

High School Semiconductor Launchpad

Introduce students to the technology behind modern life. Build a foundation for *further learning and future opportunities in semiconductor manufacturing.*

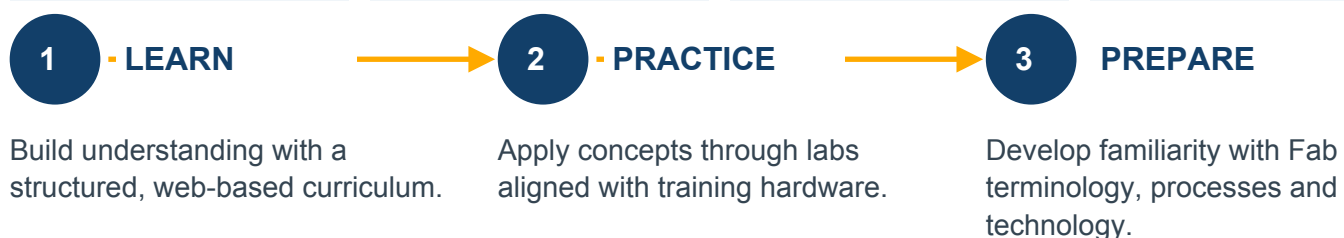


Full curriculum. Lab hardware. Designed to work together.

Intelitek connects semiconductor curriculum with hands-on lab equipment, helping high schools turn classroom concepts into practical learning experiences.

A launchpad for student success

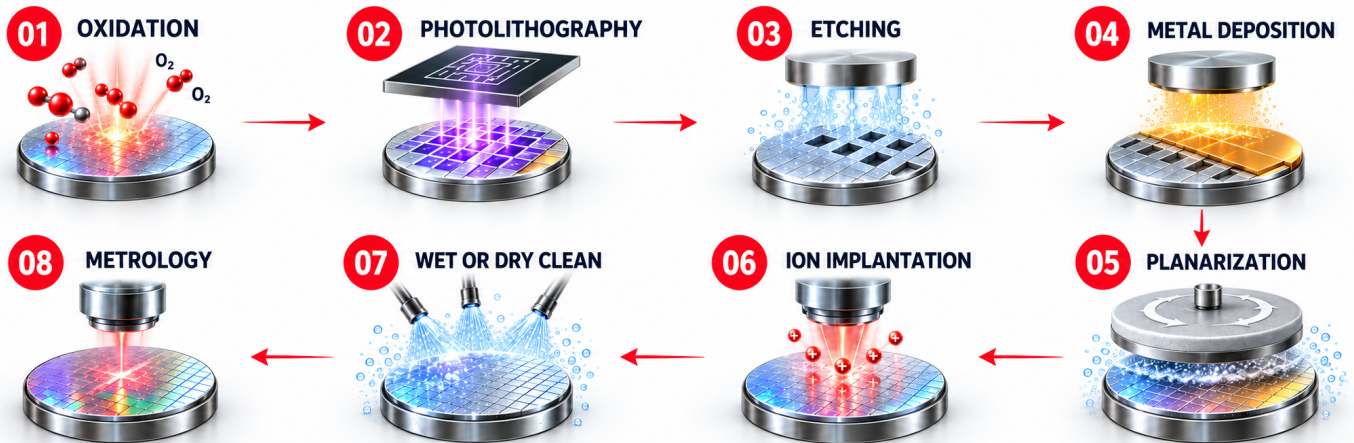
1 Discover the industry • Explore how chips are made. • Connect classroom learning to real technology. • See possibilities for the future.	2 Learn by doing • Practice with lab hardware. • Experience cleanroom procedures. • Build understanding through hands-on activities.	3 Build confidence • Learn Fab terminology. • Develop safe working habits. • Connect processes, equipment and technology.	4 Prepare for next steps • Build a base for further study. • Explore career interests. • Develop skills that support future opportunities.
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UNDERSTAND THE PROCESS.

EXPLORE CHIPMAKING.

Help students see how each step contributes to a finished chip



Steps repeat across many layers. Assembly and packaging follow.

Simplified fabrication overview. Steps repeat across layers; sequences vary by device. Design and wafer preparation precede fabrication.

A CONNECTED HIGH SCHOOL LEARNING EXPERIENCE

Intelitek combines curriculum, classroom cleanroom simulation and practical labs. Students explore the journey from design to final chip, learn why each manufacturing step matters and apply their understanding through equipment-based activities.

