

# MIT Facts

## 2015



# **MIT Facts 2015**

**Massachusetts  
Institute of  
Technology**

77 Massachusetts Avenue  
Cambridge, Massachusetts 02139-4307  
617.253.1000

[web.mit.edu](http://web.mit.edu)

MIT has taken significant steps to bring the collective intelligence of the MIT community to bear on the challenges of climate change and sustainability. First, it created the Office of Sustainability to help the Institute realize its vision of the campus as a living laboratory where new ideas are tested. Then it launched the MIT Environmental Solutions Initiative, which includes the Abdul Latif Jameel World Water and Food Security Lab, to promote transformative, interdisciplinary research relating to the environment. Most recently, it launched the MIT Climate Change Conversation, a dynamic campus-wide conversation that aims to explore and assess the broad range of actions that MIT could take to make a significant positive contribution to confront climate change.

Each of these efforts represents MIT's approach to tackling tough problems: engage the MIT community, foster the vibrant exchange of ideas, and inspire collective commitment to effect change.

\* \* \*

January 2015

This publication was prepared by MIT Reference Publications. Send comments and queries to [referencepubs@mit.edu](mailto:referencepubs@mit.edu).

An online version of *MIT Facts*, with links to additional information about the topics covered here, is available at <http://web.mit.edu/facts>.

*Cover design by Wing-Ip Ngan, ink design, inc.  
Campus map by MIT Department of Facilities and  
Wing-Ip Ngan, with ship by Marius Ursache.*

## Contents

- 4 MIT at a Glance
  - 6 Mission
  - 6 Leadership
  - 9 Faculty and Staff
  - 12 Schools and Departments
  - 13 Degrees Offered
  - 13 Admission
  - 15 Enrollments 2014–2015
  - 16 International Students and Scholars
  - 17 Tuition and Financial Aid
  - 20 Academics
  - 27 Campus Life
  - 34 MIT and the Community
  - 36 Alumni
  - 40 Research
  - 45 Lincoln Lab
  - 46 MIT and Industry
  - 49 Entrepreneurship
  - 51 Publishing
  - 52 Building MIT's Resources
  - 53 Financial Data
  - 55 Accreditation
- Campus Map*

# MIT at a Glance

## History

Incorporated by the Commonwealth of Massachusetts on April 10, 1861

## Motto

*Mens et manus*—"Mind and Hand"

## Campus

168 acres in Cambridge, Massachusetts

18 student residences

26 acres of playing fields

## Employees

Approximately 11,840 (including faculty)

## Faculty

Professors (all ranks): 1,021

Other teaching staff: 809

## Selected Honors (MIT Community, Current and Former)

81 Nobel Laureates

56 National Medal of Science winners

28 National Medal of Technology and Innovation winners

43 MacArthur Fellows

## Undergraduate Majors and Minors

Major programs: 46

Minor programs: 49

## **Freshman Admission, Class of 2018**

Applicants: 18,356

Admits: 1,447

Percentage admitted: 7.9%

## **Students, Academic Year 2014–2015**

Total: 11,319

Undergraduate students: 4,512

Women: 2,055 (46%)

Minorities: 2,317 (51%)

Graduate students: 6,807

Women: 2,171 (32%)

Minorities: 1,379 (20%)

## **International Students, 2014–2015**

Undergraduate students: 436

Graduate students: 2,784

Exchange, visiting, special students: 405

## **Undergraduate Cost, 2014–2015**

Tuition: \$44,720

Room, board, and fees: \$13,224

## **Undergraduate Financial Aid, 2013–2014**

Students attending tuition-free: 32%

Students awarded need-based MIT scholarship: 56%

Average need-based MIT scholarship: \$34,551

## **Mission**

The mission of MIT is to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century.

The Institute is committed to generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world's great challenges. MIT is dedicated to providing its students with an education that combines rigorous academic study and the excitement of discovery with the support and intellectual stimulation of a diverse campus community. We seek to develop in each member of the MIT community the ability and passion to work wisely, creatively, and effectively for the betterment of humankind.

## **Leadership**

### **Origins**

The Institute admitted its first students in 1865, four years after the approval of its founding charter. The opening marked the culmination of an extended effort by William Barton Rogers, a distinguished natural scientist, to establish a new kind of independent educational institution relevant to an increasingly industrialized America. Rogers stressed the pragmatic and practicable. He believed that professional competence is best fostered by coupling teaching and research and by focusing attention on real-world problems. Toward this end, he pioneered the development of the teaching laboratory.

