

IIIT-Delhi establishes a Centre for Intelligent Product Development (CiPD)

Electronic products touch every dimension of our lives today. From healthcare to agriculture to defence to space to manufacturing to financial services - every industry is experiencing an increasing pace of digitization enabled by electronics. However, today, the country imports most electronic products from other parts of the world. Consequently, electronic product imports continue to increase and stand next to Oil and Gold, only to surpass them in the near future.

After the success of the call for “Make in India”, the country now needs to transition to the stage of “Made in India” and “Make for the World”. To respond to this, **Indraprastha Institute of Information Technology Delhi (IIIT-Delhi) has established a Centre for Intelligent Product Development (CiPD).**

Until mid-1990s, leading-edge electronics products were designed and manufactured in the country. However, electronic product development capability in the country has dwindled over the past three decades when the Indian industry realigned itself for success in Software and Services. Today, electronics manufacturing is limited mainly to assembling, soldering, and packaging products - which is a very low-value addition. This has a significant impact on the Economy and Governance. This also presents a critical concern for national security - including defence and space, and also cyber-security.

CiPD intends to bring back hardware product design capability into the Indian electronics ecosystem. This will be done by establishing strong academia-industry linkages through designing, consulting services, and nurturing startups so that the industry can tackle end-to-end problems holistically. This should result in more job creation and improve the local electronics design and manufacturing ecosystem, thereby helping the economy. This centre will help create the virtuous cycle of innovation to make initiatives of the National Semiconductor Mission sustainable.

The Mission/ Focus of the Centre is

- To build the capability to develop **Globally Competitive Intelligent Products** by
 - Engaging *Industry Experts* with relevant experience to upskill and train manpower
 - Developing *globally certified hardware and software platforms*
- To nurture a **sustainable product development ecosystem** in the country by
 - Facilitating the development of *high-volume, industry-ready products*
 - Forging and fostering *industry and academia collaboration*
 - Seeding *RnD Capability* into the Industry
- To **increase the pace of product development** by
 - Facilitating *fast concept-to-prototype* evolution for multiple products on the developed platforms

Prof. Ranjan Bose, Director of IIIT-Delhi, remarked, “*CiPD will work on innovative, high-tech products that are both path-breaking and incorporate emerging technologies. The Centre aims to nurture hardware design capabilities through research and strategic collaborations and create a conducive ecosystem for startups. CiPD’s establishment is a significant stride toward realizing ‘Atmanirbhar Bharat’ in electronics.*”

“If India wants to become a product developer for the world, then products from India should carry global certifications and comply with the latest international standards. Therefore, the centre will focus on bringing the best-in-class design processes to seed innovation in the

*Indian electronics industry,” adds **Prof. Anuj Grover** who heads the Centre. Prof. Grover has also worked in the industry for about 20 years before he started teaching at IIIT-Delhi.*

*“One of the key observations was that there are many regional innovators who need handholding to take their products to the national and international stage.”, says **Mr. Mahendra Pratap**, who helped conceptualize the Centre, is also a co-founder of HCL and has more than 50 years of experience in product development. “At CiPD, we will work on developing indigenous product platforms that will include hardware and software and democratise electronics product development almost like a cottage industry. We want innovators and entrepreneurs to be able to quickly transition from ideation stage to prototyping and product development stages”, he adds.*

CiPD intends to work with consortia like EPIC Foundation, CII, FICCI, IESA, STPI, and the like and develop a network of industry partners and interested academic institutions so that the initiative can have a nationwide impact.