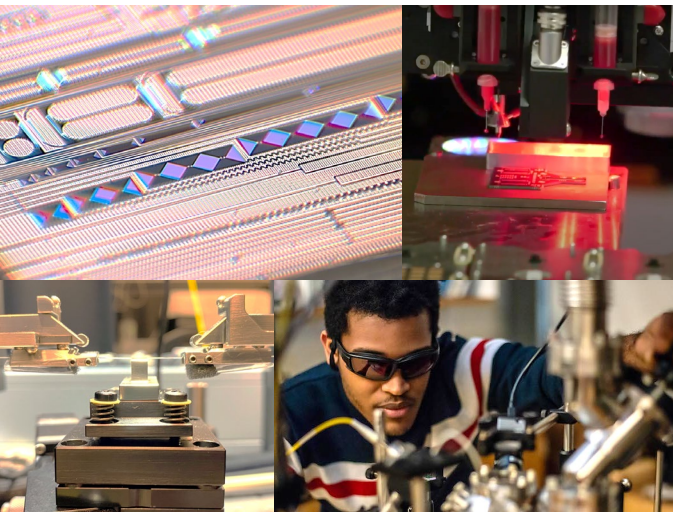


## Hands-On Integrated Photonics Bootcamp

### Integrated Photonics is an emerging field

A proliferation of new technologies in low-power cloud computing, ultra-high-speed wireless, smart sensing, and augmented imaging have begun to leverage the synergy of photonic and electronic devices working in tandem within an integrated circuit package.

As a result, critical curricular gaps are now becoming apparent in the training of engineers for these emerging industries.



### REGISTER!

Visit the AIM Photonics Academy website in October and save your spot.

\*Space is extremely limited to only 12 registrants since it is a lab course.

Organizers

Passive integrated photonics bootcamp based on problem-based learning, to create a skilled workforce of independent thinkers who can meet practical challenges

### WHERE

Massachusetts Institute of Technology (LEAP@MIT)  
Bridgewater State University (LEAP@BSU)

### WHEN

January 10 – 12, 2023

### YOU WILL LEARN

Basic concepts in photonic devices

TE/TM propagation modes, light confinement, evanescence, on-chip guiding, and applications

Prototyping using integrated circuit packaging

Die-bonding of surface-mounted components using reflow soldering followed by X-ray inspection

Characterizing integrated photonic devices

Collect data from on-chip straight waveguides, ring resonators, and Mach-Zehnder interferometers

Fiber to chip coupling

Couple light into an AIM Photonics SOI chip using edge coupling

**Lidar Imaging**

Beam Steering for LiDAR and AR Displays

On-chip optical phased array testing

Photonic engineering tools

Laser beam characterization and fiber splicing

Data analysis

Software to characterize photonic devices based on measured data

### YOU NEED

Virtual Lab simulations

Game-based learning to build intuition about on-chip light propagation and advanced manufacturing

### YOU GET TO KEEP

Laptop and lab notebook. Manual with detailed descriptions of integrated photonics experiments

### COST

\$6000 for three full days of immersive hands-on integrated photonics training