

# RCBI

ROBERT C. BYRD INSTITUTE

⋮

ADVANCING  
MANUFACTURING  
TECHNOLOGIES





# Statewide

Advanced Manufacturing  
Technology Centers



## More than \$20 million in leading-edge equipment

- CNC lathes & mills
- Waterjet & laser cutters
- Composites manufacturing
- 3D Printing



# Technical Services



# RCBI Specialized Programs

P.O.W.E.R. Awards for economic diversity in Appalachia

# Appalachian Hatchery



**Assists manufacturers, start-ups and innovators with development of new products & markets, and delivers skills training to their employees**

- Create 105 jobs
- Retain 235 jobs
- Leverage \$675,000 in private investment



CLAUDE  
WORTHINGTON  
BENEDUM  
FOUNDATION

# Workforce Training

- Machinist/CNC
- Welding
- Robotics
- 3D Printing
- Blueprint Reading
- Advanced Software Training/CAD/CAM
- Material Analysis
- New Market Development
- Quality Implementation



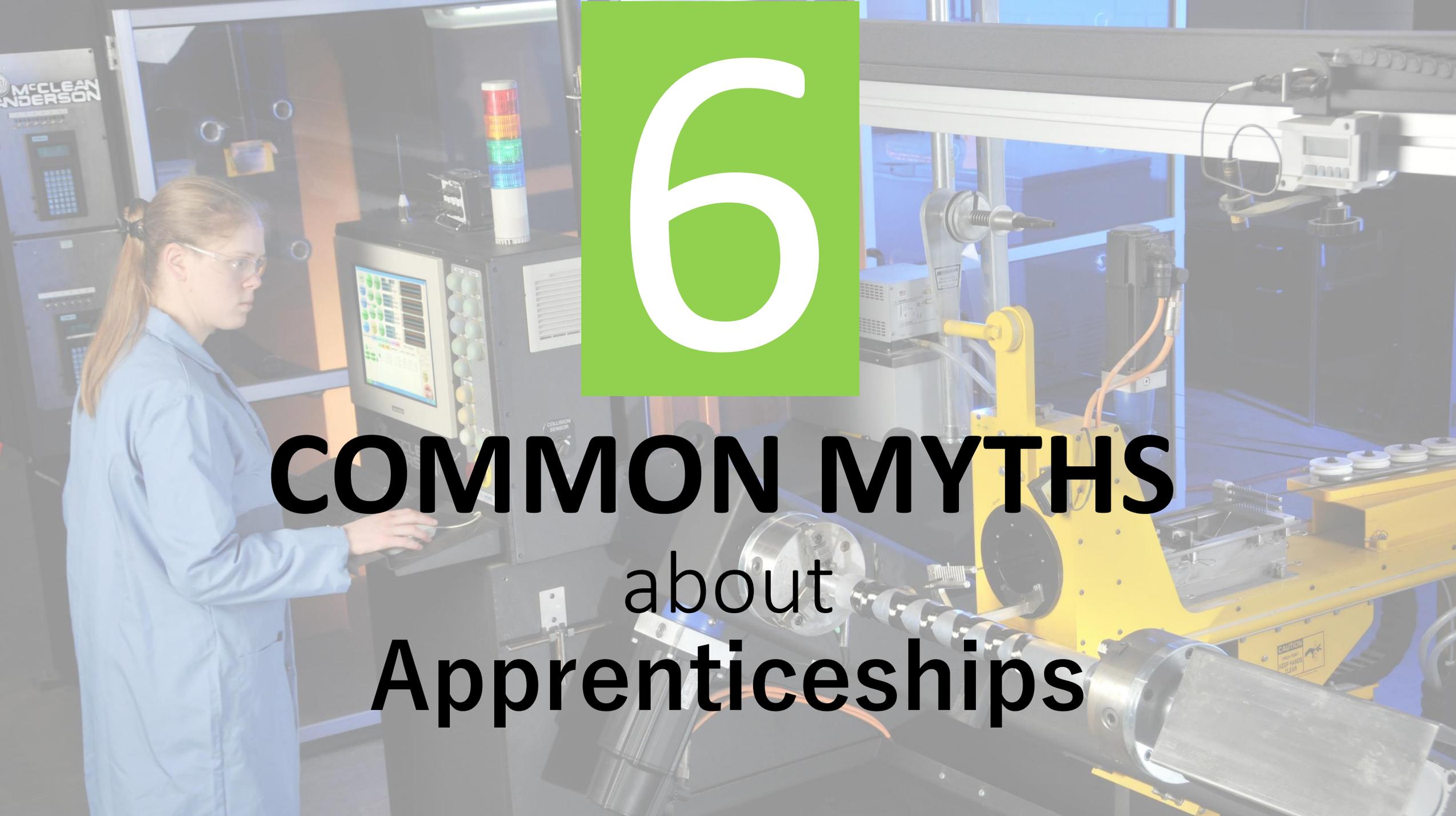


# Apprenticeship *works!*

National Advanced Manufacturing  
Apprenticeship Partnership



Apprenticeship**USA**

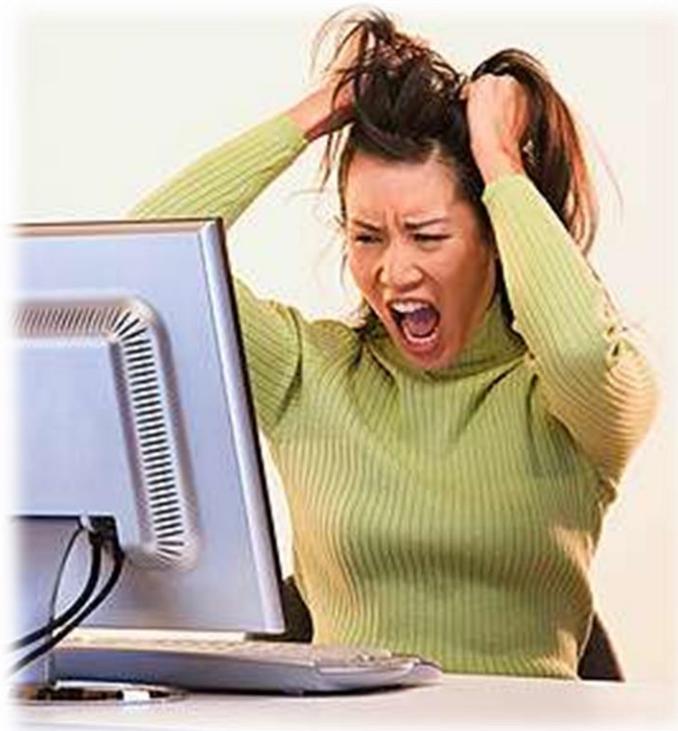
A woman with blonde hair in a ponytail, wearing safety glasses and a blue lab coat, is operating a CNC machine. She is looking at a control panel with a screen and buttons. The machine is yellow and black, with a large metal part being processed. In the background, there are other industrial equipment and a sign that says "McCLean Anderson".

6

**COMMON MYTHS**  
about  
