



IITM
PRAVARTAK
 CATALYSING INNOVATION



विज्ञान एवं प्रौद्योगिकी विभाग
 DEPARTMENT OF
SCIENCE & TECHNOLOGY

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NEWSLETTER

IITM Pravartak Technologies Foundation

Vol 3, Q3, FY 2024 - 25



ABOUT

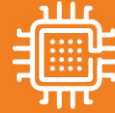
IITM Pravartak Technologies Foundation is funded by the Department of Science and Technology, Government of India, under its National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) and hosted as a Technology Innovation Hub (TIH) by IIT Madras. The NM-ICPS is a comprehensive mission aimed at complete convergence with all stakeholders by establishing strong linkages between academia, Industry, Government, and International Organizations.



Sensors



Networking



Actuators



Control Systems

In our relentless pursuit towards nation building, IITM Pravartak, is undeniably experiencing some of the best of times considering the wide spectrum of projects, we've executed and/or undertaken, in domains ranging from space tech, futuristic transportation, law enforcement, governance, smart manufacturing, affordable healthcare, Atmanirbhar digital infrastructure, quality technical education and heritage in collaboration with ministries, govt. agencies and industry partners, alike. Our proven track record of commitment to on-time, novel, quality deliverables is powered by carefully honed strong work culture and value system. It's apt to state that innovation meets excellence at IITM Pravartak.

Meenakshi.Chidambaram,
General Manager, - Projects



EVENTS



On **4th October, 2024**, GITAA, an IIT Madras-incubated company, conducted a free online workshop for MSMEs and students in the automotive sector. The program covered AI and ML fundamentals, sales prediction using Excel, and AI-driven computer vision for defect detection, with certification support from the Walmart Centre for Tech Excellence, IIT Madras, empowering participants to harness AI for improved decision-making and operational efficiency.



On **16th November, 2024**, IITM Pravartak Technologies Foundation launched the Centre for Human-Centric Artificial Intelligence (CHAI), a groundbreaking initiative focused on advancing AI that prioritizes people and drives change across science and technology. The inauguration was attended by distinguished guests, including Shri V. Kamakoti Veezhinathan, Director of IIT Madras, and Lt. Gen. Karanbir Singh Brar, along with other notable figures. CHAI aims to reshape perceptions of AI in the workforce, delivering accessible, transformative solutions for everyday challenges and supporting innovation and nation-building.

EVENTS



On **11th & 12th November, 2024**, we participated in the TIPS 5.0 Workshop at ARTPARK, Bangalore, under the National Mission on Interdisciplinary Cyber-Physical Systems (NMICPS). IITM Pravartak Technologies Foundation showcased innovative projects and startup ecosystem focusing on AI, robotics, and IoT in sectors like healthcare, education, and national security. The event provided a valuable platform for collaboration with 25 Technology Innovation Hubs (TIHs), driving innovation for real-world challenges. Inspired by the discussions, we look forward to TIPS 6.0 and the continued advancement of technology for societal growth.



On **9th December, 2024**, we hosted an exclusive screening of Stone & Age, a captivating documentary by Neon Reel Creation, directed by Mr. Vivek Wagh (Late), at the Main Auditorium, IIT Madras Research Park. The film explored the Geoglyphs of Konkan, highlighting their cultural & historical significance & the need for preservation. Supported by the Department of Science and Technology, and organized with IIT Hyderabad and JNU Delhi, the event was graced by Prof. V. Kamakoti Veezhinathan, Director of IIT Madras, and Mr. Prateek Joshi, the producer. The event was a great success, reflecting our continued dedication to preserving these invaluable cultural treasures.



