SMART MANUFACTURING **(BHEF FELLOWSHIP PROJECT)**

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THE URGENCY – WHY NOW?

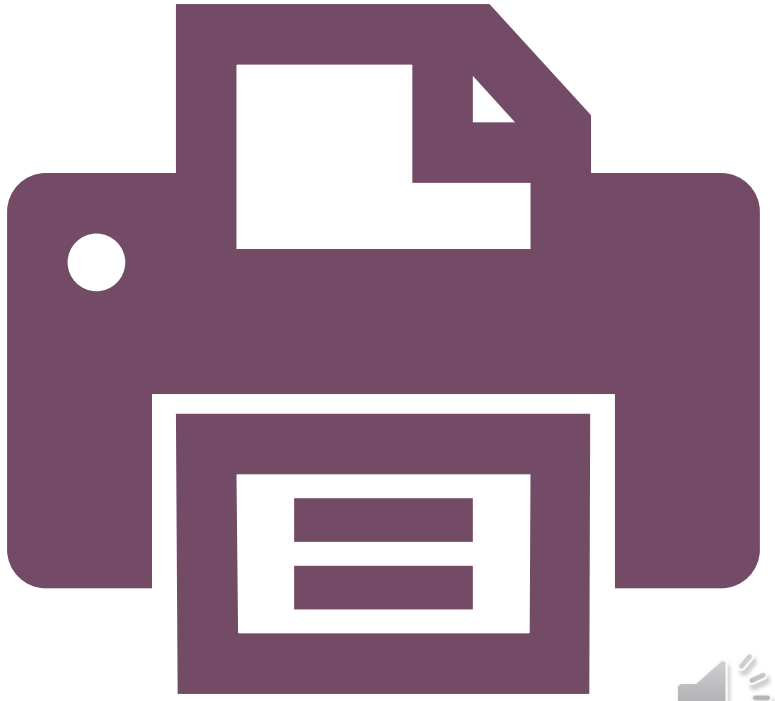
Industry is rapidly shifting to Smart Manufacturing & Additive Manufacturing.

Our students lack practical exposure to cutting-edge technologies.

Local employers face a workforce readiness gap.

PROJECT VISION AND OVERALL VALUE PROPOSITION

- Create a state-of-the-art Advanced Manufacturing Lab to equip students with hands-on skills in Smart Manufacturing and 3D Metal Printing.
- Align curriculum with industry needs, ensuring graduates are workforce-ready.



THE PROBLEM WE'RE ADDRESSING

Students currently lack critical skills and practical experience in advanced manufacturing.

Industry reports and feedback indicate a significant skills gap affecting employment readiness.

PRIMARY TARGET STAKEHOLDERS

Students at Buffalo State University

Local Manufacturing Industry Partners

Data: Projected 10% growth in regional manufacturing jobs, highlighting demand for skilled graduates.

SOLUTION

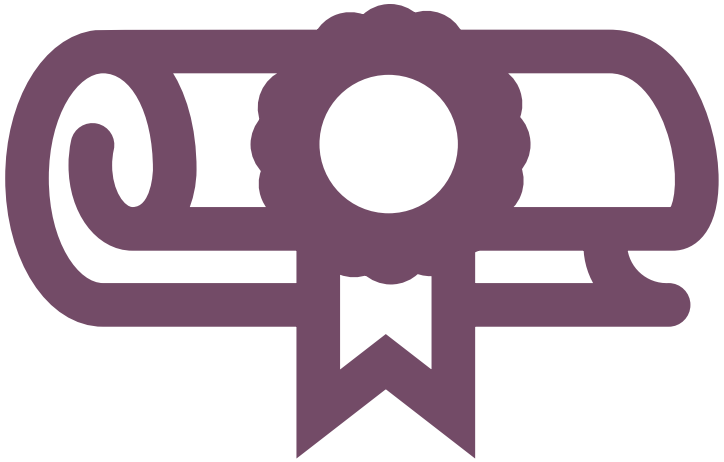
Urgent integration of advanced manufacturing curriculum.

