

Building North Central Pennsylvania's Innovation Ecosystem for Advanced Manufacturing

From classroom to career, NCPA is connecting education, research, and entrepreneurship to power the next generation of advanced manufacturing.

An innovation ecosystem is a network of interconnected organizations—such as businesses, universities, workforce agencies, nonprofits, and government entities—that collaborate to drive research, entrepreneurship, and workforce development. These ecosystems thrive on shared knowledge, resources, and relationships to turn ideas into real-world solutions, products, and jobs. Here's how the ecosystem fits together:



Universities & Technical Colleges

- Conduct cutting-edge research in materials science and process engineering
- Train students in design, automation, and applied manufacturing
- Provide access to lab facilities, technical faculty, and innovation programs



Manufacturers & Industry Partners

- Drive real-world applications and performance standards
- Provide internships, apprenticeships, and mentorship
- Offer testbeds for scaling and commercialization



Workforce Boards & Training Providers

- Align training programs with industry needs
- Support incumbent worker upskilling
- Connect jobseekers to advanced manufacturing careers



Nonprofits & Economic Development Organizations

- Convene public-private partnerships
- Provide startup support and innovation funding
- Advocate for infrastructure and regional competitiveness



North Central Pennsylvania is home to a growing network of collaborators driving industrial innovation. Together, we're laying the groundwork for an industry-led ecosystem that accelerates research, attracts talent, and prepares the workforce of the future.



Universities & Technical Colleges

Penn State, University of Pittsburgh at Bradford, Northern PA Regional College



Manufacturers & Industry Partners

N.A. Hoganas, Keystone Powdered Metal, Horizon Technology, GKN Powder Metallurgy; Gasbarre Products; Advantage Metal Powders



Workforce Boards & Training Providers

Workforce Solutions for North Central PA, Northern PA Regional College; regional Career Training Centers



Nonprofits & Economic Development Organizations

North Central PA Regional Planning & Development Commission, local chambers, Ben Franklin Technology Partners

AmericaMakes, Youngstown Innovation Center



Carnegie Mellon, Pitt, Duquesne, Chatham Universities



Penn State Main Campus, Pennsylvania College of Technology



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Want to know more? Visit pressedmaterials.org or contact our Regional Innovation Officer, John Williams at jcw5919@psu.edu