., Secretary and Siddha Consultant at the Health India Foundation, delivered an insightful talk on the theme "Agathiyar's Contribution to Health and Wellness" and discussed Siddha medicine through the scriptures of Agathiyar, connecting them to the roots of the Indian Knowledge System (IKS).
- 5. Prof. Ravinder Pal Singh, Chief Innovation & Strategy Officer at Rishihood University, shared insights into the integration of Agastya Maharishi's work with modern scientific innovations and its relevance to engineering and space studies. He emphasized the need to develop a tool to preserve ancient scriptures across all Indian languages, ensuring they serve as a valuable source of knowledge for solving future challenges.
- 6. Mr. Shama Bhat.O, Advocate, Mysuru, delivered a compelling keynote address on the theme "Cultural Confluence: Agastya's Role in Bridging the North and South of Bharat.

- 7. Dr. J. S. Bhuvaneswaran, Professor and Director of the Department of Cardiology & Preventive Cardiology at PSG Hospitals, delivered an in-depth keynote on "Panchakosha Viveka in Healthcare."
- 8. Two medical teams from PSG Hospitals—Allopathy and Naturopathy—volunteered to conduct health check-ups for patients. The teams provided expert advice on managing health conditions and recommended therapeutic measures.
- 9. The session enhanced awareness of Indian sages and their significant contributions to the unification of the nation in the fields of philosophy, science, technology, healthcare, and human well-being.



Dr N Saravanakumar, Principal, PSG iTech is presenting a memento to Shriman Adinarayanan, Founder of Anaadi Foundation on 11<sup>th</sup> January 2025

Event Title	76 <sup>th</sup> Republic Day
Event Category	College Event
Date and Duration	26.01.2025 and 8:00 am to 9:45 am
Participants	150 students, faculty and staff

- 1. The event commenced with the arrival of the Chief Guest, Dr. Arumuganathan R, Professor, Department of Mathematics, PSG College of Technology. A special escort team, including NCC cadets, guided the Chief Guest to the stage.
- 2. At 8:00 AM, the Chief Guest hoisted the national flag, marking the beginning of the formal celebration. Following the parade, a member of the student union delivered the welcome address.
- 3. The Chief Guest delivered an inspiring speech, emphasizing the significance of Republic Day, the sacrifices of freedom fighters, and the role of youth in shaping India's future. His words were met with applause and deep appreciation.
- 4. The Principal Dr N Saravanakumar honored the Chief Guest with a memento as a token of gratitude. Following the cultural performances, a prize distribution ceremony was held to recognize and reward students for their active participation.
- 5. The Chief Guest and the Principal presented endowments, encouraging students to continue striving for excellence. The event concluded with a heartfelt vote of thanks by the CUO of NCC, expressing gratitude to all contributors.



The Chief Guest and the Principal honouring the students on the occasion of Republic Day held on 26<sup>th</sup> Jan 2025

Event Title	Yukta: 2025
Event Category	Technical Symposium
Date and Duration	14 <sup>th</sup> & 15 <sup>th</sup> March 2025 (Two Days)
Organizer	Students Council
Coordinator	Dr. R. S. Sankara Subramanian, Faculty Advisor, Students Council
Number of participants	991 (Day 1) & 860 (Day 2)

- 1. Yukta: 2025, organized by the Students Council, saw an impressive footfall of over 1800 participants who actively engaged in a range of events and activities over two days. With 20+ workshops being conducted, offering participants valuable knowledge across various domains.
- 2. The event provided abundant opportunities for tech enthusiasts, featuring over 20 technical events across multiple domains. Additionally, Yukta also hosted more than 10 non-technical events, catering to diverse interests and talents.
- 3. The first day kicked off with departments conducting various technical events, including paper presentations, workshops, project exhibitions, and quizzes. The day concluded with captivating performances by the iTech Music and Dance Clubs, keeping the audience entertained.
- 4. The second day was highlighted by a spellbinding musical performance from Mr. Nivaas, who kept the audience engaged with his exceptional talent.
- 5. Each department enhanced the event's atmosphere with creative, themed decorations, showcasing their distinctive styles. The iTech Broadcast team and NSS volunteers played key roles in ensuring the smooth coordination of the event from start to finish.
- 6. Overall, Yukta: 2025 proved to be a grand success, delighting participants with its diverse experiences and serving as a vibrant platform for talent, teamwork, and celebration.



Paper presentation by the students held on Day 1 and the musical performance by Mr Nivas on Day 2

Event Title	iTech Dialogue
Event Category	Lecture
Date and Duration	29 <sup>th</sup> March 2025 (1.30 pm-3.30 pm)
Co-ordinator	Dr K Pramila, Professor & Head, Department of English
Chief Guest	Dr Pradeep G, Consultant
	Cardiothoracic & Vascular Surgery, PSG Hospitals
No. of Participants	50 participants

- 1. PSG iTech organized the iTech Dialogue on 29<sup>th</sup> March 2025. The event featured Dr Pradeep G, Assistant Professor/Consultant, Cardiothoracic & Vascular Surgery, PSG Hospitals, as the distinguished guest.
- 2. An expert in heart and lung transplantation, Dr. Pradeep delivered an enlightening and interactive lecture on heart ailments and the procedures involved in heart transplantation. Using videos, he explained the heart transplant process and highlighted how medical devices developed by engineers play a crucial role in saving lives.
- 3. One solution, he suggested, is to manufacture these medical devices in India to reduce costs. He urged engineers to continue innovating and developing medical devices to make heart surgery more affordable for all.
- 4. Mr. Shivam Gupta, Founder and CEO of Floaid Medtech, elaborated on recent innovations in medical devices and discussed the growing opportunities for engineers in the medical device industry.
- 5. Dr Pradeep G and Mr Shivam Gupta were felicitated with a memento by Dr Manojkumar, Professor, Department of Mechanical Engineering.



Student Volunteers along with the guest Dr Pradeep G, Assistant Professor/Consultant, Cardiothoracic & Vascular Surgery, PSG Hospitals on 29<sup>th</sup> March 2025