# BOSTON UNIVERSITY COLLEGE OF ENGINEERING

# SELF-GUIDED WALKING TOUR

# SELF-GUIDED TOUR

### **ENGINEERING FACILITIES**

This self-guided tour will provide you with an introduction to the BU College of Engineering and help you explore our facilities.

If you have further questions, please feel free to contact us at 44 Cummington Mall Room 107, 617-353-6447, or engineering@bu.edu.

# UNDERGRADUATE PROGRAMS OFFICE (UPO)

Your tour starts in the Engineering Research Building at the Undergraduate Programs Office (44 Cummington Mall, Rm. 107). Academic Counselors and the Records Office are located here.



# THE UPO AND RECORDS OFFICE CAN ASSIST WITH:

- The transition to college life
- Guidance for students in academic difficulty
- Counseling for a wide variety of academic and personal issues
- Leadership opportunities for undergraduate students
- Review of degree requirements
- Study abroad opportunities
- Special programs, such as Dual Degree, minors, and concentrations
- Facilitating the transfer credit process
- and more!



In the attached conference room (Rm 105) students can access free, drop-in tutoring for courses in the engineering curriculum. Tutoring is available in the evenings five days a week.

Tutoring is also available at the Educational Resource Center.
See https://www.bu.edu/erc/for more details.

# CAREER DEVELOPMENT AND GRADUATE PROGRAMS OFFICES

Down the hall to the left, you will find the Career Development Office (CDO) and the Graduate Programs Office. The CDO is exclusively for engineering students to help them find their career paths and connect them with jobs and internships, and received a Partnership Award from General Electric for their efforts in connecting BU engineering students to GE. General Electric hires close to 20 ENG students annually.

As you head back to the lobby you will pass the Binoy Singh Imagineering Lab (SILab)

# **SILAB**



This 1,400 square foot facility was donated by a College alumnus.

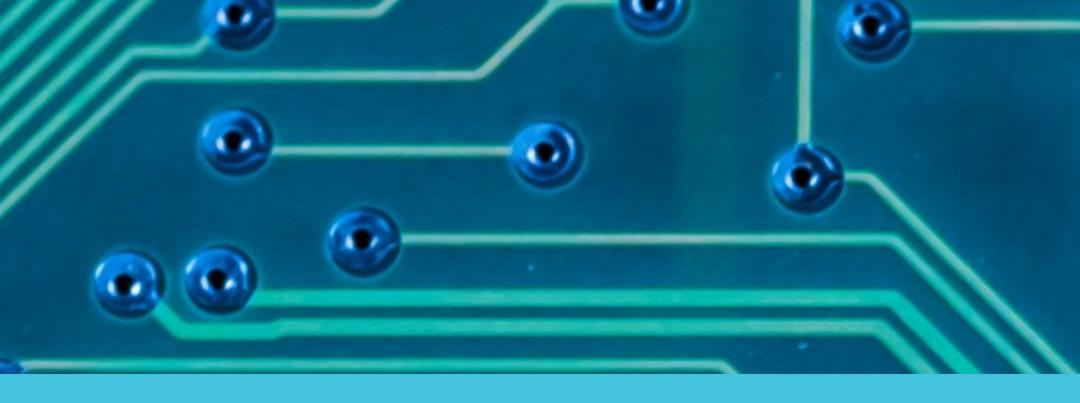
Scroll to next slide for more info.

### SILAB

There are two rules in this lab: students cannot do homework in here, and they have to pass a safety test to use it.

Students can apply what they learn in classes to projects that interest them. All the tools, materials, and bench supplies in the lab are provided to our students at no extra cost.

Please continue straight through the double doors and you will see the W. Bradford Ingalls Engineering Resource Center in front of you.



# W. BRADFORD INGALLS ENGINEERING RESOURCE CENTER



Scroll to next slide for more info.



# W. BRADFORD INGALLS ENGINEERING RESOURCE CENTER

Ingalls, which is how it is commonly referred to in the College, was donated by an alumnus and is open to engineering students. It is not a library but a resource center for students to study and relax. There are private study rooms for students, computers and printers. The walls in the study rooms are white board walls allowing for more fun studying. There is also a flat screen TV and various board games. Ingalls is a very popular spot for our students.

Take the stairs on the left to the 2nd floor.



# MAJORS

# STUDENTS CAN SELECT FROM OUR FOUR MAJORS



Biomedical Engineering



Computer Engineering



**Electrical Engineering** 



Mechanical Engineering

### BIOMEDICAL ENGINEERING

The Biomedical Engineering Department (BME) is one of the largest in the country and was one of the first to offer a Bachelors of Science in Biomedical Engineering. Research and teaching primarily focus on applying engineering computational and analytical techniques to biological systems. The department is the only one in the country to win both a Whitaker Foundation Leadership Award and Coulter Translational Partnership Award. Both highly competitive and prestigious grants are being used to advance the Biomedical Engineering Department's mission.

