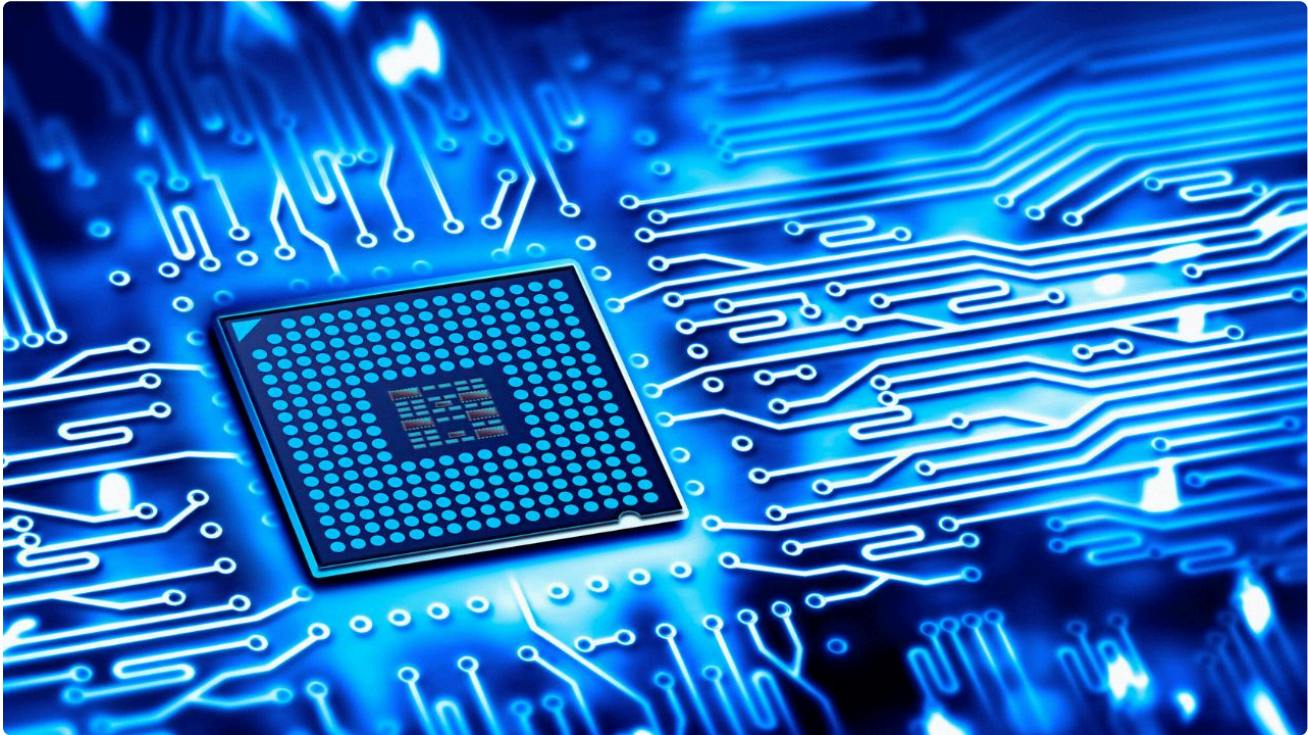


Tata Consulting Engineers steps in to bridge India's semiconductor skill gap



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Tata Consulting Engineers and Arizona State University launch semiconductor training to bridge the massive talent gap and support chip manufacturing ambitions.

Tata Consulting Engineers Limited (TCE), India's largest private-sector engineering consultancy and a Tata Group company, has signed a strategic Memorandum of Understanding (MoU) with Arizona State University (ASU) to co-develop semiconductor workforce capabilities. This partnership marks a pivotal step in strengthening India's semiconductor ecosystem through global collaboration in education, training, and applied research.

Industry-aligned semiconductor training programme

The collaboration kicks off with a joint learning and development programme designed by ASU's Ira A. Fulton Schools of Engineering and Tata Consulting Engineers. Tailored for technical professionals, the programme offers a comprehensive introduction to semiconductor manufacturing, cleanroom systems, contamination control, and sub-fab infrastructure. It blends expert-led sessions

with hands-on, industry-relevant projects to prepare engineers for the design and construction of semiconductor facilities.

“This partnership is a strategic step towards shaping India’s semiconductor future,” said Amit Sharma, MD & CEO of TCE and ASU alumnus. “Together, we aim to create benchmark engineering capabilities and contribute to global semiconductor resilience.”

Why it matters

India’s semiconductor industry is projected to reach \$40 billion by 2030, but a severe talent shortage threatens to slow progress. Multiple reports highlight the scale of the challenge:

TeamLease estimates a shortfall of 250,000–300,000 professionals by 2027 across R&D, design, manufacturing, and packaging. While NLB Services predicts 1 million new jobs by 2026, including, 300,000 in chip fabrication and 200,000 in ATMP (Assembly, Testing, Marking & Packaging). IESA also forecasts a need for 1.5 million skilled workers, 5 million semi-skilled workers across the semiconductor value chain by 2026–27.

Despite producing 600,000 engineering graduates annually, only 1% are considered job-ready for semiconductor fabrication without further training. “Our work with Tata Consulting Engineers is about building long-term capacity and trust,” said Dr. Kyle Squires, Senior Vice Provost at ASU.

“Together, we aim to prepare the next generation of engineers to drive semiconductor innovation.” Global collaboration for local impact With over 180 semiconductor design Global Capability Centres (GCCs) already operating in India and employing 110,000 professionals, the country is well-positioned to become a global hub. But bridging the talent gap is critical to sustaining momentum.

“Participants will gain not just technical knowledge, but also learn how to foster a culture of innovation and quality,” added Dr. Michael Kozicki, ASU professor and programme lead.

This partnership signals a long-term commitment to building engineering excellence and enabling India’s ambitions in advanced electronics manufacturing.