Today MIT is a world-class educational institution. Teaching and research—with relevance to the practical world as a guiding principle—continue to be its primary purpose. MIT is independent, coeducational, and privately endowed. Its five schools encompass numerous academic departments, divisions, and degree-granting programs, as well as interdisciplinary centers, laboratories, and programs whose work cuts across traditional departmental boundaries.

### **Presidents of the Institute**

L. Rafael Reif, 2012–

Susan Hockfield, 2004–2012

Charles Marsteller Vest, 1990–2004

Paul Edward Gray, 1980–1990

Jerome Bert Wiesner, 1971–1980

Howard Wesley Johnson, 1966–1971

Julius Adams Stratton, 1959–1966

James Rhyne Killian, Jr., 1948–1958

Karl Taylor Compton, 1930–1948

Samuel Wesley Stratton, 1923–1930

Ernest Fox Nichols, 1921–1922

Richard Cockburn Maclaurin, 1909–1920

Henry Smith Pritchett, 1900–1907

James Mason Crafts, 1897–1900

Francis Amasa Walker, 1881–1897

John Daniel Runkle, 1870–1878

William Barton Rogers, 1862–1870, 1879–1881

### **Administrative Organization**

The Institute's chief executive officer is the president. Senior academic and administrative officers include the provost, chancellor, executive vice president, chancellor for academic advancement, associate provosts, deans of the schools, vice presidents, dean



for graduate education, dean for undergraduate education, dean for student life, dean of digital learning, director of the MIT Libraries, and Institute community and equity officer. The Institute's academic departments and divisions—each under the leadership of a head, director, or associate dean—are organized within the five schools. In addition, numerous interdisciplinary laboratories and centers have been organized to facilitate research in fields that extend across traditional boundaries.

The MIT Faculty determines the Institute's educational policy. The Faculty meets monthly and conducts much of its business through elected standing committees.

The Institute's board of trustees, known as the Corporation, includes 70 distinguished leaders in engineering, science, industry, education, and other professions, and (ex officio) the MIT chairman, president, executive vice president and treasurer, secretary of the Corporation, president of the Alumni Association, and three representatives of the Commonwealth of Massachusetts. The Corporation also includes approximately 35 emeritus members. Approximately 80 percent of the members of the Corporation are alumni of MIT.

## Faculty and Staff

The MIT faculty instructs undergraduate and graduate students and engages in research.

### MIT's Teaching Staff, as of October 2014

Category	Number
Professors	662
Associate professors	190
Assistant professors	169
Senior lecturers, lecturers, and professors emeriti	617
Instructors (including technical instructors)	155
Professors of the practice and adjunct faculty	37
<b>Total</b>	<b>1,830</b>

- MIT employs approximately 11,840 individuals on campus.
- There are 1,021 faculty members (professors of all ranks), including 224 women.
- Minority group representation among faculty includes American Indian or Alaska Native, Black, Hispanic, and Asian.
- The student-faculty ratio is 8:1.

Members of the MIT community have received accolades too numerous to list. Several of the most notable honors and awards follow.

Eighty-one present and former members of the MIT community have won the Nobel Prize, including nine current faculty members: H. Robert Horvitz, medicine/physiology (2002); Wolfgang Ketterle, physics (2001); Robert C. Merton, economics (1997);

Richard R. Schrock, chemistry (2005); Phillip A. Sharp, medicine/physiology (1993); Susan Solomon, peace (co-chair of IPCC Working Group One recognized under Intergovernmental Panel on Climate Change, 2007); Samuel C. C. Ting, physics (1976); Susumu Tonegawa, medicine/physiology (1987); and Frank Wilczek, physics (2004).

Thirty-nine current and former members of the MIT faculty have received the National Medal of Science. Current faculty medalists are Sallie Chisholm (2012), Ann M. Graybiel (2001), Rudolf Jaenisch (2011), Robert S. Langer (2006), Susan Lindquist (2010), Stephen J. Lippard (2004), Alexander Rich (1995), Phillip A. Sharp (2004), Susan Solomon (1999), JoAnne Stubbe (2008), and Robert A. Weinberg (1997). Four current and former faculty members have been awarded the National Medal of Technology and Innovation. The current faculty medalist is Robert S. Langer (2012).

Eleven current and former members of the faculty have won the John Bates Clark Medal. The current faculty medalists are Daron Acemoglu (2005), Esther Duflo (2010), Amy Finkelstein (2012), and Jerry Hausman (1985).

Four present and former members of the MIT community have been awarded the Pulitzer Prize. The current medalists are faculty members Junot Díaz (2008) and John H. Harbison (1987) and staff member B. D. Colen (1984).

