



# HOUSE of REPRESENTATIVES

## STATE OF MICHIGAN

### Appropriations Requests for Legislatively Directed Spending Items

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1. The sponsoring representative's first name:  
Tim
2. The sponsoring representative's last name:  
Kelly
3. The cosponsoring representatives' names. All cosponsors must be listed. If none, please type 'n/a.' A signed letter from the sponsor approving the co-sponsorship and a signed letter from the member wishing to co-sponsor are required. Attach letters at question #9 below.  
n/a
4. Name of the entity that the spending item is intended for:  
American Lightweight Materials Manufacturing Innovation Institute (DBA – LIFT)
5. Physical address of the entity that the spending item is intended for:  
1400 Rosa Parks Blvd. Detroit, MI 48216
6. If there is not a specific recipient, the intended location of the project or activity:  
Willing and able high schools, ISD's and RESA's across the state.
7. Name of the representative and the district number where the legislatively directed spending item is located:  
Since the schools are not yet identified, TBD
8. Purpose of the legislatively directed spending item. Please include how it provides a public benefit and why it is an appropriate use of taxpayer funding. Please also demonstrate that the item does not violate Article IV, S 30 of the Michigan Constitution.  
This project is intended to expand career and technical education programs in public schools and intermediate school districts.
9. Attach documents here if needed:  
Attachments added to the end of this file.
10. The amount of state funding requested for the legislatively directed spending item.

3000000

11. Has the legislatively directed spending item previously received any of the following types of funding? Check all that apply.

["State"]

12. Please select one of the following groups that describes the entity requesting the legislatively directed spending item:

Non-profit organization

13. For a non-profit organization, has the organization been operating within Michigan for the preceding 36 months?

Yes

14. For a non-profit organization, has the entity had a physical office within Michigan for the preceding 12 months?

Yes

15. For a non-profit organization, does the organization have a board of directors?

Yes

16. For a non-profit organization, list all the active members on the organization's board of directors and any other officers. If this question is not applicable, please type 'n/a.'

ALMMII Board of Directors: a. Becky Stewart, Board Chair, Advisor, Australian Naval Shipbuilding Advisory Board b. Zach Mears, Vice Chair, Head of Strategy, Anduril Industries c. Nigel Francis, CEO and Executive Director - LIFT d. Karen M. Belans, Chief Financial Officer, Detroit Regional Chamber e. Del Costy, President, Digital Industries U.S. RC and Managing Director, Americas Digital Industries Software f. Harris Ng, Senior Partner, Kearney

17. "I certify that neither the sponsoring representative nor the sponsoring representative's staff or immediate family has a direct or indirect pecuniary interest in the legislatively directed spending item."

Yes, this is correct

18. Anticipated start and end dates for the legislatively directed spending item:

Q-1 2026, and end date three-year school program build out, 4th quarter 2028.

19. "I hereby certify that all information provided in this request is true and accurate."

Yes



93RD DISTRICT  
P.O. BOX 30014  
LANSING, MI 48909-7514

MICHIGAN HOUSE OF REPRESENTATIVES

PHONE: (517) 373-1778  
FAX: (517) 373-5780  
TimKelly@house.mi.gov

**TIM KELLY**  
STATE REPRESENTATIVE

April 2, 2025

To the People of the State of Michigan,

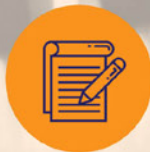
The goal of the K-12 system is to prepare Michigan students for the future. We live in a state where manufacturing is the largest sector of the economy, employing over 600,000 people. One of the sector's greatest challenges is finding people with the right skill sets to fill high-wage/high-benefit careers in advanced manufacturing. Preparing students for rewarding careers in advanced manufacturing is an important role for the K-12 system. Over many years, career tech programs have disappeared from high schools, reducing exposure and pathways for students in readily available and rewarding careers. I believe we need to do better.

The IGNITE: Mastering Manufacturing Program helps accelerate the process of expanding these programs in schools and intermediate school districts across the state. The program creates a sustainable three-year (sophomore to senior year) plug and play program for schools by providing the curricula, training the teachers, providing the industry relevant training equipment, and preparing students for industry recognized certifications to meet the exciting world of Industry 4.0 and the next generation careers.

