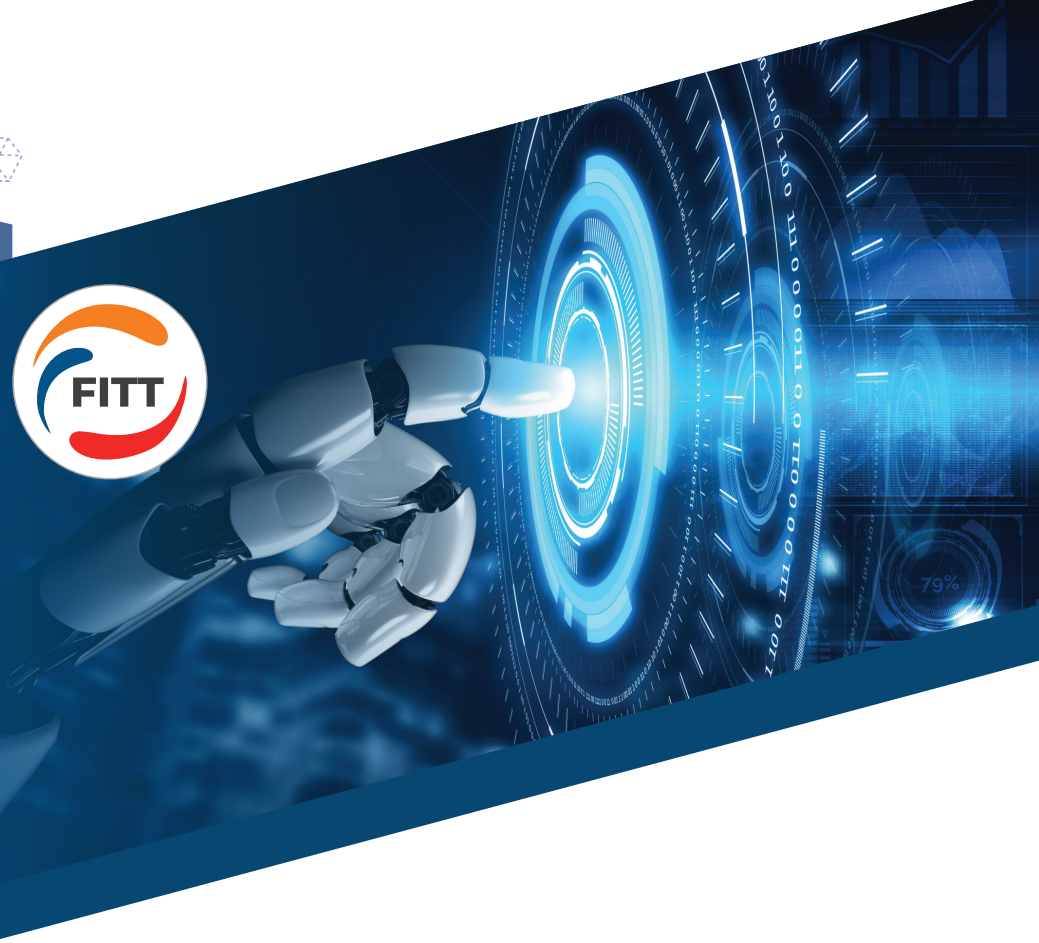


FITT Forward

QUARTERLY NEWSLETTER

APRIL - JUNE 2025

R&D Projects & Partnerships

Collaborative R&D | Technology Development | Expert Consultancy Skill Development Programs | Workshops & Conferences Industry | Government | Academia | Multilateral Organizations | CSR Funding

Intellectual Property & Technology Transfers

IP Analytics & Due Diligence | IP Filings & Management | IP Audits Technology Scouting | Match-making | Technology Transfers & Licensing IP Awareness | Techno-legal Support

Incubation & Entrepreneurship

Infrastructure | Lab/Office Space | Specialized Equipment | Access to IITD Labs Technical Mentoring | Business Mentoring Business & Market Connects | Investor Connects | Networking | Funding Support

Research & Innovation Park

Managed Facility for creating a knowledge and innovation ecosystem Spaces for corporates in manufacturing, R&D, D&D, Process Engineering Auditorium | Meeting/ Conference Rooms | Training Rooms | Service Apartments

India's Innovation Engine Hits Overdrive

If you think India's deep-tech scene is just warming up, think again. This quarter, FITT at IIT Delhi proved it's not just riding the innovation wave—it's driving it.