**Apprenticeships**

# Myth #1

Registering an apprentice program is too bureaucratic and difficult.



# Myth #2

Apprenticeship programs are just for the construction and skilled craft occupations.



# Myth #3

Apprenticeships are just for the big companies.



# Myth #4

If I train apprentices, they will just leave.



# Myth #5

If I become an apprentice, I will have to make a choice between work and college.



# Myth #6

Apprenticeships require a large number of employees

Apprenticeships come in all sizes, from as few as one employee to hundreds





## At a glance

RCBI was awarded \$4.9 million to fund the National Advanced Manufacturing Apprenticeship Partnership, Apprenticeship Works.

Expand existing innovative apprenticeships, create hybrid models for accelerated completion.

Promote advanced manufacturing pre-apprenticeships for women, transitioning military personnel and disadvantage youth.

Provide standardized, industry-endorsed online instruction and on-the-job learning for companies with sites in multiple states.

Establish 1,000 apprentices and 415 pre-apprentices nationwide.

# Apprenticeship *works!*

# What is a Registered Apprenticeship?



- **On-the-Job Training**



- **Related Instruction**



- **Rewards for Skill Gains**



- **National Occupational Credentials**

# Benefits to employers

- Higher skilled employees
- Reduced turnover costs
- Higher productivity
- More diverse workforce
- Fewer accidents
- Meet requirements for contract procurement