Please continue through the door to your left to enter the BTEC laboratory space.

# BIOENGINEERING TECHNOLOGY & ENTREPRENEURSHIP CENTER (BTEC)



A 5000-square-foot, bioengineering "maker space". Scroll to next slide for more info.

# BIOENGINEERING TECHNOLOGY & ENTREPRENEURSHIP CENTER (BTEC)

BTEC is a 5000-square-foot, bioengineering "maker space" with a Molecular, Cellular, and Tissue Engineering Suite, a Biosensors and Instrumentation Suite, and a Digital and Predictive Medicine Design Suite.

Courses in BTEC will provide students with experiential education in all three areas. Excitingly, BTEC also enables students to engage open-ended innovation on their own and in partnerships with industry.

### HOUSING

Please take the stairs back down to the first floor and exit the Engineering Research Building onto Cummington Mall, turn left, and continue to the end of the street to 110 Cummington Mall.

On your right as you walk you will see three large towers, the Warren Towers dorms, which house ~1800 students, including many ENG freshmen.

For more information on housing at BU please visit:

https://www.bu.edu/housing/

# **WARREN TOWERS**





### MECHANICAL ENGINEERING

110 Cummington Mall houses the Department of Mechanical Engineering (ME). This department specializes in acoustics, fluid mechanics, intelligent machines, and robotic surgery. The lab you see in front of you is the \$3 million Instructional Aerodynamic & Fluid Mechanics Lab which houses different wind tunnels. Mechanical Engineering students have access to state-of-the-art study and research facilities, and our graduates have a high placement rate in lucrative jobs and competitive graduate programs.

Continue straight down the hall, and you will enter the Photonics Center.

# ELECTRICAL & COMPUTER ENGINEERING (ECE)

The Photonics building (PHO) houses the ECE Department, which has an excellent international reputation in the area of photonics (the study of lasers and fiber optics and their applications into information processing and communication systems). In addition, our high-tech instructional labs provide an environment for coursework, extracurricular exploration, and teamwork. The Electronics Lab to your left supports numerous courses and is where all sophomores take the lab component of their Electric Circuits class.

As you continue down the hallway, you will notice the Student Lounge to your left. Continue towards the elevators and up to the second floor.



# PHOTONICS ATRIUM



Scroll to next slide for more info.