Establishment of a dedicated Advanced Manufacturing Lab.

Implementation of industry-driven workshops, competitions, and internships.

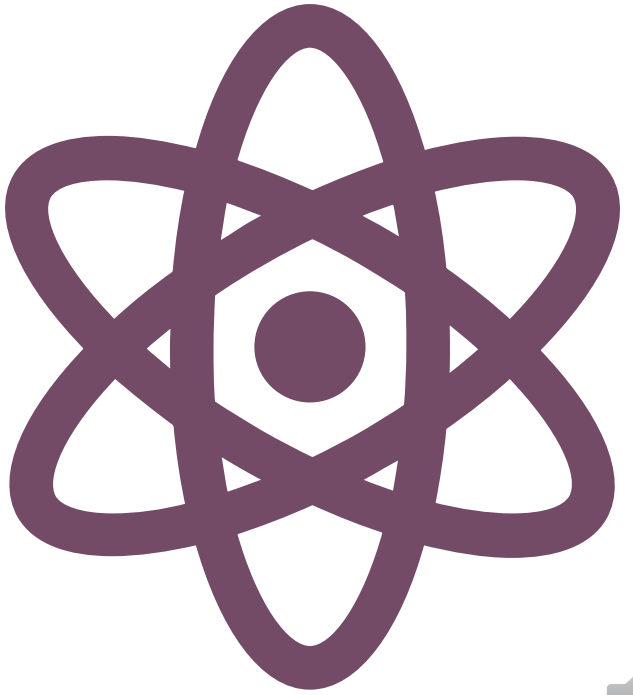
BENEFITS TO BUFFALO STATE

- Position Buffalo State as a regional leader in advanced manufacturing education.
- Create a strong workforce pipeline with job-ready graduates.
- Strengthen partnerships with companies like Moog, Siemens, etc.
- Open avenues for research, grants, and innovation projects.



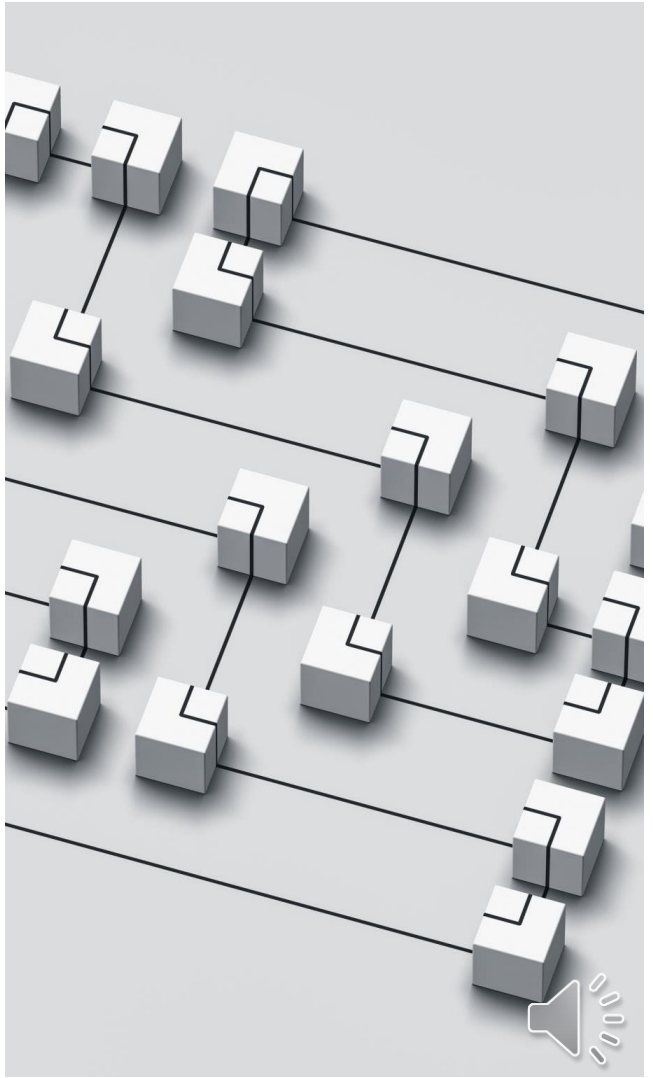
BASIC ROADMAP AND MILESTONES

- Achieved: Faculty team established, initial industry partnerships secured.
- Short-term (0-6 months): Lab setup, initial curriculum developed.
- Mid-term (6-18 months): Launch student-industry projects and internships.
- Long-term (18+ months): Sustainable partnerships, certifications, and continuous curriculum improvement.