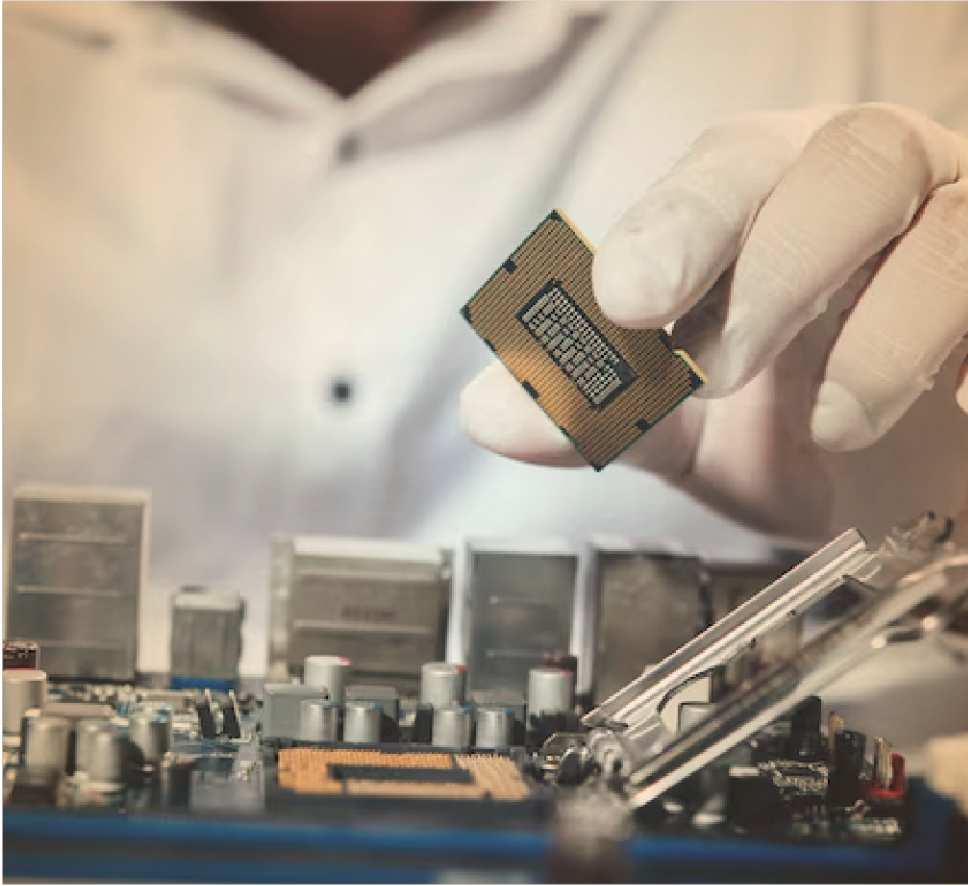
On **10th December, 2024**, A Fun Activity Center for budding scientists, founded by Prof. T. S. Natarajan (Retd.), IIT Madras/Tirupati, was introduced to offer exciting DIY learning experiences for children aged 10 and above. The center provided modules on 3D Modeling, Fun with Science, Basic Electronics, and Learning Computers, with six sessions per module, each lasting one hour. IITM Pravartak Technologies Foundation shared this initiative to promote science awareness among students, while all communications and transactions were handled directly by organizers "The Falling Apple".

COURSES LAUNCHED



From **14th November to 21st December, 2024**, IITM Pravartak Technologies Foundation partnered with ENAC (Ecole Nationale de l'Aviation Civile), a prestigious French university, with support from Airbus, to launch India's first Aviation Safety Management course. This advanced program was designed to strengthen safety standards in India's civil aviation sector, equipping Safety Managers and Experts with essential skills to lead, evaluate, and enhance safety across the Air Transport System.

COURSES LAUNCHED



On **30th November, 2024**, IITM Pravartak Technologies Foundation launched the 'Advanced Electronic Manufacturing' course, empowering learners to operate industry-standard machines and earn a prestigious certificate issued by SWAYAM Plus in collaboration with IIT Madras. The program covers SMT components, solder paste technology, automatic pick-and-place machines, and reflow fundamentals, offering eligibility to B.E./B.Tech graduates, Diploma holders, and B.Sc. Electronics students.

On **01st December, 2024**, IITM Pravartak Technologies Foundation launched a hands-on "Digital Manufacturing" course designed to equip students with industry-ready technical skills. The program covered 3D modeling, 3D printing and scanning, and CNC programming. This Course is open to B.E./B.Tech graduates in Mechanical, Manufacturing, or Production Engineering.





On **9th October, 2024**, IITM Pravartak Technologies Foundation hosted AAI Chairman Mr. M. Suresh and Executive Director Mr. Sunil Dutt to discuss several strategic initiatives, including the development of a Flight Test Course and a one-year PG program in Aviation Management in collaboration with AAI and IITM. They also explored opportunities in advanced ground handling equipment and passenger security scanning technologies. This collaboration aims to drive innovation in the aviation sector.