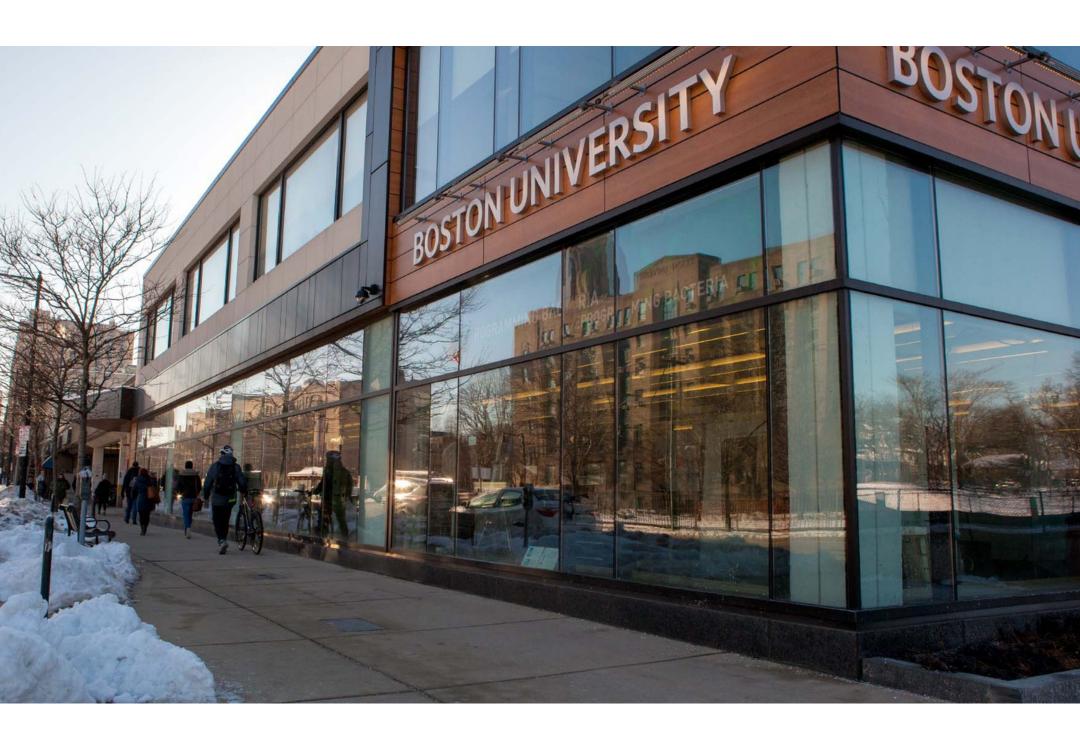


# **PHOTONICS ATRIUM**

This is where many of the Engineering Lectures are held. As you make two immediate left turns out of the elevator and proceed down the hallway, you will pass two engineering lecture halls. Discussion sections (~12-30 students per class) accompany lectures, and all engineering professors hold Office Hours. At the end of the hallway you can exit Photonics. Across the street, you will see 15 St. Mary's Street which houses our Material Science Division, Systems Division, and the Fraunhofer Center.

Exit Photonics. Take a right on Saint Mary's Street and then take a left onto Commonwealth Avenue until you reach 750 Comm. Ave.

# ENGINEERING PRODUCT INNOVATION CENTER (EPIC)



Scroll to next slide for more info.

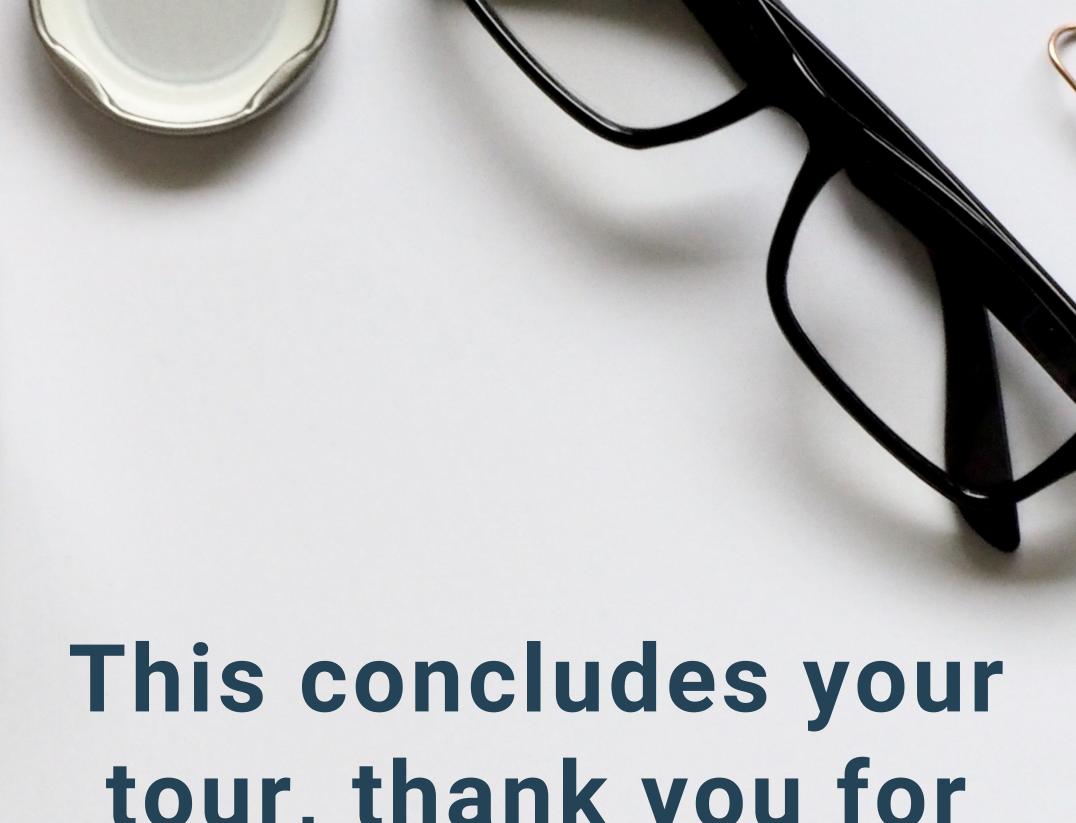
# ENGINEERING PRODUCT INNOVATION CENTER (EPIC)

EPIC is a 15,000 square foot, \$10 million facility built to create a new generation of engineers, capable of understanding and leading the entire new production process, from design through manufacturing in a global environment.

EPIC is open to the BU Community from 8am-10pm, Monday-Friday, 10am-6pm on weekends, and is partially staffed by undergraduates. To gain access, students must pass an online safety test.

