Silicon Summer Schools with Synopsys

What's New: This summer, Synopsys hosted a series of academic programs across the globe, empowering students with hands-on experience and real-world insights into semiconductor engineering. These initiatives are both educational opportunities and investments in the future semiconductor industry workforce.

Why it Matters: The world's reliance on advanced technology—from smartphones to electric vehicles and beyond—has never been greater, and at the core of every innovation lies the essential semiconductor. At the same time, the semiconductor industry faces a critical challenge: a significant workforce gap that threatens to slow progress and innovation. Industry forecasts suggest that by 2030, the global semiconductor industry will require around 1 million more skilled professionals, in addition to maintaining its existing talent pool.

Recognizing the pivotal role that skilled engineers play in shaping tomorrow's technologies, the Synopsys Foundation and Synopsys Academic and Research Alliances (SARA) are dedicated to furthering education from K-12 to the university level through collaborations and shared programs to empower the next generation of semiconductor engineers.

This summer, Synopsys held camps and classes around the world to attract emerging talent to our industry.

A Closer Look:

- **Synopsys and GlobalFoundries 'Chip Design to Tapeout' Pilot Program, Global:** Synopsys and GlobalFoundries (GF) collaborated to launch a global 'chip design to tapeout' educational program for universities. This pilot initiative, supported by SARA and GFLabs, will provide hands-on access to real-world chip design and manufacturing for researchers, professors, and students, significantly lowering the cost barrier to custom silicon. Forty universities worldwide are participating in the open-source 180MCU pilot this fall, with Synopsys supplying electronic design automation (EDA) tools, training, and design collateral, and GF manufacturing the chips via its GlobalShuttle Multi-Project Wafer Program.

- **Synopsys and Purdue University Semiconductor Design 101 Course, Global:** In July, Synopsys and Purdue University launched a new online self-paced course open to high school and university students as well as professionals. The 15-hour self-paced curriculum, led by leading experts in the semiconductor industry, aims to provide foundational chip design knowledge. Over 450 learners have already completed the course and received a certificate from Purdue University.

- **Synopsys Intensive Training Program (ITP), Vietnam:** The end of a school year and the beginning of summer is often marked by a graduation ceremony. For 30+ students in Vietnam, summer kicked off with a June graduation ceremony for their successful completion of the 13-week Synopsys Spring ITP in Design Verification and Synthesis. Program graduates also participated in job matching sessions with Taiwan-based companies. And as summer started for those 30+ graduates, a new cohort of students joined the Synopsys Summer ITP which concluded in August with a graduation ceremony planned for early September.

- **Synopsys "IC the Future" Summer Camp, Taiwan:** The "IC the Future" Summer Camp, in its 3rd year of operation, gives high-school students access to semiconductor and IC design knowledge helping them build confidence, develop industry-relevant skills, and identify clear pathways into STEM fields. Total enrollment for this highly successful program has grown more than 3X between 2025 and the inaugural year in 2023 with 90% of the students who participate to continue studies in STEM-related fields.

- **Synopsys Academic Seminar – Designing with FinFET Technologies, Taiwan:** This seminar, organized by Synopsys and with support from top Taiwanese universities and research institutes, brought together students, professors and industry leaders to discuss the latest in FinFET chip design. Over two days, attendees participated in expert-led sessions on FinFET trends, challenges, and opportunities, with keynote speeches from MediaTek and Synopsys executives. The event included panels on AI and EDA in chip design education and hands-on workshops using Synopsys tools, offering students practical experience in digital and analog design.

- **Synopsys IC Design Boot Camps, Latin America:** From July to August, Synopsys hosted IC design boot camps in seven countries: Guatemala, Colombia, Ecuador, Costa Rica, Chile, Mexico, and the Dominican Republic. Nearly 400 students participated in these programs, which introduced Synopsys EDA tools and IP through collaboration with universities and industry professionals. The boot camps are recognized by regional engineering faculties and students for building practical skills relevant to semiconductor careers. Many current Synopsys employees first engaged with the company through these events.

- **Synopsys Summer and Seasonal Schools, Europe:** This summer, Synopsys organized a series of advanced training programs in collaboration with top universities across Germany, Italy, Portugal and the Netherlands. The programs brought together hundreds of attendees and included hands-on workshops and immersive courses covering topics from analog and digital IC design to AI-driven test engineering, photonics, and advanced chip technologies. Participants benefited from direct experience with Synopsys EDA tools, insights from prominent industry experts as well as networking opportunities.

Additional assets available online: