Project Abstract

1. Applicant Name – Macomb Community College on behalf of the Michigan Coalition for Advanced Manufacturing (M-CAM)

2. Applicant City/State – Warren, Michigan

3. Consortium Member(s) and Consortium Member State(s) – Macomb Community College, Bay de Noc Community College, Grand Rapids Community College, Kellogg Community College, Lake Michigan College, Lansing Community College, Mott Community College, and Schoolcraft College all in Michigan


5. Total Funding Level Requested

6. Sub-Total Requested Funding Amount by Consortium Member (as applicable)

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<th>Consortium Member</th>
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<tr>
<td>Macomb Community College</td>
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<td>Bay de Noc Community College</td>
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7. Project Name – Michigan Coalition for Advanced Manufacturing (M-CAM)

8. Project Description and List of Credentials to be Developed and Awarded – Following extensive industry input, M-CAM will focus on the four job sectors of: 1) CNC Machining, 2) Welding/Fabrication, 3) Multi-Skilled Technician, and 4) Production Operations. M-CAM will feature an advanced manufacturing competency model that promotes job readiness skills, basic skill development, pathways to certificates/degrees, employer involvement, online/hybrid courses, education plans, prior learning assessments, and career services. Participants enter the program at multiple points based on skills and education needs. Member colleges plan to create 13 new industry-focused credentials and upgrade/modify 63 certificate and degree programs.
New certificate programs: Welding/Fabrication: Basic Welding, Robotic Welding and Welding Fabrication (Lansing); CNC Machining: Machine Tool Technology (Mott); Multi-Skilled Technology: Electricity and Basic Electronics, Basic Control, Fluid Power, PLC and SCADA (Bay de Noc); Mechatronics (Bay de Noc, Grand Rapids, Lansing, Mott); Multi-Skilled Technology, Multi-Skilled Technology Associate Degrees (Kellogg), Certified Production Technician (Lansing), Production (Mott).

Coalition members also will update 63 certificate and associate degree programs in the four occupational areas.

**Welding:** AWS Level 1, TIG, MIG, and Stick/Arc Welding; Welding Process Qualification, Fabrication Technician, Welding Technology, Industrial Welding, Industrial Machining Technology, General Technology, Maintenance Technology, Welding/Joining Technology.


**Proposed outcomes:**
Total Unique Participants Served: 2,738
Total Participants Completing a TAACCCT-Funded Program of Study: 1,619
Total Number of Participants Still Retained in Program of Study: 1,188
Total Number of Participants Completing Credit Hours: 1,336
Total Number of Credentials: 2,034
Total Number Enrolled in Further Education after TAACCCT Completion: 246
Total Number Employed after TAACCCT Program of Study Completion: 1,619
Total Number Retained in Employment after Program of Study Completion: 1,323
Total Number Employed Who Received a Wage Increase: 360

9. Populations to be Served – TAA-eligible and dislocated workers, veterans, incumbent workers and others

10. Targeted Industry(s) – Advanced Manufacturing


12. Public Workforce System Partner(s) – Michigan Works! agencies (workforce investment boards) in all college regions; Department of Licensing and Regulatory Affairs, Workforce Development Agency

13. Other Key Partner(s) – National Association of Manufacturers, Gates Foundation’s Breaking Through Initiative, Northern Virginia Community College, National STEM Consortium, Flint STRIVE, Michigan Manufacturing Association, Grand Rapids Urban League, Michigan Center for Student Success, Battle Creek Unlimited, Goodwill of Greater Grand Rapids, National 4C Collaborative, Talent, 2025, Delta County Economic Alliance

14. Public Contact Information – Robert Stevens, Director of Grant Support Services, Macomb Community College, 14500 E. 12 Mile Road, Warren, Michigan 48088, (516) 445.7863, stevensr@macomb.edu

15. Percentage of OER Program Materials Developed vs. Percentage of Licensed or Purchased Program Materials – Approximately 80% of program materials will be developed as open educational resources, and the remaining 20% will be licensed or purchased.