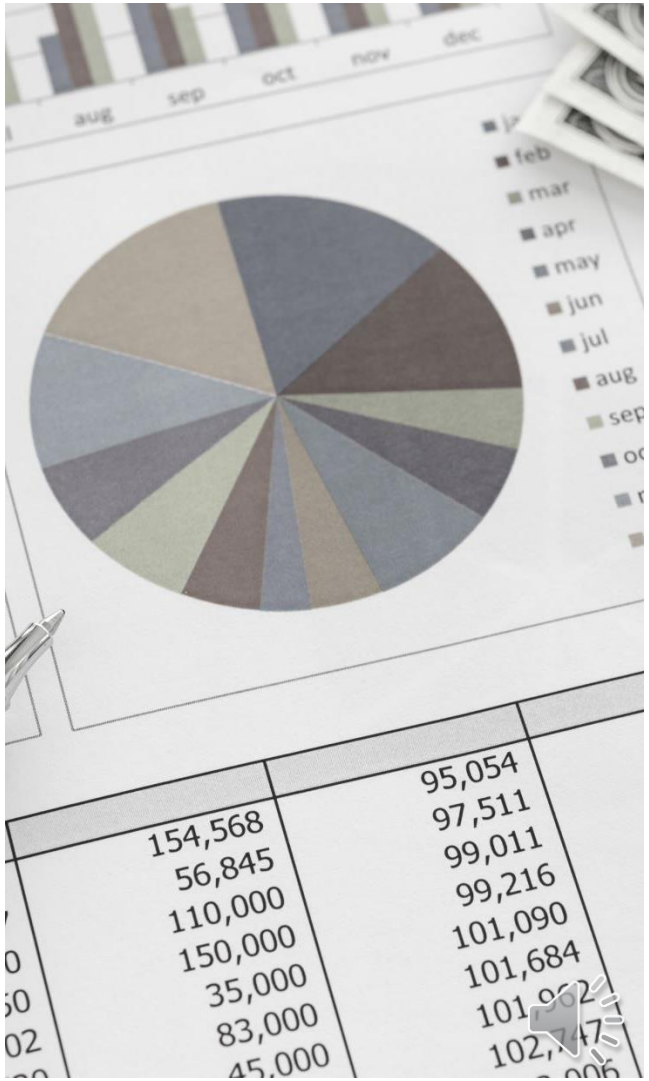
RESOURCES: WHAT WE HAVE AND WHAT WE NEED

- Available: Faculty expertise, initial industry connections, university support.
- Needed: 3D metal printers, specialized software, lab infrastructure, additional training staff.
- Acquisition strategy includes industry sponsorship, grants, and institutional support.



BUDGET & FUNDING PLANS

- Hypothetical Budget Overview (simplified for clarity):
  - Equipment (e.g., 3D printers, software): 40%
  - Facility Renovation (lab setup, infrastructure): 30%
  - Personnel (additional staff, trainers): 20%
  - Operational Expenses (maintenance, materials): 10%
- Suggested Funding Sources:
  - Industry sponsorships: Partner with local manufacturers.
  - Educational grants: Apply for federal/state technology advancement grants.
  - Internal funding: Leverage existing university budgets and matching funds.