From international startup diplomacy with Malaysia and Korea to a flurry of Demo Days at DSCE, the action was nonstop. Over 100 startups pitched to investors like DBS Bank and Soonicorn Ventures, while ₹37.3 Cr in funded R&D projects pushed boundaries in biotech, defence, and clean energy.

FITT's IP pipeline also flexed: 28 new filings, including breakthroughs like a Wound Healing Patch and Tele-Robotic USG Suite, are already being commercialized. And programs like Unnati AI (with Microsoft) and Samsung's Solve for Tomorrow are taking grassroots innovation national.

India's deep-tech startups aren't just competing globally—they're winning. With pilots, partnerships, and patents, FITT is building more than startups—it's shaping the future.

R&D Projects & Partnerships

Malaysia & India Double Down on Startup Synergy

Innovation diplomacy is having a moment. A high-powered Malaysian delegation recently touched down in Delhi to visit DSCE and FITT as part of the Malaysia-India Startup Exchange Program. The goal? To build deeper ties in deep-tech, AI, digital health, and sustainable innovation.

Innovation passports were stamped, ideas exchanged, and collaboration emerged as the new currency during this high-impact visit to DSCE and FITT at IIT Delhi. This wasn't just a diplomatic handshake—it was a

dynamic exchange of knowledge and ambition, designed to supercharge entrepreneurship across borders.

From in-depth explorations of AI, sustainable technologies, and digital health, to brainstorming on co-developing future-ready products, the energy was electric. Delegates toured FITT's incubation hubs and saw India's boldest ideas in action.

More than a tour, it became a masterclass in ecosystem-building. Panel discussions sparked partnership plans, and innovation demos led to shared venture blueprints. The delegation voiced strong intent to collaborate in high-impact areas—from intelligent manufacturing to inclusive healthcare.

This landmark initiative wasn't about exporting startups—it was about importing trust, vision, and a shared ambition to co-create meaningful impact. As the world leans into borderless innovation, Malaysia and India are setting the gold standard for startup diplomacy: fast, fearless, and founded on progress.

In a world where tomorrow's big idea might be born in Kuala Lumpur and scaled in New Delhi, this initiative made one truth loud and clear: the future belongs not to isolated innovators, but to those who build global bridges with local impact.

Sangam 2025: Where Korean Innovation Meets Indian Ambition

On June 26, 2025, FITT became a global launchpad as it hosted *Sangam: Korea-India Startup Bridge*—a high-energy convergence of bold ideas, breakthrough technologies, and borderless innovation.

This one-day summit brought together seven high-potential Korean startups—BE Digital Presence INC, ELMCAD Co., Ltd., WI. Plat Co., Ltd., Tidy-B Inc., K Startuparm, Second Team, and Dodlab—to engage with India's thriving startup ecosystem. These ventures spanned sustainability, smart manufacturing, digital transformation, and lifestyle innovation.

Through curated interactions, founders explored India's market dynamics, regulatory frameworks, and consumer behavior. Expert sessions offered insights into market entry strategies, funding avenues, and partnership frameworks. A workshop with Unicorn Incubators and Indian startups became a collaborative sandbox where new partnerships began to form.

Sangam 2025 wasn't just a networking event—it was a two-way street of learning and collaboration. Korean startups gained ground-level insight, while Indian stakeholders discovered disruptive tech and global perspectives.

True to its name—*Sangam*, meaning confluence—the event was a celebration of cultural connection and a shared commitment to innovation. FITT once again reaffirmed its role in shaping global entrepreneurship through meaningful cross-border collaboration.

