



THE OHIO TECHNET DEFENSE INDUSTRIAL BASE STEM CONSORTIUM

Executive Summary & Progress Update

SUPPORTED BY AN AWARD FROM:

Office of the Undersecretary of Defense (Research & Engineering) – DoD STEM
National Defense Education Program (NDEP) –
Congressional Add-on Funds
Regional Community College Consortium (RC3)

AWARD INFORMATION

Base Period: 1 September 2022 – 31 August 2026

Base Award Under Contract: \$4,999,955

Three one-year option periods, contingent on
Congressional funding and project performance,
\$2M each

Total Potential Amount of Federal Award with
3 Option Periods: \$10,999,500

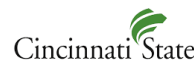
Ohio Education & Industry Partners



*Lorain County
Community College*



SINCLAIR
COMMUNITY COLLEGE



COLUMBUS STATE
COMMUNITY COLLEGE



WASHINGTON STATE
COLLEGE OF OHIO



National Partners



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The **Ohio TechNet Defense Industrial Base (DIB) STEM Consortium** leverages Ohio TechNet's (OTN's) collaborative network to accelerate and scale innovation, and support the Department of Defense's mission to build a diverse and sustainable defense manufacturing STEM and technician workforce. This project aligns to defense-critical technologies and technical occupations. Lorain County Community College (Elyria, Ohio) and Sinclair College (Dayton, Ohio) co-lead a consortium of 13 OTN member colleges and universities and numerous strategic partners, including the Ohio Manufacturer's Association, Manufacturing USA Institutes, and Ohio MEPs.

OHIO-WIDE IMPACT TO-DATE

ENGAGING NEW TALENT: PARTNERSHIP WITH MANUFACTURING USA INSTITUTE NEXTFLEX

- Since 2018, 12 OTN partners have served **more than 10,000 Ohio youth** with engaging, hands-on exposure to advanced manufacturing, local industry, and related educational pathways via the FlexFactor program
- DoD STEM National Defense Education Program, Regional Community College Consortium investment supports additional youth engagement in advanced manufacturing pathways
- **520 iterations** of FlexFactor at **120+** Ohio middle and high schools, camps, and community programs
 - 81% of participants more aware of career opportunities in manufacturing and STEM
 - 62% of participants more interested in pursuing manufacturing and STEM careers

PREPARING THE FUTURE-READY WORKFORCE: INDUSTRY 4.0 TRAINING & EDUCATION

AUTOMATION AND ROBOTICS – LORAIN COUNTY COMMUNITY COLLEGE

- **41 Ohio high school, career tech, college, and university faculty** trained in Industry 4.0 Automation & Robotics
- **200+ students** statewide received instruction in I4.0 A&R from LCCC-trained instructors
- **15 manufacturers** engaged in talent planning and Industry 4.0 technical assistance
- **53 students and 33 incumbent workers** enrolled in LCCC Automation courses Spring 2024
- Expansion of Innovative **Earn & Learn** and **Apprenticeship** at LCCC and OTN partner schools

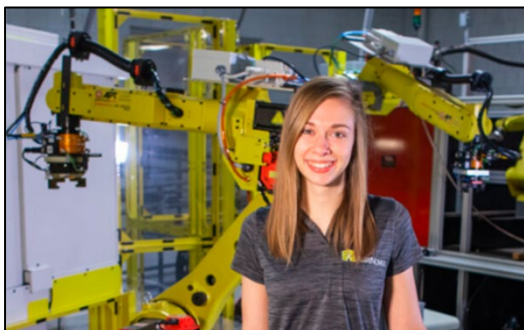
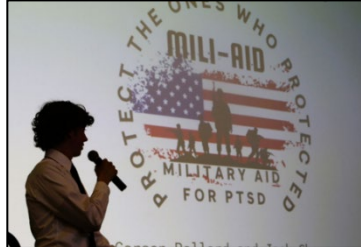
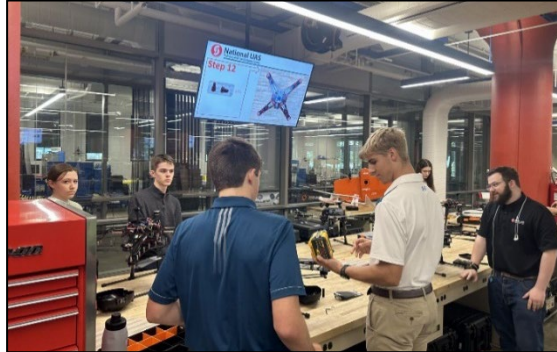
DIGITAL THREAD AND DIGITAL TRANSFORMATION – SINCLAIR COMMUNITY COLLEGE

- **Short-Term Technical Certificate in Digital Thread Engineering Technology** developed by Sinclair (supported by Air Force Prime Contract No. F48650-16-D-5524, MITS Task Order J: Regional Fabrication and Certification Training Labs)
- **Digital Transformation** non-credit curriculum modules developed for standalone deployment or integration into credit-bearing courses and K-12 classrooms
- **21 faculty** trained in the use of Digital Transformation curriculum modules and implementing content in lessons
- **18 Wright Brothers Institute Summer of Innovation interns** completed Digital Transformation curriculum

OTN DIB STEM REPLICATION AND REGIONAL CUSTOMIZATION OF INDUSTRY 4.0 CURRICULA

- **Ohio University** – Creating curriculum materials in digital engineering and robotics for deployment through 3DExperience Platform, with content tailored to different learning levels, including K-12 in partnership with local Educational Services Center
- **Miami University** – Developing a tiered robotics pathway which provides flexible options for students and incumbent workers to earn micro-credentials, certifications, 2-year, and 4-year degrees aligned to in-demand technician and engineering careers
- **Cleveland State University** – Developing a non-credit Digital Transformation training course incorporating Sinclair DTx curriculum modules and industry training content. Augmented with hands-on training in Digital Thread utilizing CSU Transdigm Advanced Manufacturing Lab.

OhioTechNet



Ohio TechNet partners are driving innovative, data-informed strategies to recruit new talent into manufacturing STEM pathways, increase enrollments and student success, and create sustainable models to support the DoD STEM mission