

EDUCATION AND WORKFORCE DEVELOPMENT PORTFOLIO

NextFlex's Education and Workforce Development portfolio is designed to address the growing national manufacturing skills gap shortfall through a scalable strategy to secure human capital for the hybrid electronics, semiconductor, and advanced manufacturing sectors. Our portfolio of programs targets the future, emerging, and incumbent workforces needed to create a deep and diverse STEM talent pipeline.

FLEXFACTOR®

FlexFactor is an outreach, engagement, and STEM education program designed to familiarize K-12 students with advanced manufacturing technology, entrepreneurship, and the education and career pathways that can lead to a STEM career. The program was designed to showcase the promise of these careers and help students develop the critical thinking, creative reasoning, and problem-solving skills needed to thrive in a challenging and fast-paced career in STEM.



FlexFactor is layered over an existing K-12 class and challenges small teams of students to identify a real-world problem, conceptualize an advanced hardware device to solve that problem, and build a business model around it. Core program elements include an industry tour, a college tour, and opportunities to interact with current industry professionals.

At the end of the program, teams pitch their product ideas to a panel of local industry and academic representatives. The program can be conducted virtually, in-person, or in a hybrid format.

Begun with eight students in Silicon Valley, FlexFactor has successfully expanded nationwide, having reached over 15,000 students across thirteen states.

FLEX2FUTURE™

Flex2Future is a suite of materials designed to supplement existing work-based learning experiences by providing guidance and evaluation of technical and 21st century skills for both the student and employer participants. Through the Flex2Future program, students engage with the career pathways, skills, and competencies that will help them transition smoothly from education to employment. The result is a cohort of students with not only the foundational technical knowledge, but also the professional, communication, and hands-on skills necessary to be competitive hires in the advanced manufacturing sector. Further, employer participants can engage with future talent and grow internal leadership and management capability for staff who manage interns.



FLEXPRO™/FLEXAHEAD™

To accelerate the maturation and commercialization of hybrid electronics technology through awareness, training, and education, NextFlex created two digital learning programs focused on the design and manufacturing of hybrid electronics. The first program, FlexPro, is a series of technical courses designed for engineering professionals to understand



end-to-end design and manufacturing via self-paced, asynchronous delivery. A second program, FlexAhead, will cover the same topics but through modular delivery appropriate for incorporation into university and other post-secondary instruction.

Both programs include video lecture, presentation materials, lab demonstrations and other content designed to convey critical knowledge, skills, and abilities central to enabling current (and future!) engineers and product developers to transition from rigid to hybrid and/or additively manufactured form factors.

To ensure these programs represent the best of experience, knowledge, and capabilities available throughout the national ecosystem, NextFlex carefully curated content from member companies and leaders in the hybrid electronics industry.



NEXTFLEX CONSULTING

NextFlex conducts consulting and intermediary activities designed to bring diverse stakeholders together to achieve local workforce development goals. These consultations bring together local stakeholders such as high schools, community colleges, universities and companies to learn how they can collaborate to expand the advanced manufacturing workforce. Our expertise spans from building training programs to providing support for employers related to worker attraction, recruitment, and retention.

Success stories include:

- Development and deployment of an Advanced Manufacturing Technology program for technicians in partnership with the National Science Foundation (NSF), Evergreen Valley College (EVC), and local manufacturers including CAES, Jabil, DuPont, and others in San Jose, CA.

- Creation of a talent recruitment strategy for STEM careers in partnership with SI2 Technologies, local industry, and state government in the greater Boston, MA region.
- Buildout of a high-impact outreach and orientation strategy to engage underserved and diverse populations in STEM education and employment in partnership with the Capital Youth Empowerment Program (CYEP), the Department of Health and Human Services (HHS), and Virginia Tech in the National Capital Region.



SECURING THE WORKFORCE OF THE FUTURE

The resurgence of US advanced manufacturing will support and sustain the economy, national security, and US innovation prowess. As part of the Manufacturing USA network, NextFlex is playing a critical role in building the workforce capacity which will ensure US manufacturing remains on the cutting edge. We are bringing awareness of Industry 4.0 into the classroom and then building technical knowledge and skills through structured programming that connects participants to current and future careers. By connecting to diverse and underrepresented talent, we are working to build a future industry equipped to solve our country's greatest problems. We are committed to innovation in support of electronics manufacturing and the growth of social and economic capital by increasing the accessibility of good, highly skilled jobs which help build thriving communities. Workforce development requires a collective approach with diverse stakeholders, thought leaders and practitioners. **Emerging technology may be looking forward to the future, but emerging talent is the work we are doing today. To join us or to learn more about our offerings, contact workforceteam@nextflex.us.**

