# The Campaign for Boston University CHOOSE TO BE GREAT

## **Boston University College of Engineering**

#### **YEAR FOUNDED**

1950 as the College of Industrial Technology; named College of Engineering in 1964

#### DEAN

KENNETH R. LUTCHEN

#### **NUMBER OF STUDENTS**

UNDERGRADUATE: 1,500

GRADUATE: 840

#### **SIZE OF FACULTY**

TENURED/TENURE-TRACK FACULTY: 120
RESEARCH FACULTY & ASSOCIATES: 26

#### **NUMBER OF LIVING ALUMNI**

14,058

#### **DEGREE PROGRAMS**

- BS
- MS
- MFNG
- PHD
- BS/MAT (STEM EDUCATOR-ENGINEER PROGRAM WITH SCHOOL OF EDUCATION)
- MS/MBA (WITH SCHOOL OF MANAGEMENT)
- MD/PHD (WITH SCHOOL OF MEDICINE)

#### **ACADEMIC PROGRAMS**

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



## The College of Engineering is committed to training engineers who will work to create a better world: Societal Engineers™.

Societal engineers approach engineering with a sense of purpose. They have a range of skills, from effective communication and global awareness to a social consciousness and a passion for innovation. The societal engineer inspires people from many backgrounds to work together to create a safer, greener, betterconnected world.

The College created the dynamic concept of the societal engineer, and we've built our undergraduate education around it. Our faculty is full of path-breaking thinkers whose research is already transforming many fields. As a result, ENG has grown rapidly, in terms of both excellence and institutional reputation. Case in point: The College has risen in the *U.S. News & World Report* rankings faster than any other engineering school. ENG is now in the top 40 engineering schools in the country, and research funding per faculty member ranks 23rd in the nation, after only 50 years of existence and only 22 years with a PhD program.



## EXAMPLES OF RESEARCH STRENGTHS/KEY PROGRAMS

- BIMOLECULAR ENGINEERING RESEARCH CENTER
- CENTER FOR COMPUTATIONAL NEUROSCIENCE & NEURAL TECHNOLOGY
- CENTER FOR COMPUTATIONAL SCIENCE
- CENTER FOR FUTURE TECHNOLOGIES IN CANCER CARE
- CENTER FOR INFORMATION & SYSTEMS ENGINEERING
- CENTER FOR MEMORY & BRAIN
- CENTER FOR NANOSCIENCE & NANOBIOTECHNOLOGY
- CENTER FOR REMOTE SENSING
- CENTER FOR SPACE PHYSICS
- CENTER OF SYNTHETIC BIOLOGY
- ENGINEERING PRODUCT INNOVATION CENTER
- FRAUNHOFER CENTER FOR MANUFACTURING INNOVATION
- HEARING RESEARCH CENTER
- NEUROMUSCULAR RESEARCH CENTER
- PHOTONICS CENTER
- RAFIK B. HARIRI INSTITUTE FOR COMPUTING AND COMPUTATIONAL SCIENCE & ENGINEERING
- SMART LIGHTING ENGINEERING RESEARCH CENTER

#### **TOTAL RESEARCH AWARDS (2014)**

\$47 million



#### **DISTINGUISHED ALUMNI & FACULTY**

- Professor Edward Damiano, developer of the closed-loop bionic pancreas system to revolutionize diabetes treatment
- Professor Charles DeLisi, Metcalf Professor of science and engineering and dean
  of the College from 1990 to 2000, Presidential Citizens Medal recipient for seminal
  role in initiating the Human Genome Project
- Matt Heverly (ENG'05), NASA's lead driver of the Curiosity rover on Mars
- Dean Kenneth Lutchen, dean since 2006, past president of the American Institute
  of Medical and Biological Engineering (AIMBE) and recipient of the AIMBE Pierre
  Galletti Award
- Kathleen McLaughlin (ENG'87), president of the Walmart Foundation
- Professor Theodore Moustakas, coinventor of the blue light-emitting diode (LED)
- Anton Papp (ENG'90), vice president for corporate development at Teradata
- George Savage (ENG'81), chief medical officer and cofounder of Proteus Digital Health
- Professor Alice White, chair of the Mechanical Engineering Department, whose long career at Bell Labs culminated in her assignment as chief scientist

#### **POINTS OF PRIDE**

- The Engineering Product Innovation Center (EPIC) is a pioneering 15,000-squarefoot, \$12 million facility that helps address a critical need in the U.S.: training prospective engineers in the advanced design and manufacturing processes of the future. EPIC gives students hands-on design, prototyping, and smallscale manufacturing experience.
- The Binoy K. Singh Imagineering Laboratory gives students the resources to
  experiment and take on their own creative engineering projects. Using the lab's tools
  and machinery, students are encouraged to expand their engineering thinking and
  pursue their ideas and designs that aren't part of class or lab work.
- Through the Technology Innovation Scholars Program (TISP), select engineering undergraduates visit middle and high schools nationwide to excite students about careers in engineering. TISP has reached more than 9,000 K-12 students.
- Study abroad programs are designed specifically for BU engineering students in Madrid, Tel Aviv, Dresden, and Grenoble.
- The W. Bradford Ingalls Engineering Resource Center provides students with a state-of-the-art place to meet, conduct research, and work on common projects. Established through a gift from the College's first alumnus, the center combines high technology with innovative design to create a welcoming environment where students can build on the knowledge they gain in the classroom and lab.

### **CAMPAIGN PRIORITIES**

**COLLEGE OF ENGINEERING** 

- Up to \$30 million: research centers
- \$18 million: capital improvements
- \$16.5 million: professorships and faculty awards
- \$9 million: graduate fellowships and student funds
- \$1 million: lecture series