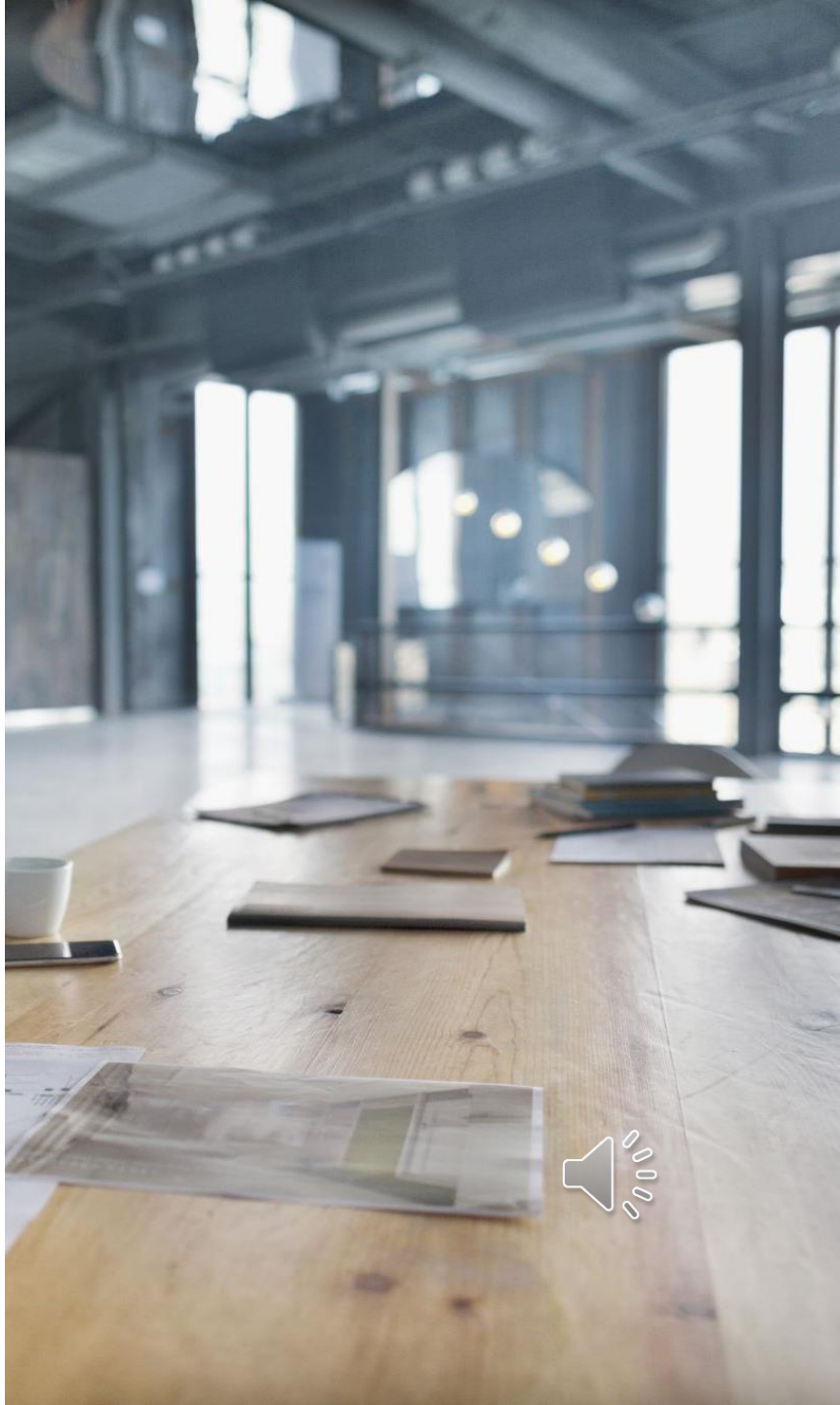


REQUIREMENT AND SUGGESTED APPROACH

Request

- Initial meetings or workshops with potential industry sponsors to discuss collaboration.
- funding or in-kind contributions (such as equipment or software licenses) to initiate lab setup.

Seek advisory input from industry professionals on project specifics and relevance.



THANK YOU

- Project Highlight
  - Direct improvement in student employability and alignment with industry needs.
  - The unique opportunity for industry partners to influence educational practices and future workforce development.
  - Invitation for stakeholders to actively participate in shaping and supporting the project's success.