

ADAMC Status Update April, 2025

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ADAMC: Where We Are Now



Serving **22** counties aerospace and defense manufacturing, defense installations and associated industries



incumbent and dislocated workers in 265+ workshops



Developed over **150**courses in advanced
manufacturing including
IIOT, controls, and robotics

Awarded **\$3.7M**Defense Manufacturing
Community Grant



Assisted **285+**companies in advanced
manufacturing
technology



Trained over **4700** secondary and postsecondary students in **120+** workshops



Leverages resources such as regional industry

partners, DoD
manufacturing institutes
and other academia and
workforce development
organizations





WORKFORCE
DEVELOPMENT



TECHNOLOGY ADOPTION



TECHNOLOGY DEVELOPMENT



ADAMC Vision

The ADAMC region is comprised of. . .

industry that is **knowledgeable** of advanced manufacturing technologies, applications, and benefits and **progressively adopting** them into their normal operations;

and an

advanced manufacturing workforce that is educated and gainfully employed, and fed by a pipeline of candidates that view advanced manufacturing as a preferred career path;

where

advanced manufacturing technologies are easily accessible by industry and developed and integrated to improve their performance.

ADAMC Thrust Areas



Workforce Development

Secondary, post secondary, incumbent worker, dislocated worker



Technology Adoption Awareness, benefits, justification and barriers



Technology Development

Integration, augmentation and design

Goal Areas for ADAMC Strategy

- Presence
- Perception
- Promotion



Defense Manufacturing Community:

A Defense Manufacturing Community is designated by the DoD Defense Manufacturing Community Support Program (DMCSP). Its purpose is to support long-term community investments that strengthen national security innovation and expand the capabilities of the defense manufacturing industrial ecosystem.

Alabama Defense Manufacturing Community

Received DMC Designation in 2020

The ADAMC comprises 22 counties that capture

- the majority of aerospace and defense manufacturing,
- defense installations, and
- associated industries





Consortium and Partners

Founding Organizations











Consortium Members and Strategic Partners

































ARM ADVANCED ROBOTICS POR HANDIPACTURES













ADAMC is building on the existing relationships with DoD Manufacturing Innovation Institutes that support the vision of ADAMC

Over 100 Supporting Organizations

Partner Non-Profit

Academia

Community College / Technical

Municipality / Econ. Development

Industry: DoD OEM

Industry: DoD Small/Medium

Workforce Development

Regional Other



ADAMC Supporting Organizations

Partner Non-Profit

National Center for Defense Manufacturing and Machining Advanced Manufacturing Innovation and Integration Center

Academia

Auburn University

Stillman College

Troy University

University of Alabama, Tuscaloosa

University of Alabama in Huntsville

University of West Alabama

Athens State University

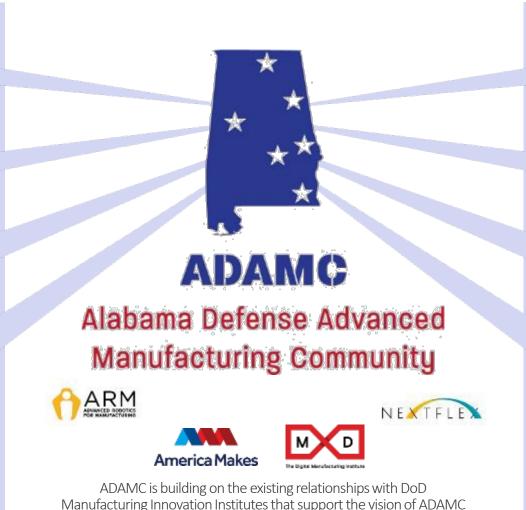
Community College / Technical

Calhoun Community College Central Alabama Community College J.F. Drake State Community & Technical College Southern Union College

Municipality / Econ. Development

BIO Alabama Calhoun County EDC City of Huntsville City of Tuscaloosa Huntsville Committee of 100 Huntsville Madison County Chamber Lake Martin Area Economic Development Alliance Montgomery Area Chamber of Commerce Morgan County Economic Development Association Ozark-Dale County Economic Development Corporation TN Valley Corridor

Tuscaloosa County Commission



DoD OFM

Carpenter Technology

Dynetics

Dynetics, Inc. **GE Additive**

GE Aviation

Intuitive Research

Lockheed Martin Corporation Northrop Grumman

Siemens

Teledyne Brown Engineering

DoD Small/Medium

Aerobotix

Brown Precision, Inc.