Mavin Ventures Partners with FITT to Fuel Innovation

At Mavin Ventures, we believe that breakthrough innovation emerges at the crossroads of research and bold entrepreneurship. In alignment with this vision, we're thrilled to announce a strategic partnership with FITT - India's premier innovation engine.

This collaboration embeds us within IIT Delhi's vibrant R&D ecosystem, offering direct engagement with emerging technologies and India's leading scientific minds. Together, we aim to support visionary founders and accelerate the journey from lab to market.

Through this partnership, we're building a bridge between academic excellence and market relevance—co-creating innovation policies, catalyzing commercialization, and helping India evolve as a global hub for transformative ideas.

FITT Spurs ₹37.3 Cr in Funding Through 56 High-Impact R&D Projects

Between April and June 2025, FITT spearheaded 56 impactful R&D, tech development, and consultancy projects—unlocking an impressive ₹37.3 Cr in funding. This isn't just about numbers—it's about momentum.

By collaborating with corporates, academia, and government bodies, fitt is igniting regional growth and accelerating tech transfer. These partnerships fuel knowledge exchange, entrepreneurial breakthroughs, and tangible societal impact.

Select Projects

Project Title	PI	Department/Centre
Phase 2 of Route Optimisation: Optimization of Procurement Operations	Nomesh	Mechanical Engineering
Spectroscopy-based characterization of cell culture samples	Anurag S. Rathore	Chemical Engineering
SED Fund	Shashank Bishnoi	Civil Engg.
Providing Drinking Water to Bhabua and Mohania Town Under Jal-Jeevan-Hariyali Abhiyan on a Turnkey Basis by Utilizing Water Technical Review of Design and Drawings	K.N. Jha	Civil Engineering
Development of National Highways Climate Adaptation Policy and Guidelines (HighCAP)	Vimlesh Pant	C.A.S.
Development of a Separator for Alkaline Water Electrolyzer	Bijay P. Tripathi	DMSE
Emissions assessment from interstate trucks in Delhi	Rahul Goel	TRIPC
Development of Cost-Effective and Durable Repair Material for structural repair and for use as mortar for making brick walls	Gupta Supratic	Civil Engineering
Development of Guidelines for Tunnel Safety	Shirole Deepanshu	Civil Engineering
Demonstrate Proof of Concept for robust control of continuous Protein A chromatography and pH titration for viral inactivation step	Anurag S. Rathore	Chemical Engineering
Facilitate a continuous downstream processing step (CIEX step) for the production of Mabs, taking one specific BBL Mab product as a model, including the development and implementation of required PAT tools at in-process stages.	Anurag S. Rathore	Chemical Engineering
Consultancy Services for Assessment of Load-Carrying Capacity and Strengthening of existing Bridges on Zozila-Kargil-Leh Road (NH-1) for passage of Heavy Multi-Axle Load, Leh	Gupta Supratic	Civil Engineering

Key Partners Across Sectors

- **Govt & Public Sector:** Ministry of Home Affairs, NDMA, Arunachal State Rural Livelihoods Mission
- **Healthcare & Biotech:** Biocon, TATA 1MG, Lonza
- **Infrastructure & Engineering:** L&T, Dee Vee Projects
- **Aerospace & Defence:** Merlinhawk Aerospace
- **Technology & Innovation:** Eaton, Fermionic Design
- **International:** Fortify Health, GIZ





Forging the Future: IIT Delhi & IPMPL Advance Surface Engineering

In a bold step towards enhancing component durability, FITT has partnered with Industrial Processors & Metallizers (IPMPL) for a groundbreaking project titled "*Surface Modification of Components for Improved Lifing Using Lasers.*"

Led by Prof. Ayan Bhowmik from the Department of Materials Science and Engineering, this research focuses on laser-based microstructural engineering to combat erosion, abrasion, and corrosion in high-value industrial components.