I believe this program helps expand career opportunities for students where high-paying careers are readily available in their communities. That is why I am sponsoring this program.

Sincerely,

Tim Kelly  
State Representative, District 93  
Chair of the School Aid and Department of Education Subcommittee of Appropriations



**IGNITE**  
Mastering Manufacturing



# IGNITING OPPORTUNITIES

Manufacturing continues to be a large economic sector in the U.S., with a better paid workforce and better benefits than other sectors, particularly in high-value export sectors. Employment opportunities exist in global market giants, medium-sized enterprises, and small firms.

From a 2015 survey of senior manufacturing executives, Deloitte projects nearly 3 1/2 million manufacturing jobs will need to be filled over the next decade. Two million of those jobs are projected to go unfilled because of a lack of workers with the required knowledge, skills and abilities.

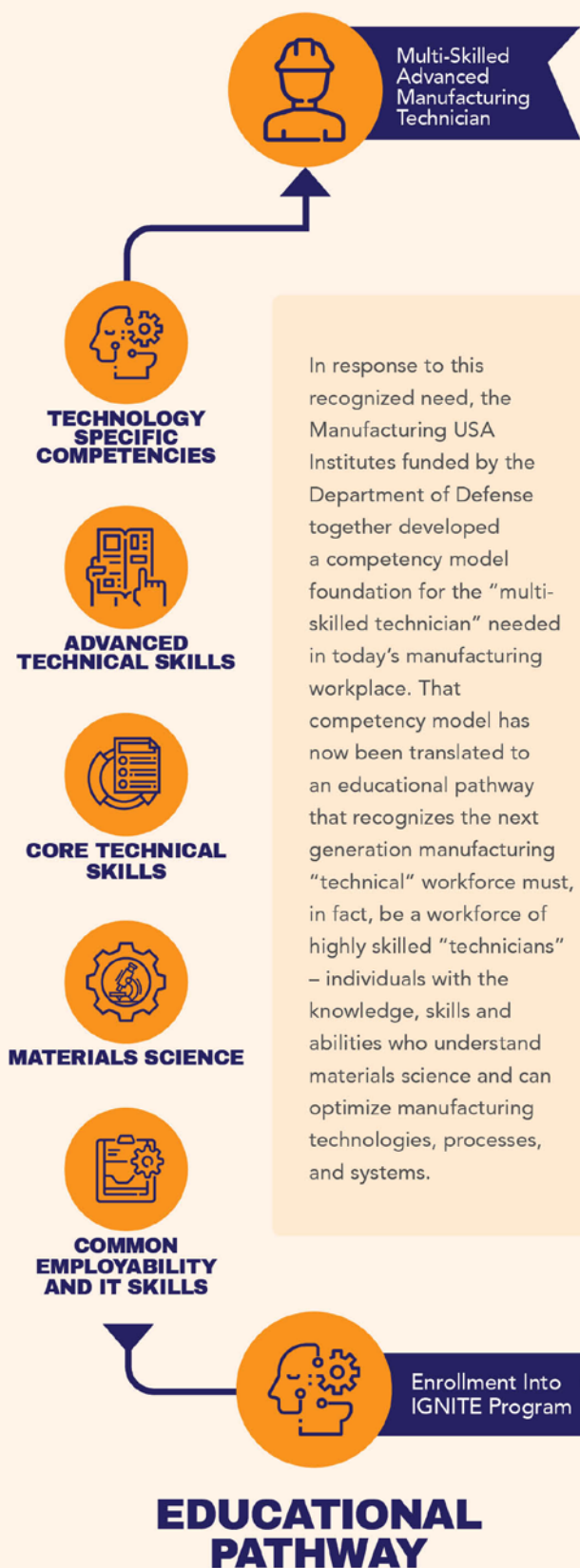
The range of employment needs in manufacturing presents broad economic opportunities for prospective workers seeking great jobs and careers and significant challenges for manufacturers who need workers with "upscaled" knowledge and skills, now described as "high tech" or "advanced manufacturing." These requirements mean the U.S. has to teach and train our next generation manufacturing workforce differently.