Canvas Incorporated

CFD Research Corporation

Cimarron Composites

Defense Enterprise Solutions

DigiFlight

EngeniusMicro Engenix, Inc.

Geeks and Nerds Corporation

GeneCapture, Inc. Go-to-Market Solutions

iXpressGenes, Inc.

Kord, a Centauri company

Linc Research Marathon Robotics Pinnacle Solutions, Inc.

R2C Inc.

ReLogic Research, Inc.

Schmitt Consulting Group LLC

Seabrook Solutions, LLC

T&C Stamping, Inc.

TomMarkTony3 Services, LLC (TMT3)

Torus Concepts Inc. TriVector Services Inc.

Victory Solutions

Workforce Development

Alabama Technology Network (NIST – MEP) Alabama Productivity Center/UA-ATN Center CMER / UAH-ATN North Alabama Works

West Alabama Works

Still Serving Veterans

Regional Other

HudsonAlpha Institute for Biotechnology NASA Marshall Space Flight Center



Presence

Establish presence with industry stakeholders across the region

"Support industry with advanced manufacturing technology"

"Go to industry: Virtual and/or physical roadshow to go to industry"

- **✓ Workforce Development**
- ✓ Technology Development
- ✓ Technology Adoption
- Assess industry challenges & needs
- Assess DoD Technology development needs
- Convene industry, workforce development, DoD, other
- Technology conferences / workshops
- Training

- Technology introduction
- Technology demonstrations
- Technology implementation
- Technology talks
- Advanced Manufacturing and Technology Guide
- DoD manufacturing association





Perception

Change the perception of manufacturing

"Students choose careers based on what they know or have seen; most do not know nor have seen manufacturing (Perception: Dirty, dark and dangerous)"

"Not just students, but parents and teachers"

- Career exposure and opportunities students, parents and teachers
- Curriculum and program development
- Workshops and conferences
- Accessible education and career pathways

Worlds of Work (WOW):

Designed to expose youth to high-wage, high-demand careers available in North Alabama (approx. 9,000 students)

STEM Industry Externship Program:

Provide educators with externship experiences in STEMbased public and private industries, deepening the connection between STEM workplaces and the classroom.

The University of Alabama IMaDE Lab - Introduction to Smart Manufacturing Workshop:

Motivate regional teachers and educators to implement an early introduction program to Industry 4.0 and smart manufacturing systems (SMS).

Modern Manufacturing:

Develop knowledge and skills to equip high school students for careers in manufacturing such as industrial maintenance, manufacturing, electronics, precision machining, and robotics. UAH ADAMC is serving on the Advisory Committee.

NextFlex

FlexFactor and Flex2Future programs with Calhoun and Drake State





Promotion

Promote advanced manufacturing initiatives and all that is available in the region

"ADAMC can play a role as hub for sharing/disseminating information and resources to industry"

"ADAMC can play role as "convener" of organizations and associations around topics of interest – education, training, job seekers"











- ✓ Education & career pathways
- ✓ Collaboration between industry / education
- Links to statewide resources
- ✓ Advanced manufacturing / STEM activities
- ✓ DoD industry advanced manufacturing needs and capabilities
- ✓ Success stories and case studies

TECHNOLOGY GUIDES

New Technologies and Modern Methods

Discover the latest advancements transforming the manufacturing industry. Our tech guides offer insights into cutting-edge technologies and modern methods, detailing practical applications, benefits, and key considerations. Enhance safety, quality, and productivity in your operations with these powerful tools and strategies. Explore each guide to unlock new potential for your business.









