



**SUMMER
SPRINGBOARD**
Look Inward. Go Upward.

Fundamentals of Engineering Infosheet - Held on the Campus of MIT

New student admissions for
Summer 2025 are open



Program Highlights

- Learn about the Fundamentals of Engineering through hands-on projects and simulations.
- The program starts with a practical introduction to MATLAB computer programming (a pioneering computational programming language in science and technology) that will be used for better delivery of our course material on various science and engineering fields as it is done at MIT.
- Learn from professionals in the field about the latest advancements in engineering and technology.
- Required Computer specs:
 - Operating System: Windows 10 or newer
 - Hardware: PC laptop (not Mac/Apple)
 - USB Interface: Ensure your PC laptop has a regular USB interface. If it only has a USB-C interface, you will need to obtain a USB-C to regular USB adapter, which is readily available from numerous vendors.



Academic Program Overview

Engineering is an expertise for applying science along with real practical data for solving a problem, given some limitations/specs. In this program, you will learn about fundamental principles behind various engineering fields (mechanical, electrical, computer/programming, aero-astro, civil, ...) from MIT seasoned Instructors/Practitioners. This program will also help you to explore your potential college fields of interest while improving your odds of getting admitted to top Engineering schools. (Maximum Capacity 30 Students Per Session)



Typical Schedule



2025 Dates

Boston

- Session 1: June 22 - July 4
- Session 2: July 6 - July 18

Excursions

In the past, excursions have included Winthrop Center in Boston, the world's largest Passive House office center in the world, Boston Metal and the Engineering department at Northeastern University. Our students have also had exclusive visits to various Engineering labs at MIT.

Instructor

Dr. Ali Talebinejad, Ph.D MIT

Ali Talebinejad earned his PhD at the MIT Artificial Intelligence Laboratory, specializing in Robotics and Computer Vision. He also holds an MS in Mechanical Engineering from MIT, focused on System Dynamics and Control. His postdoctoral research was a pioneering work on Tracking Moving Objects Using Video Images at the Canadian Institute for Robotics and Intelligent Systems. His industrial experience includes his work at Parametric Technology Corporation (PTC) on "Pro Engineer" which was the leading software suite in CAD/CAM area at the time. Dr. Talebinejad's research and teaching includes Design, Manufacturing, Numerical Computation, System Dynamics, Control, Robotics, Computer Vision, and Computer Programming, and Calculus. In 2018, he was involved in teaching a course titled "Computational Thinking for Modeling and Simulation" through an edX program internationally that attracted over 10,000 students. Dr. Talebinejad is a private pilot and a member of the American Society of Mechanical Engineers and Institute of Electrical and Electronics Engineers.



Course Structure

There are nine 3-hour class sessions over the two-week course. During week one, students have class from 9am-12pm, Monday - Friday. During week two students have class from 9am-12pm Monday through Thursday. Wednesday afternoons are dedicated to additional academic time (excursions, speakers).



Tuition Information:

Residential Students:

- **Includes:** all meals, lodging, excursions, academic course, weekend excursions
- **Excludes:** optional airport pickup and drop off service (available for an additional fee)
- **Price:** \$6,498

Commuter Students:

- **Includes:** lunch, academic course, excursions, programming from 9am to 5pm, Monday-Friday
- **Excludes:** lodging, breakfast, dinner, weekend excursions
 - Weekend excursions can be added on for \$125 per day
- **Price:** \$3,298

Supplements:

- **Application fee:** \$99 (mandatory, non-refundable)
- **Fundamentals of Engineering @ MIT Course Supplement:** \$250 (mandatory)
- **Tuition Protection Plan:** Allows for cancellation for any reason up until the day of the program. Click [here](#) for more info.

More info on [Airport Transfer](#)

More info on [Unaccompanied Minor Service](#)

Apply Now!

Summer Springboard programs are not run by our campus partners (with the exception of Cal Poly and NYSID which are run in partnership with SSB). Universities and their affiliated departments and partners do not control and are not responsible or liable in any manner for any part of the Summer Springboard program.



2025_V8

