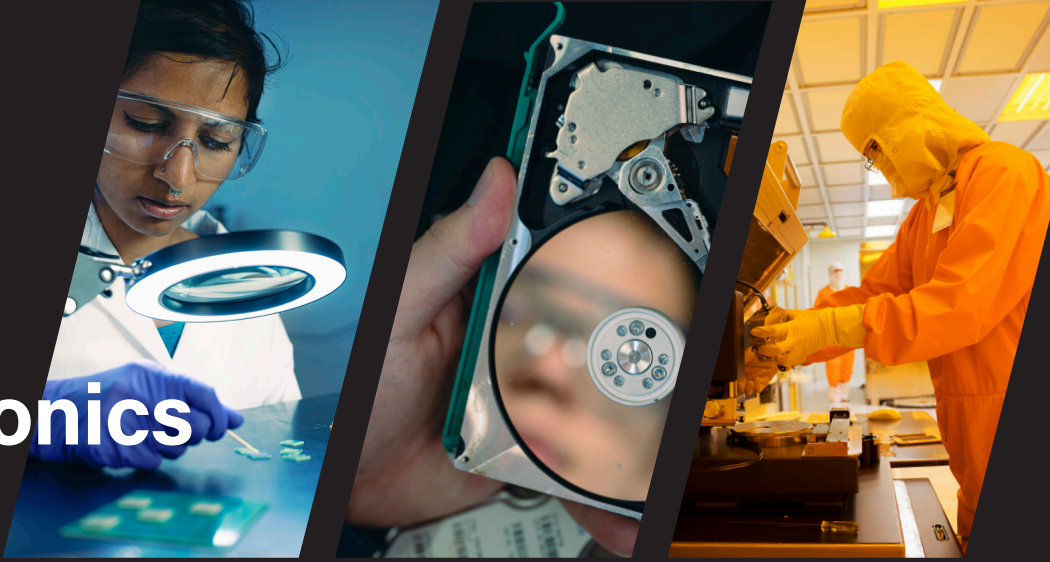


Preparing a Robust Microelectronics Workforce



In the next five years, the United States needs a minimum of 50,000 trained semiconductor engineers to meet the overwhelming and rapidly growing demand.

Purdue University has answered the call with a comprehensive suite of innovative, interdisciplinary credentials, degrees and training opportunities in semiconductors and microelectronics.



Scalable Asymmetric Lifecycle Engagement (SCALE)

Led by Purdue, funded by the DOD and managed by NSWC Crane, the preeminent nationwide program for semiconductor workforce development is a novel approach to training highly skilled U.S. microelectronics engineers, hardware designers, and manufacturing experts.

500+
STUDENTS
ENROLLED

22
LEADING
UNIVERSITIES

78
FACULTY
AND STAFF

SCALE provides unique courses, mentoring, internship matching and targeted research projects for college students interested in five microelectronics specialty areas:

- Radiation-Hardening
- Heterogeneous Integration/Advanced Packaging
- System-on-Chip
- Embedded System Security Trusted AI
- Supply Chain Awareness
- Radio Frequency/Optical Electronics

Nation's First Comprehensive Semiconductor Degrees Program

Innovative credentials and degrees for graduate and undergraduate students, enabling a quick ramp-up of skilled talent.

- **6-in-1 content**
Chemicals/materials, tools, chip design, manufacturing and packaging — all of the semiconductor industry's key steps in one interdisciplinary program, plus supply chain management.
- **Choice of credentials**
Master of Science degree, stackable certificates at the post-graduate level, Bachelor of Science minor/concentration; plus, associate degrees through partner Ivy Tech Community College.



Partnership with Ivy Tech Community College

The Purdue/Ivy Tech collaboration provides a robust strategy to meet microelectronics needs across the entire workforce value chain, from associate to doctoral degrees.

Ivy Tech is the largest public postsecondary institution in Indiana and the largest single accredited statewide community college system in the country.

100k
STUDENTS SERVED
ANNUALLY

40+
INDIANA
LOCATIONS

75
COMMUNITIES

Purdue and Ivy Tech are exploring pilot programs for recruitment, training, and placement of students, reaching out to local high schools, and informing prospective students of semiconductor careers. Purdue plans to offer online courses and programs to Ivy Tech students as well as access to virtual training tools.