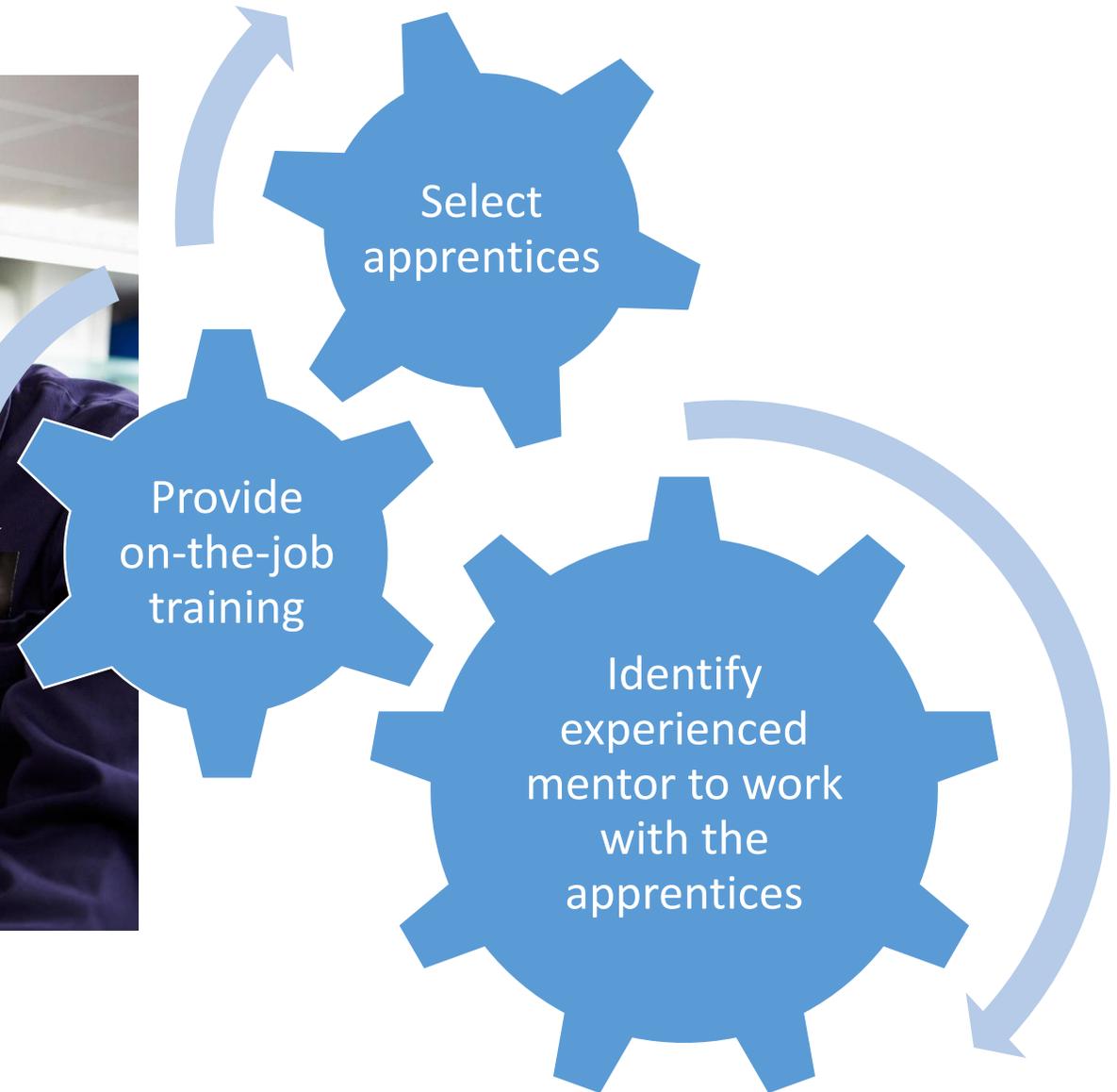


# Benefits for employees

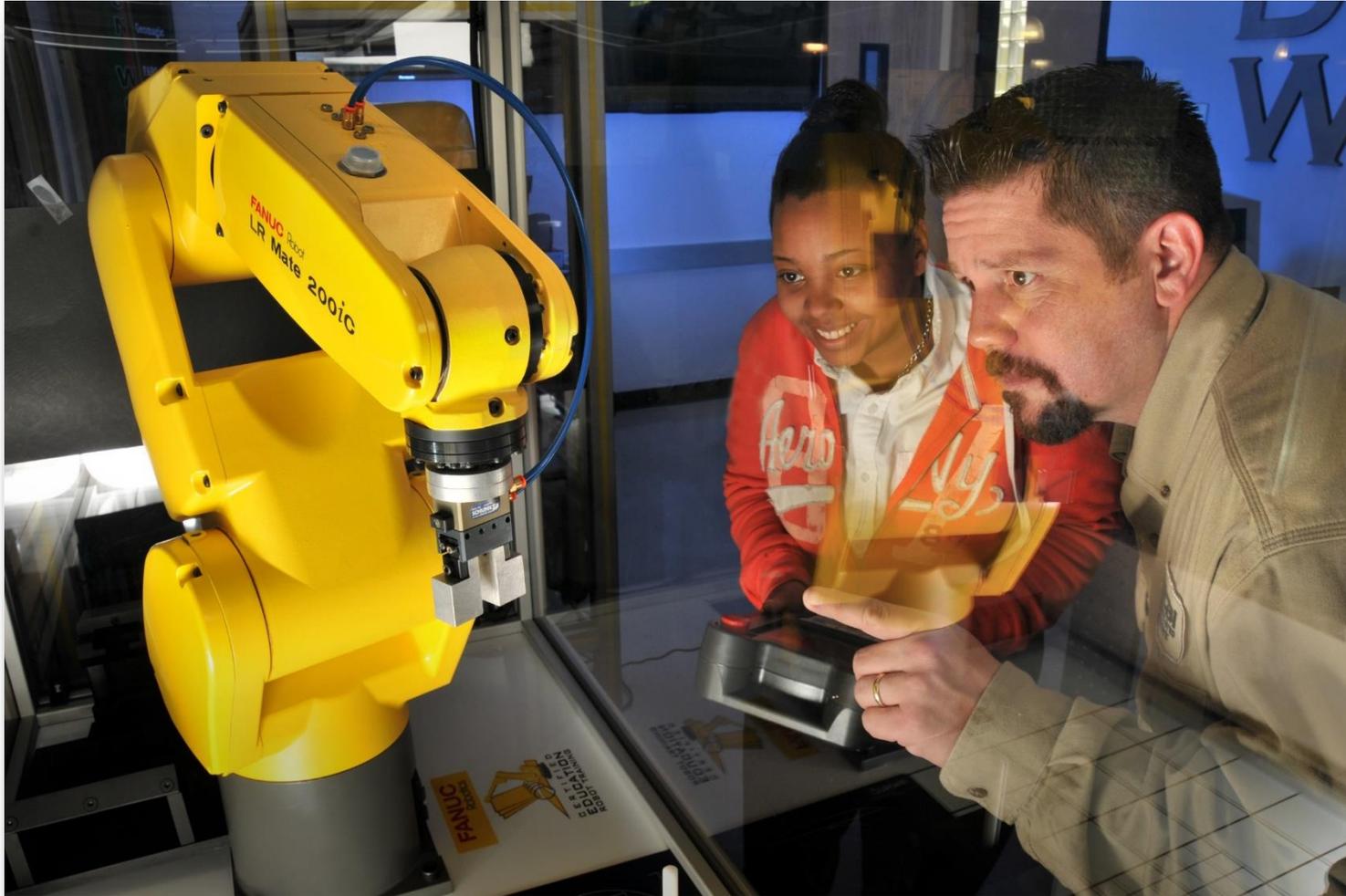
- Increased skills
- Higher wages
- National credentials
- Career advancement
- Safer workplace
- Job security



# Employer's role



# Occupations



- Additive Manufacturing/  
3D Printing Technician
- Engineering Assistant
- Welding Technician
- Industrial Manufacturing  
Technician
- Robotics Technician
- CNC Operator/Programmer
- Quality Control Inspector
- Composites Technician
- Press Operator
- Electrician
- Maintenance  
Technician/Mechatronics
- Machinist

# Grant-funded activities & curriculum



- Consulting services to develop and implement apprenticeship programs for each participating company
- 80 hours of train-the-trainer at company site for journey workers/supervisors
- 4 hour online pre-assessment of apprentices
- 144 hours minimum per year of online course facilitation per apprentice
- Learning Management System (LMS) tracking of apprentices progress of Related Training Instruction (RTI) and On-The-Job (OJT) competencies

# A customized approach



- Apprenticeships customized to meet needs of employers

# Industry Partners



West Virginia



West Virginia,  
Tennessee



Arkansas, Georgia, North  
Carolina, South Carolina,  
Texas and Virginia



Ohio



West Virginia

# Industry Partners



West Virginia



West Virginia



Illinois



Indiana

**Learn more**

# Apprenticeship *works!*

National Advanced Manufacturing  
Apprenticeship Partnership



**Contact Director Lucinda Curry at 800.469.7224**