



# Technology Pathways Initiative Fact Sheet

**Mission** TPI brings together university and community college faculty and high tech industry leaders committed to helping more college women excel in technology fields, through interdisciplinary computing education, from campus to career.

**Challenge** By 2026, the U.S. will have less than 450,000 Computer Science Bachelor's grads to fill roughly 900,000 computing jobs.<sup>1</sup> This workforce gap is exacerbated by a gender gap: women make up 58% of all college graduates, but only 19% of graduates with computing degrees. In California, public universities and community colleges are major suppliers of talent to a rapidly evolving workplace. Closing these gaps will strengthen our workforce, drive tech innovation, and fuel economic growth.

**Key Players** TPI University Partners include: U.C. Berkeley, U.C. Davis, U.C. Riverside, San Francisco State University, San José State University, and California Polytechnic State University, San Luis Obispo. TPI Industry Partners include Genentech Foundation, Intel Corporation, KLA Foundation, Salesforce, and Xilinx Corporation. In 2020, TPI was expanded to include California Community Colleges. TPI benefits from a platform for community and collaboration provided by the Center for Advancing Women in Technology (CAWIT).

**Model for Systemic Change** TPI faculty champions are creating new interdisciplinary programs that integrate computing with biology, mathematics, statistics, and cognitive sciences and other fields of study characterized by a high level of female student enrollment. These fields continue to evolve and expand through innovative applications of technology.

Each university program begins with a cohort of students who study computing as part of their college degree curricula. Cross-campus collaboration and sharing of new curricula and teaching methods help ensure a scalable and replicable model that can be adapted by other public universities, all of which serve large and diverse student populations.

Tech industry sponsors are funding initial development and implementation of university pilot programs, after which the programs become self-sustaining. They are also funding California Community Colleges enhancing their degree programs with computing coursework.

**Timetable and Goal** The Technology Pathways Initiative was launched in 2015. Its goal is to produce twice as many women graduates with computing degrees per year beginning in the 2020-2021 academic year.

Learn more at [cawit.org](http://cawit.org).

<sup>1</sup>[U.S. Bureau of Labor Statistics](https://www.bls.gov/news.release/archives/women081515.pdf)