

▶ **Manufacturing  
Engineering Education  
Program (MEEP)**

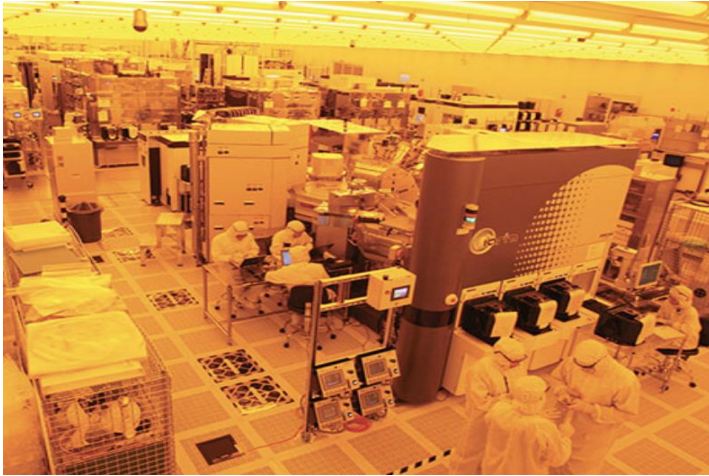


# What is AIM Academy?

## American Institute for Manufacturing (AIM) Photonics

### Technology Development

- Applications in data centers, sensing, autonomous vehicles, and more



### People Development

- Education and workforce development

  
**This is AIM  
Academy**



***AIM Academy is the unified education, workforce, and technology interface for AIM Photonics***

# AIM Academy Portfolio

*AIM Academy  
Product  
Portfolio*

## Education

Summer Academy | Online Education | Virtual Lab | TED-Ed

## Workforce Development

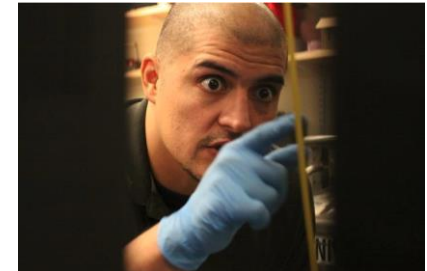
LEAPs | Future Leaders | ★ Certification

## Roadmap

Consortium Technical Meetings | Application Interest Groups | Webinars

*NPR piece on AIM Academy*

**At MIT, Advanced  
Training for Community  
College Students**



*The New York Times article  
on AIM Academy*

**Teaming Up to Get  
Workers Ready for  
Technology of the Future**



# MEEP Program

MIT won a \$1.8 million grant to create a 15-month technician training program with the manufacturing institute ARM

Institutes



Education Partners



Veterans



# Structure of the program

First class of photonics students, summer 2020  
First class of robotics students started this fall

Summer	Fall	Spring	Summer
Boot camp and two foundational modules (3 credits each)	Three manufacturing modules (3 credits each)	Three institute-specific modules (3 credits each). Students begin to meet with the companies where they will do their internships.	Internship and capstone project (6 credits)

\*This program would be a model for other institutes.

\*\*BSU is considering offering an early college program in optics and photonics.

## LaserFocusWorld®

### Massachusetts announces \$3.8M grant for new integrated-photonics training hub, third one in state

The new photonics lab, co-led by Bridgewater State University and Stonehill College, will join one at MIT and a collaborative project between Worcester Polytechnic Institute and Quinsigamond Community College.

**Author** — John Wallace

Oct 31st, 2019

# Funding



- Three professional societies committed to funding the first cohort of students at \$15K per student for 15 students for the 15-month program
- Their corporate members need technicians and their academic members can use the course content that Stonehill/BSU/MIT create

# AIM Academy technician training

Activity	Tie to technician training
Development of a LEAP network	Students will get hands-on training on state-of-the-art tools
Creation of a Virtual Lab	The Virtual Lab will give students a way to understand integrated photonic concepts in a game-like environment
Problem-based learning modules	AA and Springfield Technical Community College are together developing problem-based learning modules
Education modules	AA is rolling out education modules in integrated photonics that can be adapted for a technician audience
Internship Matching Program	AA has successfully placed students in internships for the past two years
Open edX platform	AA plans to launch an Open edX platform for online content

*Screen shot from AIM Academy Virtual Lab*





# Stonehill/BSU MEEP program

## Stonehill College/BSU collaboration

Strong presence throughout all of Southeastern, MA

Many students want to live and stay in surrounding area

Established ties to MCC and BCC

Shared Programs, courses, seminars and speaker series to increase student access

Complementing expertise at each institution



*Stonehill College*



*Bridgewater State University*

# Takeaways

## Pros:

- Four-years schools have access to top professors
- The credits can go toward an associates or college degree
- Universities can attract new students, and offer more paths for existing students

## Cons:

- Universities don't have a funding model to provide federal financial aid to certificate students
  - Students in certificate programs are not eligible for federal financial aid or Perkins V funding
  - Unless students come with funding – from the VA, or a high school, or a community college, they need to take out private loans
  - The state legislature can include a line item to pay for financial aid, but this is a risky path