Launched on April 1, 2025, the initiative combines academic rigor with IPMPL's industrial expertise to develop next-gen protective coatings for components used in aerospace, power generation, and heavy machinery. By leveraging advanced laser technologies and real-world testing, this project sets a benchmark for sustainable, high-performance surface solutions.

Intellectual Property & Technology Transfers

FIF and SIDBI Back iDEX Startups

In a major step to empower deep-tech ventures, FITT hosted an Investment Committee meeting under the FITT Investment Fund (FIF), in collaboration with SIDBI. The session spotlighted 10 high-potential startups—including seven under the Ministry of Defence's iDEX (Innovations for Defence Excellence) program.

From advanced UAV systems and surveillance tech to dual-use AI platforms, the iDEX startups presented disruptive innovations with robust commercialization pathways. The remaining ventures showcased sector-agnostic solutions in healthcare, green energy, and automation—reaffirming FIF's commitment to impactful entrepreneurship.

This FIF round not only highlighted the value of seed equity in national strategic sectors but also strengthened FITT's role as a bridge between innovation and investment.

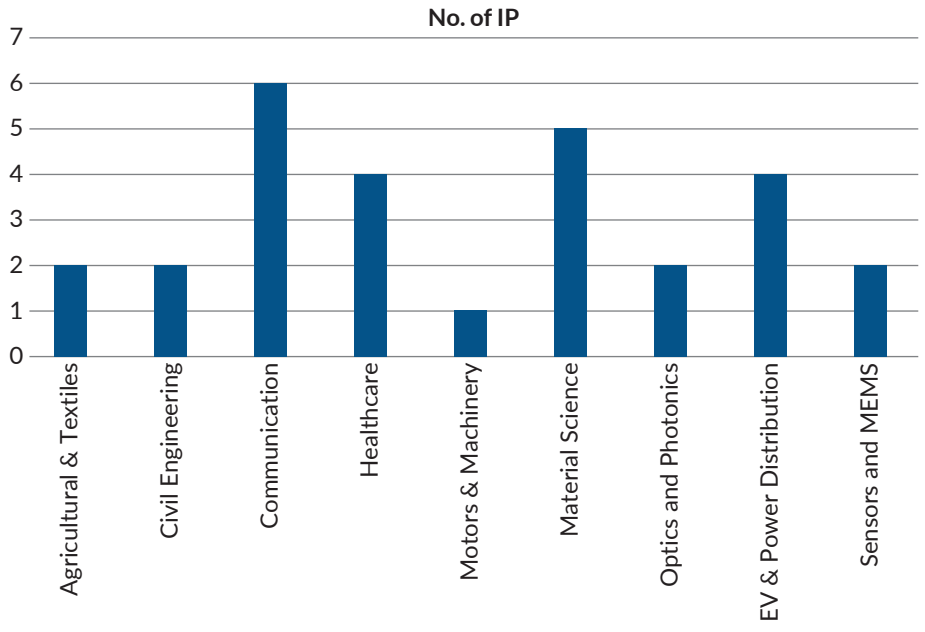
28 IPs Filed in Q1 FY25: Mapping IIT Delhi's Innovation Pipeline

FITT filed 28 intellectual property applications in Q1 FY25—underscoring IIT Delhi's steady output of cutting-edge innovations.

Leading Sectors by IPs Filed:

- Communication: 6
- Material Science: 5
- Healthcare: 4
- Motors & Machinery: 4
- Sensors & MEMS: 2
- Optics/Photonics, EV & Power: 2 each

Meanwhile, Civil Engineering, Agriculture/Textiles, and some sub-fields show emerging activity, pointing toward future potential with targeted R&D.



From Lab to Market: Strategic Technology Transfers at FITT

Two standout technology licensing deals were executed this quarter:

- Wound Healing Patch (Prof. Jayanta Bhattacharyya): A hydrogel-based dressing accelerating tissue regeneration.
- Tele-Robotic USG Control Suite (Prof. Subir Kumar Saha): Enabling remote ultrasound diagnostics using robotic arms.

