



BOARD OF TRUSTEES

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Work Scholars Program

Mr. Dave Nyberg, Executive Director – Business
Engagement/Economic Development

Dr. Cale Polkinghorne, Department of Engineering Technology

Work Scholars Program

Overview:

- Vision + Concept
- Pilot: Medical Device Manufacturing ↔
NMU Engineering Technology
- Sharing the NMU Student Story
- 2025 and Beyond
- Discussion/Q&A



Vision + Concept

- *Students receive work-based learning, competitive pay, and academic credit* for certain NMU courses
- Employers provide *curriculum insight* and build connections with faculty and students to support *recruitment opportunities*
- Together, NMU and employers provide earlier and progressive connections for students than they would through a traditional internship, *fostering mentorship and meaningful career opportunities upon graduation*






Aligned with State Population Growth Objectives

Executive Summary

Recommended Strategies

These recommendations will have a significant impact on population growth and higher education attainment, likely reversing the state's current brain drain and bringing us to a top-quartile state in attainment.

Advance Equity

 Increase Enrollment	<p>Create a K-14 public education system by providing graduating high school students with two years of tuition at a community college or public university.</p> <p>Support early college credit uptake and universal Free Application for Student Aid (FAFSA) or opt-out as a high school requirement.</p>
 Improve Transfer/Completion success	<p>Make the transition from community college graduate to university junior status seamless.</p> <p>Form advisory group to reimagine higher education funding process, led by proper higher education stakeholders, to ensure competitive, sufficient, sustainable funding that enables increased student success and graduate retention.</p>
 Enhance Job Placement and Retention	<p>Support, formalize, and grow employer partnerships to enable greater student exposure to real-world, on-the-job experiences for credit and/or payment.</p> <p>Directly influence reversal of "brain drain" by incentivizing recent graduates to seek employment and live in Michigan.</p>

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Note: Data revealed that work-based learning partnerships and post-graduation incentives were the only recommendations forecasted to drive direct population growth

Source: Growing Michigan Together Council – Higher Education Workgroup Recommendations



Opportunity

- Three medical device manufacturers in the Marquette are poised for short- and long-term growth and inhibited primarily by the number and quality of CNC machining and CNC programming professionals
- Enrollment opportunity NMU Engineering Technology programs
- Collaboration with K-12 school districts on career exploration opportunities



Pilot: Medical Device Manufacturing

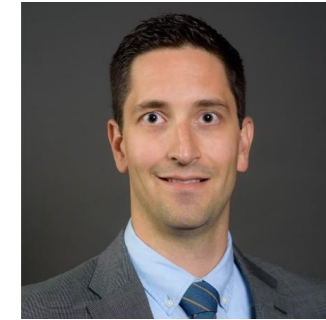
Mapping NMU CNC Certificate Curriculum with Work-Based Learning Modules

Dr. Cale Polkinghorne led a working group w/industry partners to align learning objectives for Engineering Technology courses with work-based learning modules.

- **Multiple Pathways** - This important work is key to ensuring that students can achieve academic credit through their Work Scholars experience at either at Able Medical Devices, Resolve Surgical Technologies, or Mount Mfg.
- **Special thanks** - Wes Sramek (Resolve Surgical), Jesse Nye (Mount Mfg), and Rob Kinney (Able Medical) for their time and dedication to this effort!



Jesse Nye
Mount Mfg



Wes Sramek
Resolve Surgical



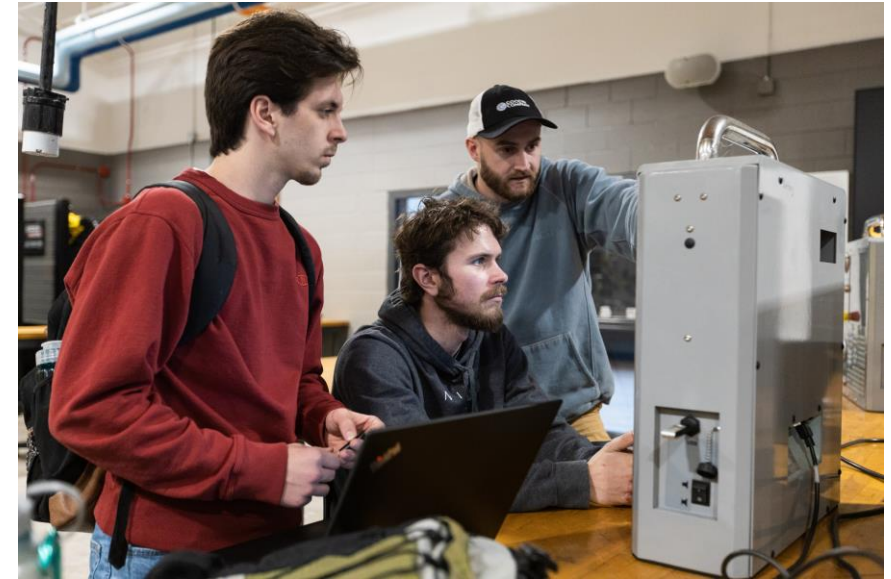
Rob Kinney
Able Medical



Pilot: Medical Device Manufacturing

Next Steps

- Report to the Committee on Undergraduate Programs (CUP) report to eliminate one course, add another, and update curriculum within existing courses to keep up with technology and changing processes within the medical device industry.
- Develop a process for students to receive NMU credit for learning objectives achieved through Work Scholars experience, including a designated representative at each partner site who reviews and signs off on tasks completed within the workplace



Pilot: Medical Device Manufacturing

Issues to resolve

- Aligning the Work Scholars experience with the current advanced placement process
- Allocation of costs for the credits
- Grade assignment for Work Scholars credits
- Process for applying credit to student transcripts using the work scholars model (Registrar)
- Addressing the potential impact of on traditional enrollment for the courses taking place at NMU (i.e., How to keep traditional courses going if Work Scholars becomes the preferred pathway for credit?)
 - Current pilot capacity for three employers is approximately 6 Work Scholars per semester



Pilot: Medical Device Manufacturing

Sharing the NMU Student Story

From the classroom to meaningful careers, NMU Marketing & Communications team is curating the stories of NMU students and recent graduates into a power message for future Wildcats while also helping to celebrate these unique industry partnerships.

→ **Special thanks** – Mike Forester, Brooke Whaley, Ryan Sullivan, Dr. Cale Polkinghorne, and Adam Carpenter (NMU Student)





ALEX CARPENTER

STUDENT PROFILE



Future Opportunities

Career Exploration & Connecting Activities

NMU and industry partners have a shared interest in growing the potential of the Engineering Technology program and the *Work Scholars* experience.

- **“Manufacturing Day”** – An idea currently in discussion with the Michigan Manufacturing Technology Center to showcase career opportunities and new manufacturing technologies with middle- and high-school students
- **Upskilling for current employees**
- **Idea: Manufacturing Advisory Council**
 - Intentional forum to foster trust-built relationships and strategy around mutually beneficial initiatives
 - Membership inclusive of diverse industry perspectives, NMU faculty/program leadership, and economic/workforce development partners
 - Action Oriented



Work Scholars Program

Next Steps:

- Launch the pilot in Fall, 2024
- Marketing, K-12 outreach, and career exploration/connecting activities
- Expand to additional NMU programs through a second cohort in 2025-26?
- Continue to develop public-private partnerships for funding support



Thank you!

Questions?



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