

Creating a Skilled Worker Pipeline for Microelectronics

Kara Perry, PhD

Naval Surface Warfare Center, Crane Division

kara.l.perry6.civ@us.navy.mil

As the microelectronics (ME) industry globalizes, the skilled workforce required to implement key elements of complex microelectronics technology is increasingly located outside of the U.S. This presents a challenge for the DoD that has limited, but critical needs for a workforce with those same skills that are U.S. citizens and can be qualified to work on sensitive DoD programs. The Trusted and Assured Microelectronics (T&AM) Education and Workforce Development (WFD) mission is to attract, develop, obtain, and maintain a skilled, clearable technical workforce to support design, development, fabrication, verification, validation, security, and modernization of microelectronics. With current efforts (curricula development, internships, research, and funding) the workforce demographics include bachelors through existing workforce and leadership to address WFD needs in the areas of Radiation Hardened ME, System-on-chip, Heterogeneous Integration / Advanced Packaging, Supply Chain Security, and Trusted AI.