The IGNITE curriculum has now been developed. This educational pathway will IGNITE student interest and engagement in learning, because it blends interactive multimedia learning with virtual simulations. IGNITE will ensure students master manufacturing, because it couples learning with project-based experiences built around real industry problems and challenges. By mastering manufacturing technologies, processes, and systems, students will be equipped for success in the 21st century production environment and prepared for additional postsecondary education to become engineering technicians, technologists, or engineers.



**3.5 MILLION**

manufacturing jobs projected to be available over the next 10 years.



# CURRICULUM PATHWAY



# WHERE THE JOBS ARE FOR IGNITE STUDENTS

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Manufacturing begins in an R&D environment – where new products, product features, capabilities, problems to be addressed, and solutions to be created are the focus. IGNITE students will be introduced to and experience hands-on application of emerging tools, developing technologies, and application-ready processes, so a research environment may be their choice of workplace.

IGNITE provides a grounding in Materials Sciences and the properties of materials needed to prototype a new product or solution. This foundation prepares students for their first entry into the world of design – the core competency of engineers.

From product design to product fabrication, IGNITE introduces students to advanced manufacturing, the movement from manufacturing that designs products around materials to a field that tailors materials to specific use. Students who understand new computational tools in manufacturing are the technicians who bridge design and production.

IGNITE ensures students are prepared for SMART factories where the Internet of Things has provided for an entirely “networked” system of manufacturing tools and world-class equipment. In this environment, educated and trained technicians will optimize manufacturing processes and systems.

As advanced manufacturing increasingly moves to customization and individualization of products, IGNITE-educated technicians and technologists will be exploring the “next generation” of advanced manufacturing in the U.S.



# A FOUNDATION FOR SUCCESS

IGNITE will feature capstone, project-based learning modules as a key component of the new generation “masters of manufacturing” upscaled learning. Each of the three Institutes that participated on the curriculum development team helped design their thematic, project-based learning as capstone experiences for **IGNITE** students.



Since its founding, LIFT's manufacturing focus has been on lightweight and advanced metals that offer major performance enhancements and great energy efficiency. LIFT works with its industry and university partners on projects with applications in automotive, aerospace, shipbuilding, railroads, fabrications, and other sectors. Recognized as the Manufacturing USA leader in workforce education, LIFT also focuses on addressing the skills gap in advanced manufacturing and aligning technology and talent development.



America Makes is the national accelerator for additive manufacturing (AM) and 3D printing (3DP) and is the nation's leading and collaborative partner in AM and 3DP technology research, discovery, creation, and innovation. Structured as a public-private partnership with member organizations from industry, academia, government, non-government agencies, and workforce and economic development resources, America Makes is working to innovate and accelerate AM and 3DP to increase our nation's global manufacturing competitiveness.



The Digital Manufacturing and Design Innovation Institute (DMDII) is where innovative manufacturers go to forge their futures. In partnership with UI LABS and the Department of Defense, DMDII equips U.S. factories with the digital tools and expertise they need to begin building every part better than the last. As a result, our more than 300 partners increase their productivity and win more business. DMDII has invested approximately \$90 million in more than 60 applied research and development projects in areas including Design, Product Development, and Systems Engineering; Future Factory; Agile, Resilient Supply Chain; and Cybersecurity.

## PARTNERS

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### The Development Team:

LIFT – Lightweight Innovations  
For Tomorrow

DMDII – Digital Manufacturing and  
Design Innovation Institute

America Makes

Amatrol Inc.

ASM Materials Education Foundation

The Ohio State University

The PAST Foundation



**IGNITE** Mastering Manufacturing

LIFT

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313.309.9003

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For more information, please email [IGNITE@LIFT.Technology](mailto:IGNITE@LIFT.Technology)  
Or visit [Lift.Technology/IGNITE](http://Lift.Technology/IGNITE)

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