Beyond IIT Delhi, FITT's i-TTO supported 27 IP filings and facilitated the transfer of a Stubble Removal Machine developed at IIT Ropar's iHub-AWaDH to Regenerix Resource Pvt. Ltd.

A comprehensive IP portfolio, including innovations in VR, quantum communication, biomedical devices, and sustainable energy systems, reflects India's growing deep-tech ecosystem.

S. No	Title	Inventor	Department
1	Pneumatic Cotton Bolls Thresher for the Picked Cotton Bolls	Virendra Kumar Vijay	Centre for Rural Development and Technology
2	Method for Facilitating Vr-Enabled Vision of a Target Site and System Thereof	Joby Joseph	Department of Physics
3	A System and Method for Estimating Suspiciousness in an Environment	Lalan Kumar	Department of Electrical Engineering
4	Omnidirectional Three-Dimensional (3D) Underwater Imaging Using Single Acoustic Vector Sensor with no Motion Requirement	Arun Kumar	Centre for Applied Research in Electronics
5	Bioinspired Nanotextured Tribological Hybrid Surface for Controlling Directional Friction, and Method of Fabricating The Same	Jitendra Pratap Singh	Department of Material Science and Engineering

S. No	Title	Inventor	Department
6	Radial-Wing-Augmented Pipe Section for Mitigating Lateral Buckling in Offshore Pipelines Buried in Seabed	Bappaditya Manna	Department of Civil Engineering
7	Brillouin-Based Optical Carrier Amplification for Kramers-Kronig Receivers with Direct Current-Value Iteration Method	Amol Choudhary	Department of Electrical Engineering
8	A Spherical Gear-Based Laparoscopic Camera Holder with Integrated Braking	Srinivasan Venkataraman	Department of Design
9	Robotics Manipulator with Kinematic Chain of Hinge-Joint Shaped Links for Minimally Invasive Neurosurgery	Sunil Jha	Department of Mechanical Engineering
10	Method for Optimizing Data Processing and Communication in Real-Time and System Thereof	Swades De	Department of Electrical Engineering
11	A Weight-Shifting Training System for Lower Limb Amputees	Deepak Joshi	Centre for Biomedical Engineering
12	A Piezoelectric Material-Based Echosounder for Underwater Applications	Sushma Santapuri	Department of Applied Mechanics
13	Solution-Processed Method for the Preparation of Cathode Material	Madhusudan Singh	Department of Electrical Engineering
14	Hydrogel Membrane for Wound Dressing, Methods of Preparation, Kits and Use Thereof	Bhuvanesh Gupta	Department of Textile and Fibre Engineering
15	Method to Recover Transparent Conductive Oxide Coated Glass Substrate from End-of-Life (EOL) Perovskite Solar Cells	Trilok Singh	Department of Energy Science and Engineering
16	Multi-Axis, Stepper Motor-Based Laparoscopic Camera-Holder	Srinivasan Venkataraman	Department of Design
17	A Method to Synthesize a Sulfur-Infused Aminated Metal-Organic Framework (MOF) Composite for a Sodium-Sulfur Battery	Vipin Kumar	Department of Energy Science and Engineering
18	System and Method for Individual Classification and Novelty Detection Using Structural Vibration Data	Subrat Kar	Department of Electrical Engineering
19	Bend-Compensated Optical Fibers	Deepak Jain	Optics & Photonics Centre
20	System for Generation of Entangled Photon Pairs for Multi-User Quantum Communication	Joyee Ghosh	Department of Physics
21	Hybrid Flame Post-Treatment Process of High Velocity Air Fuel Sprayed Nickel Based Superalloy Coatings	Ayan Bhowmik	Department of Material Science and Engineering
22	Development of Thermoregulatory Polyester Filaments from Textile Waste	Archana Samanta	Department of Textile and Fibre Engineering
23	System and Method for AI/ML-Based Latency Reduction in Wireless Retransmission Mechanisms	Monika Aggarwal	Centre for Applied Research in Electronics
24	A Free-Standing Flexible Thermoelectric Generator	Jitendra Pratap Singh	Department of Material Science and Engineering
25	A Method of Preparing a Modified Sodium Metal Electrode, a Sodium Metal Anode, and an Electrochemical Cell	Vipin Kumar	Department of Energy Science and Engineering
26	Three-Phase Multilevel Inverter with Flying Capacitor and Level Doubling Network for Enhanced Voltage Levels	Sumit Kumar Chattopadhyay	Department of Energy Science and Engineering
27	A Damping System for a Railway Track	Arnab Banerjee	Department of Civil Engineering
28	Novel Flame-Retardant Resin and Method of Preparation Thereof	Javed Nabibaksha Sheikh	Department of Textile and Fibre Engineering