SEMICONDUCTOR BASICS

Explore the industry, the purpose of key manufacturing processes and the technology used to produce chips.

HANDS-ON LEARNING

More than 50% hands-on learning connects curriculum with practical activities, lab equipment and assessments.

SAFE WORKING HABITS

Introduce Fab-specific safety, contamination control and the practices used in a cleanroom environment.

WHY IT MATTERS

Make learning tangible

Connect scientific concepts with equipment, procedures and the manufacturing processes behind everyday technology.

Build a foundation for growth

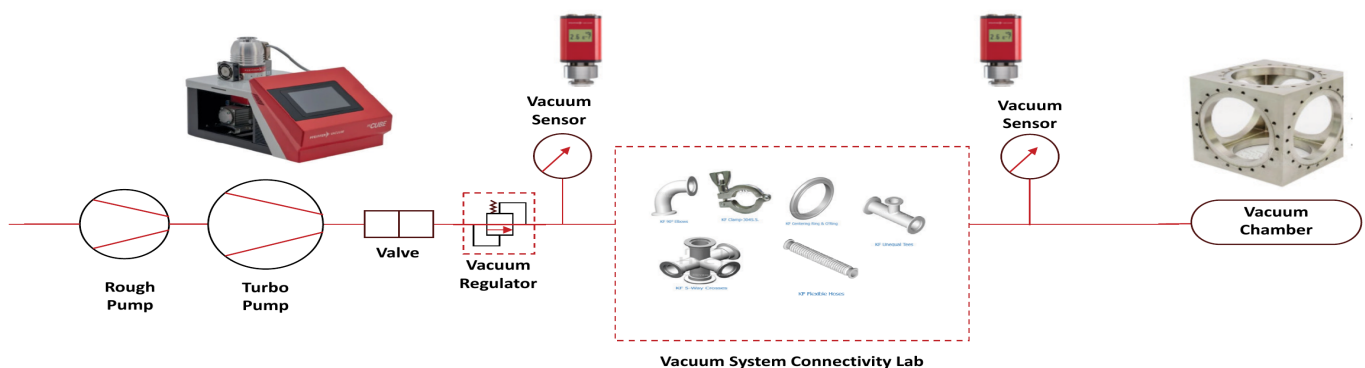
Give students the vocabulary and practical familiarity to take their next steps with greater confidence.

CLASSROOM LEARNING. HANDS-ON DISCOVERY.

Bring semiconductor learning into the school lab with curriculum and equipment designed to work together.

VACUUM TECHNOLOGY LAB

Vacuum Technology Lab



Real equipment connects vacuum principles to practical learning: pumps, sensors, valves, fittings and a vacuum chamber.

Cleanroom practice

A classroom simulation introduces gowning, contamination control, safe behavior and procedures typical of a Fab.

Vacuum systems

Students explore components and operating principles, then practice building, operating and maintaining a vacuum setup.

Theory + experience

Connect theory with hands-on experience, giving students practical opportunities to demonstrate their learning.

BUILD YOUR STEM / CTE PATHWAY

Modernize your program with semiconductor learning, strengthen connections with colleges and regional industry, and support local workforce development goals.

A TWO-SEMESTER CURRICULUM PATHWAY

Five 16-hour courses across two semesters

SEMESTER 1 BUILD THE FOUNDATION	
Intro to Semiconductor Manufacturing 16 hours	Explore the industry, its history, career pathways and the fundamentals of semiconductor manufacturing.
Working in the Semiconductor Environments 16 hours	Learn cleanroom types, behavior, gowning, cleaning, maintenance and contamination control.
Semiconductor Safety 16 hours	Practice safety protocols, hazardous-material awareness, emergency response and incident handling.
SEMESTER 2 CONNECT PROCESSES AND TECHNOLOGY	
Advanced Semiconductor Manufacturing Processes 16 hours	Follow the end-to-end process, identify major modules and layers, and understand how each station affects the next.
Industrial Vacuum Systems for Semiconductor Manufacturing 16 hours	Explore how vacuums are created and why clean, low-pressure environments are essential to chipmaking.

A HEAD START ON FUTURE OPPORTUNITIES

A foundation in semiconductor technology can open doors to further education, training and better job opportunities. With practical experience and familiarity with Fab terminology, processes and equipment, students can approach their next step with confidence and be better prepared to hit the ground running.

ALIGNED TO INDUSTRY CREDENTIALS



BRING SEMICONDUCTOR LEARNING TO YOUR SCHOOL.
ASK US ABOUT CURRICULUM + LAB HARDWARE.

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