

Skill India: A Key to Self-Reliance

An initiative
for
Developed India (Vikshit Bharat) Mission
by 2047

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Motivation

1. **Insufficient** skilled manpower
2. Approx. **5000** skilled manpower in ESDM annually
3. **FIVE Million** people required at various levels in next 15 years in ESDM

Trivia

- ❖ 800+ Universities
- ❖ 35000+ Colleges affiliated with the universities
- ❖ 2100+ Diploma colleges in India
- ❖ 38 Million Students in the science stream
- ❖ 1.1 Million students in the engineering domain

Obstacles

- ❖ Availability of Commercial EDA tools
- ❖ Lack of proper infrastructure
- ❖ High cost in setting up of startups/small-medium scale companies in ESDM domain

Solution

- ❖ **Right to Quality Skills:** Enable not only engineers but also science stream (Physics, Maths, etc.) students
- ❖ Opensource EDA tools and their ecosystem for tapeouts and system design
- ❖ Foundry support for fabrication
- ❖ Low cost pooled infrastructure for startups/small-medium scale companies
- ❖ Well established supply chain management
- ❖ Cross-border collaborations for greater good

Opportunities

- ❖ Govt. of India schemes in ESDM segments
- ❖ \$30 Billion Funding to boost ESDM sector in India
- ❖ \$10 Million funding to IIT Guwahati from MSDE and MeitY for Skilling and R&D
- ❖ IIT Guwahati & UCSD collaborative efforts to build a global opensource based ecosystem

Recent Activities

- ❖ Two Hybrid-Workshops on OpenROAD for Low-cost ASIC Design and Rapid Innovation and Capacity Building in ESDM and Future Skills was attended by 350+ participants



An effort to build world-wide opensource ecosystem

UCSD and PII have collaborated for the upskilling of 50,000 students and industry professionals by 2030 to generate the quality workforce for ESDM, VLSI and Semiconductors missions activities in India through projects sponsored by MSDE and MeitY, Govt. of India

Technological excellence and self-reliance

IIT Guwahati and UCSD invite all the stakeholders to join the collaboration for greater outreach, technological excellence and self-reliance for a sustainable future and electronic products based skilling.....

For more details, please contact Prof. Andrew B. Kahng, UCSD and Dr. Gaurav Trivedi, IIT Guwahati to join our joint initiative....

Thank You