Incubation & Entrepreneurship

Startups & MSMEs Thrive Under DSCE's Bootcamps and Accelerators

FITT's DS Centre of Entrepreneurship (DSCE) hosted two high-impact events:

- **Innovation & Entrepreneurship Bootcamp** (April 30): MSME leaders and student entrepreneurs explored finance, branding, government schemes, and digital marketing through immersive sessions.
- **Maxcel Accelerator Open House:** Powered by DBS Bank and backed by Capital-A and SanchiConnect, this event introduced a sector-specific accelerator focused on hardware, IoT, and automation.

Together, these initiatives reinforced DSCE's mission to democratize innovation and empower ventures across India.

Demo Day Series: From Pitches to Partnerships

Across four editions of Demo Day, DSCE provided over 130 startups with the opportunity to pitch to marquee investors like GrowX, SeaFund, Soonicorn Ventures, 888vc, and 3i Partners.

Each edition evolved—moving from stage presentations to intimate, high-impact one-on-one conversations. From AI diagnostics and clean tech to robotics and agri-tech, these sessions have consistently delivered term sheets, pilot offers, and lasting partnerships.

DSCE's Demo Days are becoming a national launchpad for startups ready to scale—and investors hungry for the next big thing.

Launch of Unnati AI: A National Call to Build with Purpose

The Unnati AI Accelerator, powered by Microsoft, launched with a visionary keynote by Abhishek Singh, emphasizing skilling, innovation, infrastructure, and inclusivity as pillars of India's AI future.

This platform supports startups and students with mentorship, funding, and access to Microsoft's tools—designed to create real-world, AI-driven impact in healthcare, education, and sustainability.

DSCE on the Global Stage

At **TiEcon 2025**, DSCE's second cohort—including iKITES, HumLogJobs, Aaizel Technologies, and MachPhy Solutions—showcased India's deep-tech strength in AI, sustainability, and HR-tech.

With support from the **FITT Investment Fund (FIF)** and DS Group, DSCE startups also engaged in closed-door evaluations, industry connects, and strategy sessions—reinforcing its position as India's deep-tech venture catalyst.

R&I Park - Bio Spark Program Lights Up Mathura

FITT's Bio Spark Program—launched with HS Foundation India—isn't just another entrepreneurship bootcamp. It's a grassroots innovation movement catching fire in India's heartland. Most recently, it ignited serious startup energy across colleges in Mathura, where students and faculty came together to chart out campus-based innovation ecosystems.

Mentorship sessions, startup pitches, and plans for new E-cells sparked excitement and ideas grounded in local challenges. Faculty lined up to become mentors. Students rolled up with startup concepts tailored for semi-urban India.

While metro cities often get the startup spotlight, Bio Spark is building a new narrative—one where innovation rises from every corner of the country, not just the usual suspects.