# EPIC IS COMPOSED OF 7 MAIN COMPONENTS:

- 1. Automated Design Manufacturing System (ADMS): a robotic assembly line
- 2. Machine Shop: with 4 Computer Numerically Controlled (CNC) Machines, computerized measuring system, drill presses, band saws, laser printers, and numerous commercial-grade precision lathes and mills.
- 3. A full Electronics Lab with testing, soldering, and measurement equipment
- 4. An additive manufacturing station with seven 3D printers capable of fabricating both polymer and ceramic parts
- 5. A Materials Characterization Lab
- 6. A full carpentry shop
- 7. A metals fabrication center



# tour, thank you for visiting!

The official tour has finished but this guide contains additional resources for you - keep going to review these.



# What is the Societa Engineer?

The Societal Engineer has a sense of purpose and appreciation for how an engineering education and its experiences are superior foundations for improving society. The Societal Engineer inspires people from many backgrounds to work together to help create a safer, greener, more sustainable, healthier, better-connected, more energy-efficient and productive world with enough food, drinkable water and economic opportunity for all

# CONCENTRATIONS

### A COMPLEMENT TO A DEGREE

AEROSPACE
(ME MAJORS ONLY)

ENERGY TECHNOLOGIES & SUSTAINABILITY

**MANUFACTURING** 

**MACHINE LEARNING** 

**NANOTECHNOLOGY** 

**TECHNOLOGY INNOVATION** 

GRAND CHALLEGE
SCHOLARS PROGRAM

# MINORS

Students can minor in any of the following areas within engineering:

- BIOMEDICAL ENGINEERING
- COMPUTER ENGINEERING
- ELECTRICAL ENGINEERING
- MECHANICAL ENGINEERING
- MATERIALS SCIENCE & ENGINEERING
- SYSTEMS ENGINEERING

# MINORS

... or in other Schools/Colleges at BU:

- COLLEGE OF ARTS & SCIENCES
- COLLEGE OF COMMUNICATION
- COLLEGE OF FINE ARTS
- COLLEGE OF GENERAL STUDIES
- FACULTY OF COMPUTING AND DATA SCIENCES
- SARGENT COLLEGE OF HEALTH & REHABILITATION SCIENCES
- WHEELOCK SCHOOL OF EDUCATION
- QUESTROM SCHOOL OF BUSINESS

#### **STUDY ABROAD**

OF OUR SOPHOMORES STUDY ABROAD EACH YEAR - ABOUT TWICE THE NATIONAL AVERAGE FOR ENGINEERS

Transformed. That's the word BU Engineering students use most to describe themselves after returning from a semester studying abroad.



# STUDYING ABROAD

Boston University was among the first to offer study abroad programs just for engineering students. Students can spend the second semester of their sophomore year taking the same engineering courses they would at BU, all taught in English. Students can study in one of the world's most dynamic metropolises Madrid, Spain; or down under in the alluring city of Sydney, Australia.

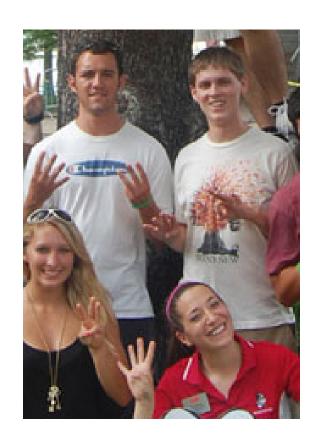
#### Visit

https://www.bu.edu/eng/prospectiveundergraduate/study-abroad/ for more information on these programs.



# **ENG Mentoring Programs**





### **EK 100**

First Year course where students meet with faculty and student advisors and attend lectures to broaden their knowledge of the inner workings of the College.

### **EK 200**

A program designed to provide support and resources to ENG sophomores.

### **TRAC**

Transfer-Student
Resources and Advising
Community, designed to
help transfer students
adjust to BU.

# USEFUL WEBSITES

### **UNDERGRADUATE ADMISSIONS**

For information on undergraduate entry requirements, tuition and application timelines for BU's centrally managed admissions process.

www.bu.edu/admissions admissions@bu.edu 233 Bay State Road (617) 353-2300

### FINANCIAL ASSISTANCE

For information on financial aid and scholarships.

www.bu.edu/finaid finaid@bu.edu 881 Commonwealth Ave. (617) 353-2965

# USEFUL WEBSITES

### **BU ENG AT A GLANCE**

A quick overview of rankings, leadership, faculty and student numbers. www.bu.edu/eng/about/at-a-glance/

# ENG UNDERGRADUATE OUTCOMES

Enrollment numbers, number of degrees awarded and retention rate. www.bu.edu/eng/about/undergraduate-outcomes/

# QUESTIONS? COMMENTS?

LET US KNOW!

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