

About AIM Summer Academy

The AIM Photonics Summer Academy is an annual one-week intensive program that introduces attendees to the materials science, device physics, and circuit design principles relevant for fabricating a photonic integrated circuit prototypes using the Multi Project Wafer run (MPW) methodology of semiconductor chip foundries. The program provides an accelerated introduction to working directly with the most advanced state of the art 300 mm semiconductor processing research fab in the world, operated by AIM Photonics and located at SUNY Polytechnic Institute.

Who should attend AIM Summer Academy?

AIM Summer Academy's audience is primarily industry professionals with little to moderate photonics knowledge or photonics manufacturing competency; our audience also includes faculty interested in building an Integrated Photonics instructional track at their university or community college. Lastly, our audience includes advanced undergraduate and graduate university students, seeking to diversify their skill set and learn about both the fundamentals of photonics design and an introduction to photonic integrated circuit fabrication.

What will you learn at AIM Summer Academy?

Attendees acquire a core competency in photonic device design, photonic integrated circuit (PIC) layout, and PIC manufacturing principles. The Academy program will enable attendees to:

- Identify trends in the optical components industry for datacom, signal processing, sensing, and automotive applications.
- Evaluate the latest silicon photonic devices and foundry chip production methods for these applications.
- Use Process Design Kits (PDKs) to create PIC designs and learn how to submit a PIC design for fabrication with AIM Photonics.
- Evaluate and execute design tradeoffs to meet high volume manufacturing constraints for large scale integration of thousands of device components in a PIC.
- Use design rules for the design requirements to fabricate a PIC with AIM Photonics.
- Create and use product roadmaps that incorporate the benefits of electronic-photonic integration in PICs.

Quick Facts

- AIM Summer Academy runs from July 24-28, 2017 at MIT.
- Attendees can register for a 3-day (Monday-Wednesday) program that reviews photonics materials science, device design and photonic integrated circuit fabrication; or attendees can register for the full-week (Monday-Friday afternoon) program, which also includes manufacturing principles for integrated photonics and attendee participation in a culminating design review team project. A networking dinner (on Tuesday evening) is part of both packages.
- Registration deadline: Friday, June 30, 2017.

- Admission for the 3-day instruction and networking dinner is \$550; admission for the full-week program (including the networking dinner) is \$750.
- A [map](#) of the city of Cambridge, showing important landmarks, facilities and restaurants close to MIT.
- Open to industry professionals (researchers, baccalaureate engineers, technicians, management); academic students (senior year undergraduate, graduate level Master's or PhD); and academic faculty (university, community college) with interests in related research or in building an integrated photonics track at their home institution.
- Registration is limited and based on a first come, first served basis.
- Registration requires your name, affiliation, email/phone contact information, a short description of your background in photonics, and a short description of three photonics learning goals that are a priority for you in taking this intensive program.
- Your registration will be confirmed via email, and will include additional instructions on how to complete your registration fee payment with MIT's online Ticket Office.
- Housing is off-campus and must be arranged by the attendee; click here for a comprehensive MIT online resource to find local hotels or bed-and-breakfast options.
- Coffee/tea will be available in the mornings. Lunch will be provided Monday through Thursday. Attendees are expected to arrange for their own dinners. Several convenient dinner options are available within MIT campus and in nearby Kendall or Central Square.
- Arriving late or departing early could compromise your learning experience. Registrants should attend all registered program dates. The Summer Academy program immerses attendees in a collaborative learning experience that includes daily team work on an integrated photonics design challenge project, and full attendance is important in order to contribute fully to this hands-on learning process and master the curriculum milestones.
- Completion of the full-week program will give attendees the prerequisite skill set to take AIM's online edX credentialing course offered in the fall of 2017 for design submissions to MPW runs with AIM Photonics.

Frequently Asked Questions

I currently attend MIT. Can I apply?

AIM Summer Academy is open to anyone.

What are the dates of the next AIM Summer Academy program?

From July 24-28, 2017.

What are my principal expenses?

Your principal expenses are the registration cost, travel from your home to MIT campus and back, hotel/bed-and-breakfast stay, and daily breakfast and dinner (with the exception of the Tuesday Networking Reception).

What are my dining options?

MIT is located adjacent to Kendall Square and the much larger Central Square, where you will find several eating options that meet various budget constraints. In addition, there are dining options on campus in the Student Center and Stata Center buildings. There is a small grocery store on campus, and a larger grocery within a long walk or a short bus ride from campus.

Where will I be living during the program?

Attendees must make arrangements with a local hotel or bed-and-breakfast for their lodging. AIM Summer Academy does not provide on-campus housing at MIT. Click [here](#) for a comprehensive MIT online resource to find local hotels or bed-and-breakfast options.

Do I need health insurance?

Yes, attendees are responsible for their own health insurance coverage during their stay at MIT. Please ask your insurance provider how this coverage works.

What are my working hours during the Summer Academy?

AIM Summer Academy short courses begin at 8:30 and 9 AM and conclude between 5:30 and 6 PM, Monday-Thursday. Tuesday, July 25th, AIM Summer Academy will host a dinner for all attendees on campus. The other evenings, there are no work or attendance obligations, and you're free to explore the cities of Cambridge or Boston and/or pursue your work commitments. On Friday, we will have a half-day schedule (9-12 PM) and the Summer Academy will conclude at noontime.

I'm interested. What's my next step?

Please complete our online registration form. We have a rolling admissions process, and will continue to accept registrations until our class is full or June 30 (the registration deadline).

What else do you need for my registration? Will I receive a confirmation email?

Please be sure to specify your dietary restriction in the online registration form. Once your registration form is submitted, you'll receive an email confirming receipt, with additional instructions on how to complete your registration fee payment with MIT's online Ticket Office.

For questions not answered by this FAQ, contact Dr. Sajan Saini, sajan@mit.edu.