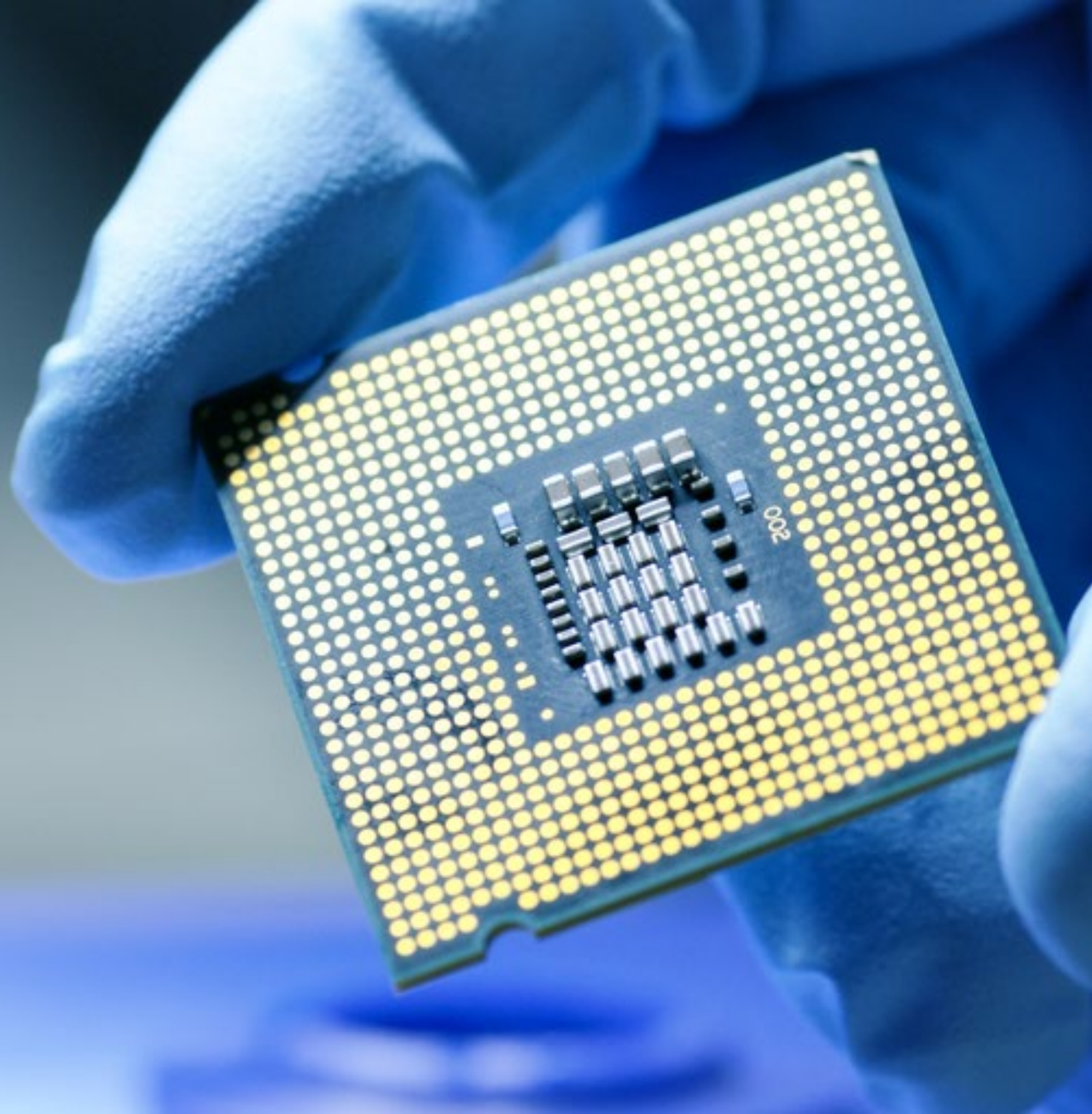# Building Florida's Semiconductor Workforce:

FSI's Vision and How You Fit In

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FSI Workforce Development

Florida Semiconductor Institute

Vision	• Florida Leading the World in Specialty Electronics
Mission	• Coordinate Florida's Semiconductor Ecosystem • Educate Trainees and Expand the Workforce Pipeline • Execute High-Impact Research & Development Programs
Impact	• Catalyze 10,000+ New High-Wage Jobs in Florida • Attract and Grow Florida Semiconductor Industry • Create New Public-Private Partnerships • Accelerate Lab-to-Fab Tech Transitions

Our Focus: Building the **Pre-Baccalaureate Workforce**, partnering with institutions like yours.