On **10th October, 2024**, We had the honor of hosting a distinguished delegation from the Asian Development Bank (ADB), including Ms. Shanti Jagannathan, Director, SG-HSD, ADB, and other senior officials. During their visit, we showcased the impactful work at IITM Pravartak Technologies Foundation as a Technology Innovation Hub and incubator supporting deep-tech startups. The ADB team explored our innovation ecosystem, visited the IIT Madras Research Park, and engaged with startups to understand the technological innovations being nurtured. Discussions centered on leveraging technology for sustainable development, and we look forward to potential future collaborations with ADB to drive inclusive innovation.

VISITS

VISITS



On **13th October, 2024**, we had the privilege of hosting a delegation from Chenduran College of Engineering & Technology, Pudukkottai, at IITM Pravartak Technologies Foundation and AMTDC. The visit fostered a vibrant exchange of ideas, with the delegation exploring ongoing advanced manufacturing and smart technology projects at our centers. Discussions centered around potential collaborations in areas such as joint R&D in machine tools and production technology, smart manufacturing, educational initiatives, and tech incubation for Chenduran College students. This visit has set the stage for future collaborations aimed at enhancing academic knowledge and driving innovation for societal impact.



On **20th October, 2024**, The cohort of 24 Mechanical Engineering graduates recently completed the Digital Manufacturing Practice Skill Training Program at CSTF, IIT Madras, supported by IITM Pravartak Technologies Foundation. The program equipped them with skills in 3D modeling, CAM, 3D printing, and conventional manufacturing processes. During the program, participants visited the IITM Research Park, AMTDC, Agnikul, and IITM Pravartak, where they engaged with project managers and startups to gain practical insights. These experiences have prepared them for careers in tech-driven industries, startups, and research centers focused on innovation.

VISITS



On **4th November, 2024**, we had the privilege of hosting Lt. Gen. Michael AJ Fernandes, Commandant of the Officers Training Academy, and his team at IIT Madras Research Park and IITM Pravartak Technologies Foundation. During their visit, Lt. Gen. Fernandes explored our 5G CoMNet Testing Lab and engaged with incubatees from Startups 32 Mins and Music Temple. The discussions highlighted the potential for technology-driven collaborations with the Indian Army to support national advancement and innovation.



On **16th November, 2024**, IITM Pravartak hosted Lt. Gen. Rakesh Kapoor and Indian Army officers, showcasing innovations, deep-tech startups, and Cyber Commando training, highlighting collaboration and commitment to national progress.



On **19th November, 2024**, IITM Pravartak recently hosted students & faculty from AMC Engineering College, Bengaluru. They toured the CoMNet Testing Lab, explored 5G telecom technologies, and engaged with deep-tech startups on problem-solving and potential ventures. The visit ended with a showcase of innovative projects, fostering enriching discussions and future collaboration.

VISITS



On **26th November, 2024**, IITM Pravartak had the honor of hosting RBI Governor Shri. Shaktikanta Das and his team. They toured our facilities, engaged with CXOs on impactful projects, and praised our innovations, inspiring us to continue contributing to India's growth.



On **23rd December, 2024**, IITM Pravartak hosted Dr. A. Suphalakshmi and Mr. Jeshuran Samuel J from Takshashila University, fostering discussions on future collaborations. We showcased advancements in Sensors, Networking, Actuators, and Control Systems along with innovative startups like 32Mins and Music Temple. They explored the Gamaka Box project, toured the 5G Comnet Lab, and visited the Centre for Human-Centric AI (CHAI), showing keen interest in potential partnerships.



On **03rd December, 2024**, IITM Pravartak hosted Ms. Neeta Prasad, Joint Secretary at the Ministry of Education, showcasing groundbreaking innovations. She toured the IITM Incubation Cell, IITM Research Park, startups like Agnikul, and the 5G CoMNet lab. The visit featured discussions on government initiatives and interactions with vibrant startups, paving the way for future collaborations.



On **27th December, 2024**, IITM Pravartak hosted students and faculty from Malnad College of Engineering, Hassan. They explored advancements in Sensors, Networking, Actuators, and Control Systems and toured the 5G Comnet Lab. Engaging with startups, they learned about flagship programs like EIR, SSS, and PRAYAS, fostering innovation and entrepreneurship.

