



MAKE IT YOUR BUSINESS

StartMIT, a boot camp on entrepreneurship, gives students an intimate look into what it takes to build a company.

By Alison F. Takemura | EECS

Photo: Rose Lincoln

As part of StartMIT, Dropbox CEO Drew Houston '05 (seated, front left) visited campus to meet student innovators and discuss his latest projects.

If you daydream about founding a startup, know this: CEOs are made, not born. Theodora Koullias '13 — founder of the tech-fashion company Jon Luu — summed it up this way: “You learn on the job all the time.”

Koullias candidly shared her experience with students and postdocs during StartMIT 2017. The short course, which is packed with practical instruction and mentorship, is designed to give aspiring entrepreneurs a boost up the founder learning curve. Held during MIT's Independent Activities Period (IAP) in January, StartMIT gave participants a chance to form teams and develop their ideas into venture capital-worthy pitches. Students learn about the smorgasbord of ingredients that go into making a startup: creating a value proposition, staking a claim to intellectual property, working with the press, networking, creating culture, and, of course, raising money.

“StartMIT featured some amazing speakers who engaged actively with our students on all aspects of starting a company, giving them a glimpse of what an entrepreneurship career is,” said StartMIT lead organizer Anantha Chandrakasan, the Vannevar Bush Professor of Electrical Engineering and Computer Science (EECS) and EECS department head. The course was developed by EECS and supported by the MIT Innovation Initiative.

Scientists and engineers often find themselves wanting to turn their research into a product, said Institute Professor Robert Langer, an invited speaker. “We want to see it get out to the world and help people.”

But founders need grit, said Langer, who holds more than 1,000 pending and issued patents. In his view, the defining characteristic of students who have become successful business leaders is their willingness “to walk through walls to get their technology out into the world.”

Ray Stata '57, cofounder of Analog Devices, Inc. and leader in the design and manufacture of analog and digital signal processing semiconductors, didn't sugar-coat the entrepreneur's brand of determination. “When you start a company, there is no work-life balance,” he told students. “You continue to drink from the fire hose not only because you have to, but because you are so committed and motivated to succeed.”

Wen Jie Ong, a PhD candidate in chemistry, is determined to get his innovation to the public because he sees his technology's relevance. He's been developing a polymer that removes lead from contaminated water, making it safe to drink. To underscore the need, Ong pointed not only to the recent water crisis in Flint, Mich. — in which the city's 100,000

residents have had to grapple with lead, a neurotoxin, in their drinking water — but also to examples that are closer to home. For example, as of November 2016, drinking water at 164 public schools in Massachusetts had lead levels above regulatory limits.

StartMIT, Ong said, “is a large time commitment, but it’s totally worth it.” The course exposed him to new ideas through its star speakers, and put him in touch with mentors, including venture capitalists, who gave him “very frank” advice, he added. He couldn’t have gotten that anywhere else.

Direct feedback is priceless, said Susan Hockfield, who served as president of MIT from 2004 to 2012. She told the class that, at her very first poster presentation as a graduate student, she hadn’t realized people would actually want to talk with her about her work. So, unprepared, she rambled. Afterward, she spoke to her advisor standing nearby, telling him: “I really felt stupid over there.” His response? “Yeah, you sounded pretty stupid.”

Hockfield appreciated that unfettered honesty. She encouraged the audience to “find someone who’s willing to tell you as it really is.”

Lyric Jain hopes to make the media that people consume every day into a similarly unbiased resource. “Polarization in the media is a big problem,” the Cambridge University-MIT exchange student in mechanical engineering said during one of the course’s networking lunches.

To broaden readers’ perspectives, Jain is working on a web platform that delivers news from across the liberal-conservative political spectrum of media outlets, from MSNBC to Fox News. In addition, his technology is designed to automatically prune the stories to their facts, lining them up for readers as different sides of a debate.

During StartMIT, Jain’s project was still in its early stages, and he started the course with his guard up. “Initially, I was quite suspicious that if I talk to someone, they’re going to steal my idea,” he said. “But now I know the idea is only one small part of it. What matters is how you build on the idea, put your twist on it, and build a team around it.”

Besides, there are pluses to being open, he added: “Talking to people about your idea, you’re going to get input to make it better. They might even be a potential customer.”

Rabia Yazicigil, a postdoctoral associate in EECS, has noted the risk posed by devices that communicate with each other — components of the so-called Internet of things (IoT). A hacked pacemaker, for example, could be a potential murder weapon. To prevent that gruesome possibility, Yazicigil is developing a new kind of secure wireless communications system for IoT devices.

Before StartMIT, Yazicigil had some reservations about starting a company. Hearing from scientists who became business leaders — including Hockfield, Langer, Stata, and Michael Stonebraker, adjunct professor of computer science at MIT and co-director of the Intel Science and Technology Center — helped Yazicigil see a path for herself.

“I want to stay in academia more than become an entrepreneur,” Yazicigil said. “But I see how they’re able to still do both at the same time.”

Dozens of other pioneers also shared their experiences during the course, including emphasizing the importance of communicating, building trust with funders, and assembling an excellent team.

In addition, StartMIT allowed students to explore the entrepreneurial ecosystem beyond MIT. Students took field trips to Ministry of Supply, an innovative fashion company founded by MIT alumni; venture capital firms Pillar VC, Bolt, and Project 11 Ventures; the non-profit startup accelerator MassChallenge; and the Cambridge Innovation Center, which houses several MIT startups. The Institute also has a wealth of opportunities to support student ventures. Several teams will be using MIT’s Venture Mentoring Service. Some have applied to MIT’s Sandbox Innovation Fund, an Institute-wide program providing support, mentor matching, and funding to help qualified students and teams nurture their creative brainstorm.

Interpersonal connections represent a big part of what makes StartMIT so useful, said Anna Fountain, a senior in mechanical engineering. “It makes me feel a lot more comfortable knowing that there are people who can help us and who have done this before, right here in the greater MIT community.”

For more about StartMIT, visit startmit.mit.edu 



StartMIT lead organizer and EECS department head Anantha Chandrakasan and former MIT President Susan Hockfield discuss leadership.