Why Semiconductors? The Opportunity

- **Florida has a Robust Semiconductor/Electronics Industry:**
  - Ranking #5 nationally for employees (18,000+ jobs)
  - Ranking #3 for establishments
- **Significant Growth is Projected**: The state's semiconductor/electronics manufacturing workforce is expected to grow 25% by 2030. This means roughly 4,500 new jobs.
- **High Demand for Technical Talent:**
  - Approximately **half of manufacturing jobs** are technician-level roles requiring pre-baccalaureate education.
  - The total demand for **pre-baccalaureate trainees** (new hires + replacements) is currently **over 1,200 per year**, growing to over 1,500 per year by 2030.
- **High-Wage Careers:** The semiconductor industry offers **significantly higher wages** compared to other industries across all education levels. A worker with some college credentials can earn 65% higher wages.

Key Challenges We Face (Where You Come In)

Challenge 1: Lack of Industry Awareness
- Many people (students, educators, parents, administrators) are unaware of the scale of the Florida semiconductor ecosystem, the industry itself, and the diverse career opportunities available.

Challenge 2: Gaps in the Trainee Pipeline
- *Severe Shortage at the Associate's Degree Level*: The number of completers in relevant A.S. degree programs (Engineering Technology, Electronics Engineering Technology, Semiconductor Engineering Technology) is only 169/year, which is less than the current annual demand (203/year). This requires a radical increase in students earning these degrees.
- *Moderate Shortage at the Certificate Level* ("Some College"): While there are over 1,000 completers in relevant certificate programs, the annual demand for this education level is 380 trainees/year. Meeting this demand is unlikely given opportunities in other industries.

Challenge 3: Industry Growth / Global Competition
- Florida faces national and global competition for semiconductor growth, requiring coordinated efforts to maintain and improve its standing. A strong talent pipeline is essential for this.

FSI's Strategy: Increasing Awareness

Goal: Boost understanding, interest, and engagement in the semiconductor industry.

- Held "**Chip In Florida**" in 2025 to integrate semiconductor modules into statewide STEM programs.
- Developed engaging materials to showcase diverse career opportunities from high school through advanced roles.
- Launching a new semiconductor focused campaign! Coming this August!
- Expanding paid internship opportunities in partnership with FLATE.
- Partnering with CareerSource Florida to bring students to semiconductor facilities.
- Working with programs like Get There, Future of Work Florida, Apprentice Florida, Your Way to guide students toward semiconductor careers.

FSI's Strategy: Strengthening the Ecosystem & Pipeline

Goal: Address training gaps, capacity limits, and pipeline bottlenecks, especially at the pre-baccalaureate levels.

- Encouraging school districts and colleges to expand relevant programs, leverage state resources, and marketing these opportunities. Engaging institutions near industry hubs.

- Building IET-aligned pathways for semiconductor roles.

- **Aligning Curriculum & Certifications:**
  - Enhancing and revising *existing* frameworks to better reflect industry demands, rather than creating entirely new ones.
  - Teaming up with SACA to **create key statewide industry-recognized certifications** that are valuable for workforce development. Industry input is critically important.
  - Strengthening the pipeline from K-12 through technical/state colleges to **radically increase enrollment and completion** in A.S. Engineering Technology, Electronics Engineering Technology, and Semiconductor Engineering Technology programs.

- Hosting professional development events like the K20 Professional Development Day (65+ attendees). Partnering on IGNITE workshop for secondary instructors. Exploring an FSI-led teacher training institute based on the Amatrol model.

- Launching an anonymous talent network, powered by **GoGig** as a centralized platform to connect students/trainees with employers while maintaining privacy.

Strengthening the Ecosystem & Pipeline
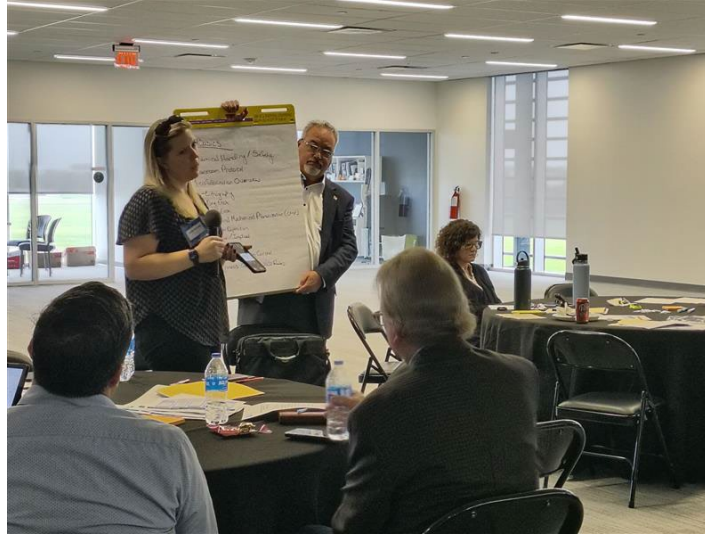
How You Can Get Involved

- Pilot semiconductor-focused IET programs that prepare students for roles in cleanrooms.

- Partner to develop contextualized instruction.

- Nominate instructors for future train-the-trainer opportunities.

- Provide input on certifications.

- Utilize and engage with FSI resources and events.

Engage with the WFD-Team at FSI

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We look forward to teaming with you as we move forward to advance WFD for the semiconductor industry.