VISITS



On **30th November, 2024**, IITM Pravartak hosted students and faculty from Sri Jayachamarajendra College of Engineering (SJCE), Mysore. They explored advancements in Sensors, Networking, Actuators, and Control Systems, toured the 5G Comnet Lab, & engaged with startups. The visit included insights into entrepreneurship programs like EIR, SSS, and PRAYAS, along with tours of the IITM Incubation Cell, Advanced Manufacturing Technology Centre, and Lab-Grown Diamond Centre, fostering discussions on innovation and collaboration.



On **30th December, 2024**, IITM Pravartak hosted over 15 enthusiastic students from the Entrepreneurship Development and Innovation Institute, Tamil Nadu (EDII TN). The visit included interactions with startups like 32Mins, Music Temple, Swayatt Drishtigochar, and Vaan Megam Networks, along with tours of the IITM Incubation Cell, Advanced Manufacturing Technology Centre, & R2D2 IIT Madras. Discussions covered incubation processes, startup strategies, & entrepreneurship, inspiring future collaborations.



ANNOUNCEMENTS

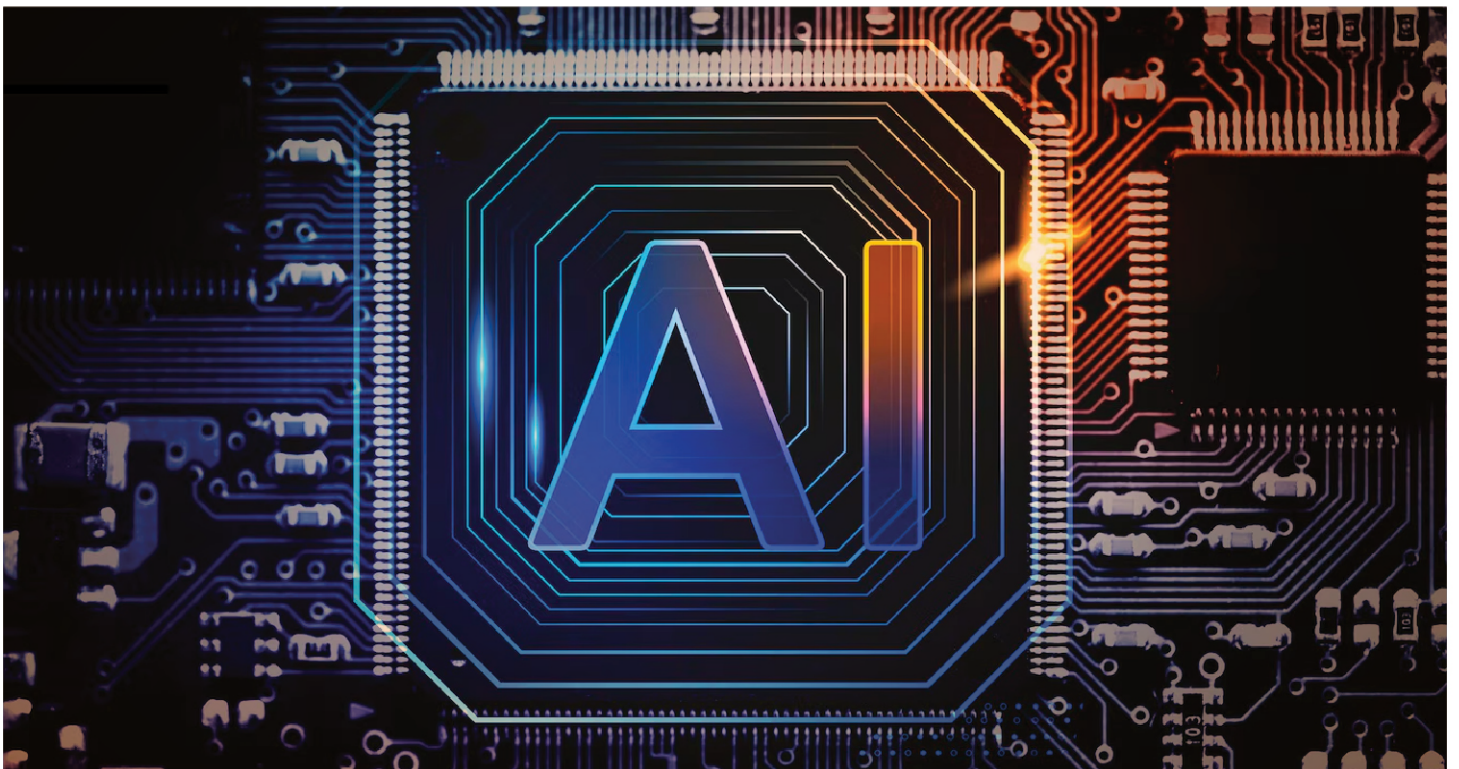


On **6th November, 2024**, IITM Pravartak Technologies Foundation (PTF) hosted the 'Database Engineering' Hackathon, providing tech enthusiasts and professionals a platform to showcase their database and systems development skills in a competitive and challenging environment. Participants tackled real-world database challenges, collaborated with experts, and presented innovative solutions while enjoying networking opportunities, hands-on learning, and exciting prizes. Winners were rewarded with cash prizes (INR 3L for 1st place, INR 2L for 2nd, and INR 1L for 3rd) and gained access to incubation support of up to INR 50L, job offers, mentorship, and the possibility of pursuing higher education at IITM, subject to approval. Their solutions are also being considered for future applications by IITM Pravartak Technologies Foundation.

ANNOUNCEMENTS



On **11th November, 2024**, We celebrated the graduation of a talented cohort from the Sony Finishing School, marking the second edition of this transformative program in collaboration with Sony India. The six-month intensive training equipped engineering graduates with advanced skills in AI/ML, Product Security, and Computer Graphics. The event featured dignitaries from Sony India, who shared insights on the future of technology and skill development.



On **26th December, 2024**, the Sony AITRIOS Innovation Challenge Hackathon, organized by Sony, IITM Pravartak, & NASSCOM DeepTech, provided a dynamic platform for AI & image processing enthusiasts to innovate using the Raspberry Pi AI Camera & Sony's IMX500 image sensor. Participants competed for prizes and incubation opportunities while showcasing their creativity & problem-solving skills.

