

## Connecticut State Colleges & Universities – Hartford, CT

**Award Amount: \$8,000,000**

**Project Name:** National Advanced Manufacturing Apprenticeship Project (NAMAP)

**Projected Apprentices to Be Served:** 3,500

**Industry Focus:** Advanced Manufacturing

**Private Sector Partners** include a business consortium composed of Lockheed Martin, General Dynamics, Electric Boat, IBM, Sound Manufacturing, and Pratt & Whitney; and four industry association partners: Aerospace Components Manufacturers, Small Manufacturers Association California Manufacturers & Technology Assn, and Eastern Advanced Manufacturing Alliance.

**Type(s) of Apprenticeship Program Proposed:** Registered Apprenticeship Program (RAP), Industry-Recognized Apprenticeship Programs (IRAP), Pre-Apprenticeship

The National Advanced Manufacturing Apprenticeship Project (NAMAP) is building and scaling pre-apprenticeship programs, RAPs, and IRAPs in a broad range of occupations that support the advanced manufacturing (AM) sector. As four of NAMAP's employer partners (Lockheed Martin, IBM, Electric Boat, and Pratt & Whitney) anchor the nation's industrial defense complex, the project also seeks to de-risk significant, long-term Department of Defense investments and strengthen the defense complex over the next decade.

Specifically, NAMAP is expanding six evidence-based apprenticeship program models that train for multiple AM occupations and creating at least ten new such programs, with an emphasis on incorporating competency-based, contextualized learning, and hybrid instructional strategies into the programs. Employer partner Lockheed Martin (LM), for instance, is offering short-term, competency-based apprenticeships (converted with NAMAP support from USDOL-registered, time-based apprenticeships) in a variety of disciplines, such as Quality Assurance Test and Inspection, Craft Worker, Electrical Test Inspector, and Quality Control Inspector. IBM is expanding ten existing RAPs in occupations supporting the AM sector, such as cybersecurity analyst, software engineering, mainframe system administrator, and data scientist. In addition, with NAMAP support, IBM is developing additional apprenticeship standards in such areas as artificial intelligence and blockchain. NAMAP is also helping LM expand and reshape the company's Advanced Manufacturing Engineering Initiative (AMEI), which LM is currently piloting in Virginia, in order to build an IRAP in AM assembly, which the company plans to operate in at least four additional states (NJ, CA, FL, and TX).

The national scale of NAMAP's anchor companies – which employ over 200,000 workers in all 50 states – offers the project a platform for scaling apprenticeships nationwide. Initially, NAMAP is deploying the new and expanded apprenticeships in 13 states (CT, AL, AZ, CA, CO, FL, GA, NC, NJ, NY, RI, TX, and WV). It plans to further scale apprenticeship programs nationally by expanding current anchor employer programs, replicating those programs at other anchor employer locations nationwide, and promoting the adoption of these programs by a range of manufacturers nationwide, including smaller manufacturers, through its base of employer and industry association partners with regional and national networks.

The lead applicant is Connecticut's state system of higher education, which represents four state universities, Charter Oak State College, and 12 community colleges, including: Asnuntuck CC, Capital CC, Gateway CC, Housatonic CC, Manchester CC, Middlesex CC, Naugatuck Valley CC, Northwestern CT CC, Norwalk CC, Quinebaug Valley CC, Three Rivers CC, and Tunxis CC.