

OhioTechNet

Defense Industrial Base STEM Consortium

Replication of programs
and curricula aligned to
defense manufacturing
talent needs

Grow enrollment and
completion of training in
Automation & Robotics
and Digital
Transformation

Accelerate manufacturing
STEM transfer &
articulation pathways
from 2yr to 4yr programs

Scale and Sustain guided
pathways from K-12 to
post-secondary
manufacturing training
and careers

Ohio Education & Industry Partners



National Replication Partners



Challenges, Wins, and Lessons

AI in Manufacturing

Growth in Digital Transformation

Evolving Priorities, Dynamic Environment

Gap Between Workforce Demand and Training System Supply

Replication & Innovation of DIB-Aligned Curricula

Approx. **40 educators** completed training in Automation & Robotics and Digital Transformation

Growing Enrollment and Completion of Training Programs

20% program growth in LCCC Automation, **33%** at Miami U
197 students received hands-on training in Industry 4.0 technologies

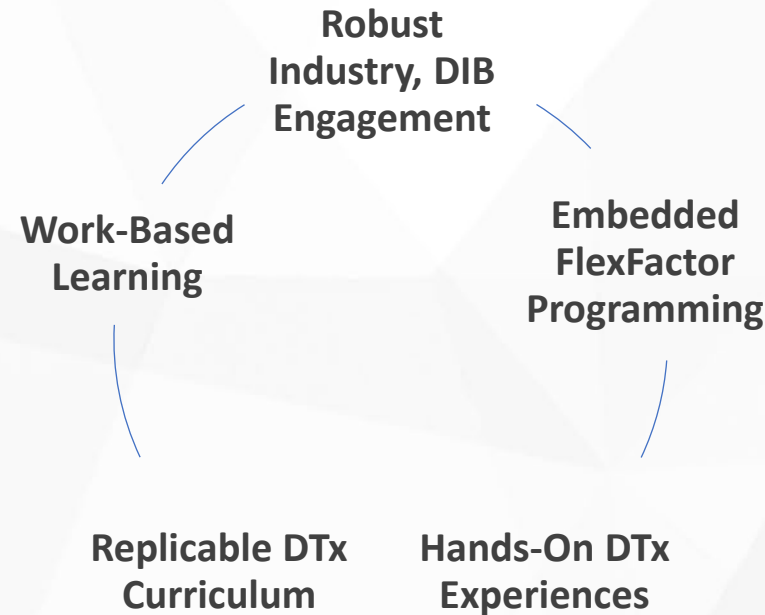
Accelerated 2yr-to-4yr Transfer & Articulation

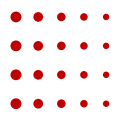
Stackable pathways from Certificates to Degrees with student supports
Technical Calculus added to statewide transfer guarantee module

Sustainable Guided Youth Pathways to Manufacturing & STEM

824 middle and high school students engaged through FlexFactor, hands-on learning, dual-enrollment, and internships

2025 Summer of Innovation





Year 3 Highlight

Marion L. Steele HS (Amherst, OH)

Instructor completed Industry 4.0 Automation & Robotics Teacher Training program in 2023

Advanced Manufacturing program launched in Spring '24 with **14 students**

\$1.6M grant from the Ohio Department of Education and Workforce to purchase new equipment

In Fall '25 the program has **88 students** enrolled in traditional and dual-enrollment courses

Students can earn up to 9 industry credentials, high school graduation points, and college credit

Developing pre-apprenticeships and Earn & Learn opportunities through deep industry partnerships

[Advanced Manufacturing at Amherst HS](#)



SCALE, INNOVATION, AND SUSTAINMENT

Statewide Strategy

The Ohio Manufacturing Workforce **Blueprint** provides a unified playbook of strategies and initiatives to address talent gaps and meet demand



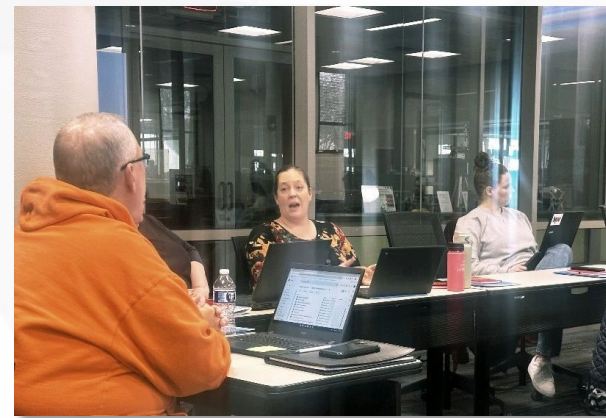
Ohio's Manufacturing
Workforce Blueprint

2025

[Manufacturing Workforce Blueprint](#)

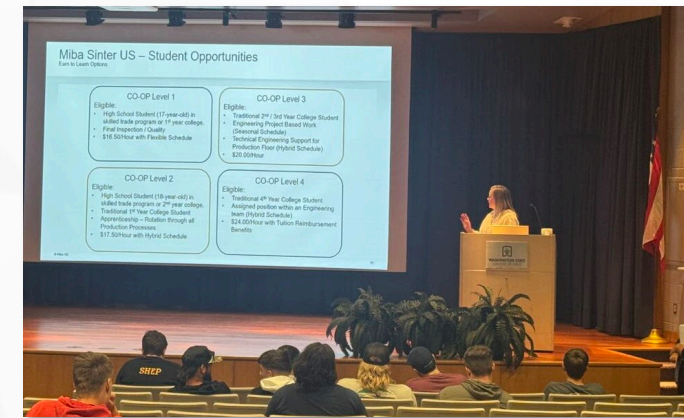
Faculty and Program Development

- DTx and Automation Teacher Bootcamps, Train-the-Trainer, Curriculum Dissemination
- Technical Calculus for Engineering Technology Open Education Resources



Replication & Innovation

- Cleveland State U Applied Digital Transformation Training – Students, Faculty, Industry
- Ohio U and Miami U curriculum pilot deployment in DTx and A&R
- Student STEM Internships and Work-Based Learning



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