Galgotias University Redefines Experiential Learning with Advanced Semiconductor, Drone & Simulation Labs

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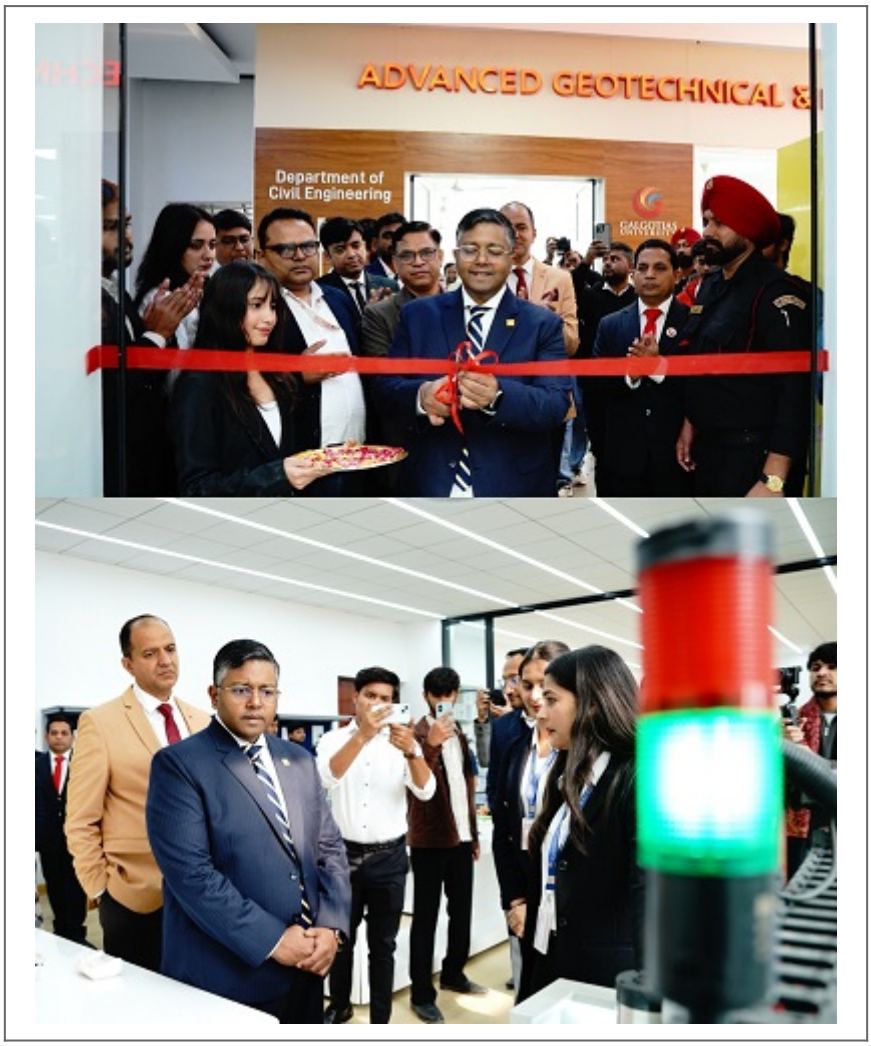
Galgotias University has taken a decisive and future-shaping step in transforming higher education in India with the launch of advanced Semiconductor and Drone Technology Labs, integrated with a powerful Experiential Simulation Learning ecosystem. This initiative firmly positions the university as a national leader in hands-on, industry-aligned education,

setting a new benchmark for experiential learning across the country.



Dr. Ashwin Fernandes, Executive Director (AMESA), QS Quacquarelli Symonds, during the inauguration and lab interaction at Galgotias University

Moving beyond traditional classroom-based instruction, Galgotias University is enabling students to learn by building, experimenting, competing, and innovating. One of the most distinctive additions is the Advanced Drone Soccer Arena, where engineering education converges with competitive gaming. Here, students design and pilot drones in fast-paced matches, sharpening skills such as precision engineering, teamwork, strategic thinking, and real-time problem-solving. The Drone

Soccer Arena was inaugurated by Dr. Ashwin Fernandes, Executive Director (AMESA), QS Quacquarelli Symonds, lending global academic recognition to this pioneering initiative.

As India rapidly strengthens its capabilities in semiconductors, electronics manufacturing, and unmanned aerial systems, Galgotias University has placed its students at the center of this national priority mission. These next-generation laboratories are designed to deliver industry-grade exposure, ensuring students acquire practical expertise rather than only theoretical knowledge.

The Semiconductor Lab provides comprehensive exposure to the chip ecosystem, covering design, simulation, fabrication processes, testing, and applications across artificial intelligence, automotive electronics, and consumer devices. By working on real-world problem statements and advanced simulation tools, students gain critical insights into a sector that is vital to India’s technological self-reliance.

Complementing this is the Drone Technology Lab, which offers immersive training in UAV design, assembly, flight control systems, payload integration, and real-time data analytics. Students engage with real-life applications such as precision agriculture, infrastructure inspection, disaster response, surveillance, and defense technologies, equipping them for rapidly growing global industries.

What truly differentiates Galgotias University is its Experiential Simulation Learning framework. Through digital twins, virtual labs, real-time simulations, and scenario-based challenges, the university recreates industrial environments on campus. This approach decisively bridges the gap between theory and practice, ensuring graduates are industry-ready

from day one.

University leadership emphasized that this initiative reflects Galgotias University’s commitment to becoming a future-ready, innovation-driven institution, aligned with evolving industry demands and national priorities. Faculty members have undergone specialized training to seamlessly integrate experiential methodologies into daily teaching.

Students have welcomed the initiative as a game-changer, citing increased confidence, stronger practical skills, and enhanced employability. Early industry feedback indicates that graduates trained under this model demonstrate superior readiness for high-technology roles.

With these pioneering laboratories and immersive simulation ecosystem, Galgotias University is not just upgrading infrastructure—it is redefining engineering and technology education in India, setting a powerful example for universities nationwide.