

# Collaboration Between Taiwan and U.S. Semiconductor-specialized Universities to Stabilize the Global Semiconductor Supply Chain

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The signing of the Taiwan–U.S. Semiconductor Workforce Advancement Program (SWAP) agreement between National Yang Ming Chiao Tung University (NYCU) of Taiwan and Purdue University of the United States represents a new milestone in the cooperation between the Taiwan and U.S. semiconductor industries. This agreement entails the formation of an alliance between these two top-ranked semiconductor-specialized universities, with the objective of collaborating to develop a semiconductor talent cultivation system that can be implemented globally. This system can help stabilize the global semiconductor supply chain and further enhance Taiwan’s cultivation of semiconductor talent. The SWAP agreement, which exports the experience of the two universities, serves as a paradigm for other countries overseas.



The SWAP agreement was signed in the United States by President Lin Chi-Hung of NYCU and President Mung Chiang of Purdue University, with Consulate Representative Xiao Mei-Qin of Taiwan as the witness. The agreement establishes the teaching and research collaboration relationships between the faculty and students of the two universities, and it focuses on stabilizing the increasingly crucial semiconductor talent supply chain. Additionally, the agreement leverages the experience of NYCU in cultivating scientific and technological talent and NYCU’s industry connections, sharing with the world Taiwan’s experience in semiconductor talent cultivation.

The event marked the third meeting between the two universities within a year, successfully concluding with the signing of the SWAP agreement. In the future, the two universities will continue to collaborate on this platform. The SWAP agreement is the most significant example of the increasing cooperation between Taiwan and U.S. higher education institutions to cultivate semiconductor talent since the enactment of the U.S. CHIPS and Science Act.



President Lin Chi-Hung expressed that in addition to cultivating higher education talent, the strengths of Taiwan’s semiconductor industry include the close industry–university collaborations in Taiwan, which produced a unique industry–university clustering effect in Hsinchu Science Park, Taiwan. The SWAP is expected to deepen the relationship between these two semiconductor-specialized universities, and it can provide opportunities for companies and alumni to participate in the industry–university collaborations of either university. Through this agreement, the collaborations between Taiwan and the United States in the fields of semiconductor manufacturing, IC design, and system integration can reach new heights.

In response to an invitation from the Taipei Economic and Cultural Office in Chicago, President Lin visited Purdue University and the State of Indiana, demonstrating his support of the relationship between Taiwan and the United States. Accompanied by Consulate Representative Xiao, President Lin also attended a forum held by the Krach Institute for Tech Diplomacy of Purdue University, where he discussed the importance of strengthening freedom and democracy through scientific and technological cooperation. In addition, President Lin and Consulate Representative Xiao visited Indiana Governor Eric Holcomb and Taiwan enterprises operating in the United States, where they witnessed the signing of the cooperation agreement between the State of Indiana and several Taiwanese semiconductor enterprises.



On June 21, 2023, NYCU received 20 freshmen from the College of Engineering of Purdue University. The freshmen were traveling overseas for short-term exchanges before the start of their university courses. This year, the School of Engineering arranged for the freshmen to visit Taiwan on the eve of the Dragon Boat Festival, enabling them to experience Taiwan’s traditional culture and participate in Chinese cultural exchange activities, including learning about traditional Taiwanese festivals, making fragrant sachets, and attempting “egg balancing.” They also attended a seminar on traditional Chinese Medicine, visited NYCU laboratories, and participated in a campus tour.

