

NIST MEP and Workcred are seeking MEP National Network Centers and clients' assistance to Examine the Return on Investment for Manufacturing Credentials

Workcred is leading a research project for NIST MEP focused on understanding the return-on-investment (ROI) of credentials in manufacturing.

Workcred and NIST MEP are seeking MEP National Network Centers and their clients to collaborate on this project. Centers will be asked to identify a main point of contact (POC) for this project. This POC will be asked to identify clients (e.g., individual manufacturing firms) with credentialed employees and recruit them to participate the project (Workcred will support this outreach). Centers with participating clients will also be asked to review proposed interview questions to ensure they will capture data to inform the needs of their clients, as well as identify one or two Center employees to participate in mock interviews. The POC from Centers with participating clients will be copied on all communications with clients.

Project Overview

Workcred is an affiliate of the American National Standards Institute (ANSI), and its mission is to strengthen workforce quality by improving the credentialing system, ensuring its ongoing relevance, and preparing employers, workers, educators, and governments to use it effectively. The George Washington Institute for Public Policy (GWIPP) will also contribute to the research for this project.

This project has two goals: 1) to examine the quality, market value, and effectiveness of manufacturing credentials; and 2) to examine the need for new or improved credentials to advance U.S. manufacturing and keep pace with changing skills needs.

Benefits to Participating

MEP National Network Centers and their clients will benefit from participating in this project in several ways. First, Centers will have several opportunities to provide feedback into the interview questions to ensure they are addressing the topics most relevant to their clients. Additionally, they, and their clients, will be sent regular progress updates and be given the opportunity for a sneak-peek at the results once the project is complete. Most importantly, the completion of this project will offer U.S. manufacturers insight into the value of credentials in identifying skilled workers, and a deeper understanding of the role credentials can play in developing and retaining a manufacturing workforce.

Next Steps

Please email Isabel Cardenas-Navia (icardenasnavia@workcred.org) to schedule a time to discuss the project.

Examples of Common Manufacturing Credentials

American Society for Quality (ASQ): Certified Calibration Technician (CCT), Certified Quality Inspector (CQI), Certified Quality Process Analyst (CQPA), Certified Six Sigma Black Belt (CSSBB), Certified Six Sigma Green Belt (CSSGB), Certified Six Sigma Yellow Belt (CSSYB)

Apprenticeship – CNC Programmers, Machinist

American Welding Society (AWS): Certified Welder (CW), Certified Welding Supervisor (CWS), Certified Welding Engineer (CWEng), Certification Program for Robotic Arc Welding (CRAW)

Association for Operations Management (APICS): Certified in Production and Inventory Management (CPIM), Certified Supply Chain Professional (CSCP), Certified in Logistics, Transportation and Distribution (CLTD)

Fabricators & Manufacturers Association (FMA): Precision Sheet Metal Operator (PSMO)

IASSC Certifications: IASSC Certified Black Belt, IASSC Certified Green Belt, IASSC Certified Yellow Belt

International Fluid Power Society (IFPS): Hydraulic Specialist, Pneumatic Specialist, Electronic Controls Specialist, Mobile Hydraulic Technician, Industrial Hydraulic Technician, Pneumatic Technician, Mobile Hydraulic Mechanic, Industrial Hydraulic Mechanic, Pneumatic Mechanic, Connector and Conductor,

International Society of Automation (ISA): Certified Control Systems Technician (CCST), Certified Automation Professional (CAP)

IPC (Association Connecting Electronics Industries): J-STD-001, IPC-A-600, IPC-A-610, IPC/WHMA-A-620, IPC-7711, IPC-7721, IPC-6012

Lean Certification Alliance (Association for Manufacturing Excellence (AME), Shingo Institute, and SME): Lean Bronze, Lean Silver, Lean Gold

Manufacturing Skills Institute (MSI): Manufacturing Specialist, Manufacturing Technician

Manufacturing Skills Standards Council (MSSC): Certified Logistics Associate (CLA), Certified Logistics Technician (CLT), Certified Production Technician (CPT)

National Institute of Metalworking Skills (NIMS): Computer-Aided Manufacturing (CAM), Diemaking, Industrial Technology Maintenance, Machining, Metalforming, Press Brake, Screw Machining, Stamping

National Center for Construction Education & Research (NCCER): Certified Mobile Crane Operator, Certified Tower Crane Operator, Certified Rigger, Certified Signal Person, Boilermaker, Commercial Carpenter, Commercial Electrician, Concrete Finisher, Construction Technologist, Drywall Mechanic, Heavy Equipment Operator (multiple), HVAC Technician, Industrial Electrician, Industrial Ironworker, Industrial Maintenance, Electrical and Instrumentation Technician, Industrial Maintenance Mechanic, Industrial Maintenance, Support Mechanic, Industrial Millwright, Industrial Painter, Industrial Pipefitter, Instrumentation Fitter, Instrument Technician, Masonry, Plumber, Power Generation, Power Line Worker (multiple), Reinforcing Ironworker, Scaffold Builder, Hydroblasting Technician

North American Die Casting Association: Certified Die Casting Technician, Operator, Tooling, Process, Maintenance, Master of Die Casting Technology

OSHA: OSHA Construction 10-hour and 30-hour, OSHA General Industry 10-hour and 30-hour, OSHA Forklift

PMMI Mechatronics: Fluid Power, Industrial Electricity, Mechanical Components, Motor and Motor Controls, Programmable Logic Controllers (PLCs)

Professional Engineer (PE) License

Project Management Institute: Project Management Professional (PMP) Certification

SME: Certified Additive Manufacturing - Fundamentals (CAM-F), Certified Additive Manufacturing - Technician (CAM-T), Certified Manufacturing Engineer (CMfgE), Certified Manufacturing Technologist (CMfgT)