Keynotes by Prof. Gaurav Raina and Dr. M.J. Shankar Raman emphasized AI's role in making India a tech leader and the importance of hackathons in addressing national challenges. Ms. Meenakshi Chidambaram highlighted this as the start of a larger vision, inspiring participants to shape the future of AI technology.

ANNOUNCEMENTS

On **20th December, 2024**, IITM Pravartak, in partnership with IIT Madras, UGC, and Yuvamanthan, successfully organized the UGC Hackathon on Waste Management and Manual Scavenging, offering IIT Madras students a platform to present innovative solutions to pressing societal challenges. The event witnessed active participation from individuals and teams, with all participants receiving certificates and top winners securing ₹75,000 for first place and ₹50,000 each for the two second-place prizes. This initiative underscored a commitment to fostering impactful innovations and leveraging technology and creativity to drive meaningful social change.





MOU SIGNING



MOUs



On **19th October, 2024**, IITM Pravartak Technologies Foundation collaborated with Codenatives to launch a specialized training course for Salesforce B2C Commerce Cloud Developers. The program was designed to teach aspiring developers how to set up and manage advanced online stores, customize features, and integrate third-party tools. This course aimed to equip participants with essential skills for success in the growing e-commerce industry.



On **19th November, 2024**, A Memorandum of Understanding (MoU) was signed between iTNT & IITM Pravartak Technologies Foundation, aiming to support deep-tech startups in Tamil Nadu. Startups incubated at IITM Pravartak had the opportunity to join iTNT Hub's acceleration program, gaining access to funding and global market expansion. Both organizations also planned to explore other sectors for collaboration and host a Joint Innovation Challenge to foster regional innovation.



On **19th November, 2024**, IITM Pravartak Technologies Foundation and Campus Angels Network (CAN) formed a transformative partnership through a Memorandum of Understanding (MoU) to accelerate the growth of university-incubated startups. CAN provided expert mentorship on business strategy, fundraising, marketing, & product development. Startups gained access to funding of up to ₹2 Crore and expanded their networking opportunities with investors and partners. This collaboration aimed to empower innovators and drive technological advancements, contributing to economic growth and entrepreneurship.



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