





Integrated Photonics is an emerging field

A proliferation of new technologies in low-power cloud computing, ultra-highspeed 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 website in November and save your spot. You will need to bring a laptop.

*Space is extremely limited

to only 12 registrants since it is a hands-on lab course.

Organizers



1/16/2024 – 1/18/2024 Hands-On Integrated Photonics Bootcamp

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 16-18, 2024

YOU LEARN

Basic concepts in photonic devices TE/TM propagation modes, light confinement, evanescence, onchip guiding, and applications

Prototyping using integrated circuit packaging Die-bonding of surface-mounted components using reflow

Characterizing integrated photonic devices Collect data from on-chip straight waveguides, Mach-Zehnder interferometers and/or ring resonators

Fiber to chip coupling Couple light into an AIM Photonics SOI chip using edge coupling

PIC Sensors Mid-infrared chemical sensing using integrated photonics

LiDAR Imaging Non-mechanical beam steering using integrated optical phased arrays for LiDAR sensing applications

Photonic engineering tools Laser beam characterization and fiber splicing

Data analysis Software to characterize photonic devices based on measured data

YOU USE

Virtual Lab built on photonic device simulation software Trade-off analysis for application-specific design

YOU KEEP

Lab notebook. Manual with detailed descriptions of integrated photonics experiments

COST

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