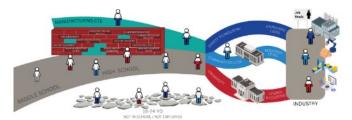






Visit the Alabama Defense Advanced Manufacturing Community Website

Future Expanded Needs-Driven Manufacturing CTE







Improving Workforce Quality for the Regional Manufacturing Ecosystem

OBJECTIVE

An effective workforce ecosystem ensures that the people entering jobs through certification programs, degrees, or other prior education pathways are as prepared as possible to effectively and directly begin work with less job-specific training.

The preparedness of the workforce participant needs to be maximized to improve satisfaction for the employee, reduce the training burden for the employer, and increase evidence of competency and effectiveness of education and training providers.

Understanding the elements, organizations, and initiatives that impact the quality of future workers, as well as having a means to measure it, can complement existing workforce development efforts and can be expanded to other sectors and regions.



Resources for Industry

Empowering manufacturers with the resources, connections, and knowledge to navigate from aspiration to achievement



New Technologies & Modern Methods

How Can I Find New Solutions to Current Challenges?

Discover insights, benefits and solutions on new technologies and modern methods successfully used in manufacturing today



Resources to Accelerate in Manufacturing

How do I Advance in Manufacturing?

Explore avenues for advancement with organizations, programs, success stories, and resources to guide your journey towards manufacturing excellence



Workforce Development Resources

What Workforce Development Resources are Available?

Explore opportunities to upskill your workforce, recruit new talent, and partner with educational institutions.



Organizations that Support Manufacturing

How Can I Connect with Organizations Supporting Manufacturing?

Learn about opportunities to collaborate, network, and engage with the broader manufacturing ecosystem.

https://adamc.tech/industry-resources/



Supporting Manufacturing Excellence

Industry resources and organizations are available to support your organization in the education and practical application of the latest manufacturing technologies.



Technology Demonstrations



Modernization Assessments



Return on Investment Assistance



Grant and Program Resources



Applications and Solutions Guidance



State-of-the-art Technologies



Technology Roadmaps



Collaborative Research and Development























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Construct objects by meticulously adding material layer by layer, offering unparalleled design flexibility, rapid prototyping capabilities, and efficient spare parts production.



Immerse users in dynamic digital environments, enhancing training, design processes, maintenance tasks, and overall productivity by seamlessly blending the virtual and physical worlds.



Optimize operations by performing maximum precision and efficiency, liberating human workers from repetitive, hazardous, or laborintensive activities while driving productivity and innovation.



A range of comprehensive software solutions meticulously designed to collect, store, organize, and analyze data within organizations.



Empowers organizations to extract valuable insights from vast amounts of data, facilitating informed decision-making, identifying opportunities, mitigating risks, and optimizing processes.



Serves as the eyes and ears of modern manufacturing, detecting and responding to physical or environmental changes by converting them into electrical signals or data.



Enables organizations to create mathematical or computational representations (models) of real world systems, processes, and designs.

Visit the Alabama Defense Advanced Manufacturing Community Website

https://adamc.tech/technology-adoption/



Benefits of Membership



Access to Industry Expertise

Tap into a network of seasoned professionals for networking knowledge sharing and best practices.



Tech Awareness and Education

Stay updated on the latest trends, technology and practices through workshops, training, programs and education initiatives.



Engagement with Stakeholders

Collaborate with academia, government agencies, and industry to address common challenges effectively



Access to Resources

Receive support and resources aimed at driving business development and growth.



Enhanced Visibility

Increase your company's visibility within the industry and broader community.



Get My Voice Heard

Collective advocacy ensures industry interests are heard.

Become a Member

- Collaboration with all stakeholders in the region is essential to the success of our initiatives.
- Your company's input and participation is invaluable to our mission of.
- Industry involvement is crucial as we strive to advance manufacturing excellence and innovation within the region.
- There is NO COST for membership.
- Your company's support helps us demonstrate strong industry commitment

By joining us, you are acknowledging your company's support for ADAMC's mission and initiatives and your commitment to collaborate with our community in advancing our collective goals.

Join Us or Learn More



https://adamc.tech/join-us/



For more information

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