

Pima County Community College District – Tucson, AZ

Award Amount: \$4,233,317

Project Name: Industry-Recognized Apprenticeship Model in Manufacturing (i-RAMM)

Projected Apprentices to Be Served: 3,236

Industry Focus: Advanced Manufacturing

Private Sector Partners include National Association of Manufacturers/Manufacturing Institute (NAM/Mi), National Tooling & Machining Association (NTMA), and NIMS (National Institute of Metalworking Skills), as well as additional employer partners, including Abbott Nutrition, Boeing Co., and Raytheon Missile Systems (Tucson)

Type(s) of Apprenticeship Program Proposed: Apprenticeship, Pre-apprenticeship

The i-RAMM project is developing and piloting a competency-based apprenticeship program model in the two advanced manufacturing career pathways of mechatronics and machining. The project's five consortium colleges are members of the Arizona Advanced Technologies Corridor (AZ-ATC), a partnership of state government, higher education, industry, and nonprofit stakeholders that was formed in 2017 to grow the manufacturing labor supply along the I-10 corridor between Tucson and Phoenix. i-RAMM is deploying initially in the AZ-ATC corridor, and then scaling to locations nationwide.

i-RAMM laid the initial groundwork for project expansion by collaborating with national industry partner NIMS to align the college members' mechatronics programs with NIMS competencies. It also obtained employer partner Raytheon's buy-in for testing the model in Arizona and then expanding to other sites nationally. NIMS is collaborating with employers and faculty to modularize the curriculum, transforming portions of classroom instruction into on-the-job training tied to competencies, which then map to college credit. To launch the second i-RAMM pathway, the colleges will complete the process of aligning their machining programs to additional NIMS credentials.

As part of its scaling strategy, i-RAMM has enlisted national industry partners NIMS and NAM (National Association of Manufacturers) to help develop a replication toolkit, which will provide tools and practices that help interested employers and colleges across the county to adopt and adapt the competency-based model quickly. To assist with national scaling, the project is also working with its employer partners that have multiple locations nationwide, such as Sargent Controls, Raytheon, and DMG Mori. Such partners have committed to replicating the programs at their additional company sites, as well as to encouraging their suppliers and vendors around the country to adopt the model.

IHE consortium members include: Pima CC (lead), Central Arizona College, Estrella Mountain CC, GateWay College, and Mesa CC.