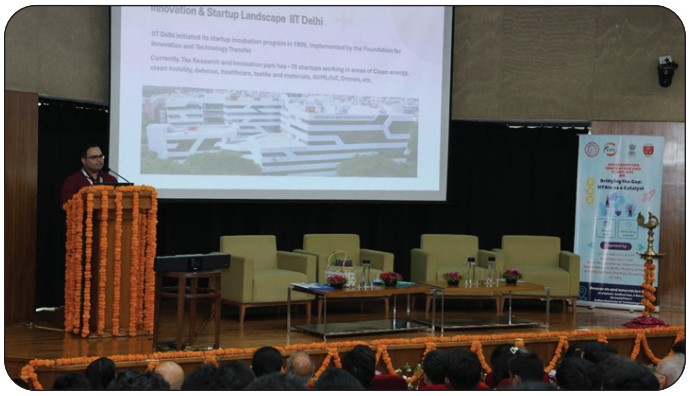
How India's startups are getting a health check

Health innovation got a prescription for impact last month when FITT teamed up with Health Technology Assessment India (HTAIn) to host a workshop titled "Bridging the Innovation Gap." The mission? Equip startups with tools to align products with real public health needs—early and effectively.

Leaders from DHR, IIT Delhi, and PGIMER discussed how HTA can help startups fine-tune product-market fit, increase sustainability, and make smarter decisions from day one. From live case studies to policy insights, the event showed how healthtech ventures can harness HTA for validation and value creation.

Innovators can no longer rely on "build it and they will come." With HTA as a compass, they can navigate the complex healthcare landscape—and make sure their tech actually saves lives.


भारतीय प्रौद्योगिकी संस्थान दिल्ली
INDIAN INSTITUTE OF TECHNOLOGY DELHI


Innovation & Startup Landscape IIT Delhi


Incubator Action
HTAIn Benefit for Startups
Guide startups through HTAIn process
Independent validation of effectiveness and cost-efficiency
Help Startups align product development with HTAIn
Optimized design and pricing for Indian market
Facilitate stakeholder engagement/ Support Startups in Preparing HTA Submissions
Access to policymakers, clinicians, and public health buyers
Consider HTAIn results during startup fundraising
Enhanced credibility with investors and partners
Connect with HTAIn resource centers
Training and capacity building in health tech assessment


Health Technology Assessment Priorities


Applications of HTA: India

Events & Outreach

Turning Ideas to IP

In its latest push to empower innovators, FITT hosted two action-packed knowledge sessions in April and May 2025, helping researchers, students, and startups unlock the true potential of their ideas through IP education.

The first, held April 8, spotlighted patent intelligence with a live demo of Xlscout.ai, led by Product Consultant Prateek Kanaujia. Attendees explored real-time patent searching, analytics, and novelty validation—all essentials for informed IP decisions.

Fast forward to May 28, and FITT's Innovation Technology Transfer Office (i-TTO) took center stage at the Startup Funding Matrix Workshop. Their talk unpacked how IPR boosts startup valuation and attracts investor dollars, arming founders with practical strategies at the nexus of innovation and protection.

With India racing toward global innovation leadership, FITT is building an ecosystem where IP literacy is power—and startups know how to wield it.

Indian Deep-Tech Startups Take the Global Stage

Indian startups backed by FITT are making waves globally:

- **Mobisec Technologies:** Honored as a "Game Changer" at GATES Tech Summit, Bali.
- **Dash Dynamic:** Won the Aegis Graham Bell Award in Electric Mobility.
- **Synchronous Drives & Inverters:** Best Startup at R&I Conclave, SVNIT Surat.
- **CLUIX Pvt. Ltd.:** Piloting water-tech in 100 villages; selected for GO AUSTRIA 2025.
- **GB Texcoat:** Received ₹40 lakh under Idea Hackathon 4.0.
- **Oneqid Technologies:** Showcased solutions to Goa's top leadership.

These ventures reflect India's ascent in the global innovation landscape—where bold ideas, strong execution, and institutional support converge to shape the future.

SAMSUNG

Solve for Tomorrow: Igniting Youth Innovation Across India

Samsung's "Solve for Tomorrow" campaign reached thousands of students through design thinking workshops, roadshows, and open houses—culminating in 12,189+ applications across four thematic pillars.

The journey now moves to the next milestone: the Top 100 teams who will take their ideas forward in one of India's most exciting youth innovation programs.

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