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PRESS-RELEASE

Advanced Semiconductor & Embedded Systems Refresher Course Begins at IIT (ISM) Dhanbad

The Indian Institute of Technology (Indian School of Mines) Dhanbad, inaugurated the Refresher Course on *Deployment of Advanced Semiconductor Devices, Microelectronics and VLSI for Proficient Embedded System Design* today at the i2h Building. The programme, scheduled from December 11 to 22, 2025 under Malaviya Mission Teacher's Training Program, commenced in the presence of Prof. Keka Ojha, Dean (Continuing Education Program); Prof. Pradip Kumar Sadhu, Professor (HAG), Department of Electrical Engineering; and Prof. Kaushik Mazumdar, Department of Electronics Engineering and Course Coordinator.

The inaugural session witnessed the participation of around 35 faculty members and professionals from diverse academic institutions across the country. The course aims to offer in-depth exposure to advanced wide-bandgap semiconductor materials, group III–V compound semiconductor-based heterojunction transistors, and their integration into modern VLSI circuits. It also includes extensive hands-on training in TCAD-based device modeling, fabrication processes of semiconductor devices such as CMOS, MOSFET and HEMT, along with digital IC design and embedded subsystem design. The programme is aligned with the evolving demands of the India Semiconductor Mission and seeks to enhance the proficiency of participants in real-time embedded system development.

During the inauguration, the dignitaries highlighted the growing importance of semiconductor technologies, the rapid expansion of microelectronics research in India, and the need to strengthen academic-industry linkages to nurture skilled manpower in this critical sector. The course will run for 12 days with intensive sessions of lectures, hands-on activities and interactive discussions, led by experts from premier institutions and research organizations.

The programme also offers benefits such as free registration, eligibility under UGC's Career Advancement Scheme, MCQ-based assessment for certification and provision for campus accommodation for outstation participants on a first-come basis. Designed to provide comprehensive skill enhancement, this refresher course underscores IIT (ISM) Dhanbad's commitment to advancing semiconductor and embedded system education and supporting national capacity-building in emerging technologies.

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