Two current faculty members, Tim Berners-Lee (2004) and Robert S. Langer (2008), have won the Millennium Technology Prize.

There are 65 Guggenheim Fellows, five Fulbright Scholars, and 22 MacArthur Fellows among current MIT faculty and staff. The MacArthur Fellows are Angela Belcher, Tim Berners-Lee, Erik D. Demaine, Junot Díaz, Esther Duflo, Linda G. Griffith, John H. Harbison, Dina Katabi, Eric Lander, Heather N. Lechtman, Nergis Mavalvala, John A. Ochsendorf, David C. Page, Daniela L. Rus, Sara Seager, Peter W. Shor, Amy B. Smith, Marin Soljačić, Richard M. Stallman, Frank Wilczek, Jack Wisdom, and George Zweig.

Seventy-nine current MIT faculty and staff are members of the National Academy of Sciences, 59 are members of the National Academy of Engineering, and 31 are members of the Institute of Medicine.

The title of Institute Professor is the highest honor awarded by the faculty and administration at MIT. The current Institute Professors are Emilio Bizzi, Ann M. Graybiel, John H. Harbison, Robert S. Langer, Barbara Liskov, John D. C. Little, Thomas Magnanti, Joel Moses, Phillip A. Sharp, Daniel I. C. Wang, and Sheila Widnall. Institute Professors emeriti are Noam A. Chomsky, John M. Deutch, Peter A. Diamond, Mildred S. Dresselhaus, Jerome I. Friedman, Morris Halle, Mario J. Molina, Isadore M. Singer, and Robert M. Solow.

## **Schools and Departments**

### **School of Architecture and Planning**

Architecture (Course 4)

Media Arts and Sciences (MAS)

Urban Studies and Planning (Course 11)

### **School of Engineering**

Aeronautics and Astronautics (Course 16)

Biological Engineering (Course 20)

Chemical Engineering (Course 10)

Civil and Environmental Engineering (Course 1)

Electrical Engineering and Computer Science  
(Course 6)

Engineering Systems (ESD)\*

Materials Science and Engineering (Course 3)

Mechanical Engineering (Course 2)

Nuclear Science and Engineering (Course 22)

Institute for Medical Engineering and Science

### **School of Humanities, Arts, and Social Sciences**

Anthropology (Course 21A)

Comparative Media Studies/Writing  
(CMS/Course 21W)

Economics (Course 14)

Global Studies and Languages (Course 21F)

History (Course 21H)

Humanities (Course 21)

Linguistics and Philosophy (Course 24)

Literature (Course 21L)

Music and Theater Arts (Course 21M)

Political Science (Course 17)

Science, Technology, and Society (STS)

---

\*In 2015, a new entity focused on complex and sociotechnical systems, information and decision systems, and statistics will replace Engineering Systems.

## **MIT Sloan School of Management**

Management (Course 15)

## **School of Science**

Biology (Course 7)

Brain and Cognitive Sciences (Course 9)

Chemistry (Course 5)

Earth, Atmospheric, and Planetary Sciences  
(Course 12)

Mathematics (Course 18)

Physics (Course 8)

## **MIT-WHOI Joint Program in Oceanography and Applied Ocean Science and Engineering**

## **Degrees Offered**

Bachelor of Science (SB)

Master of Architecture (MArch)

Master of Business Administration (MBA)

Master in City Planning (MCP)

Master of Engineering (MEng)

Master of Finance (MFin)

Master of Science (SM)

Engineer (each degree designates the field in which  
it is awarded)

Doctor of Philosophy (PhD)

Doctor of Science (ScD)

## **Admission**

The selection process at MIT is holistic and student-centered: each application is evaluated within its unique context. No school, state, or regional quotas are applied; neither is preference given to those with alumni relations. Selection is based on outstanding academic achievement as well as a strong match between the applicant and the Institute, including:

- Alignment with MIT's mission
- Collaborative and cooperative spirit
- Initiative and risk-taking
- Hands-on creativity
- Intensity, curiosity, and excitement
- Balancing hard work with downtime

### ***Selected 2014 Undergraduate Admissions Statistics***

- Applications for freshman admission were received from 18,356 candidates.
- Admission was offered to 1,447 candidates (7.9 percent), of whom 1,043 enrolled.
- Approximately 48 percent of the freshman class was female.
- A majority had attended public high schools.
- Seventeen percent were among the first generation in their family to attend college.
- Nine percent were international citizens hailing from 53 countries.
- Forty-nine US states were represented.

Applicants for graduate degree programs are evaluated for previous performance and professional promise by the department in which they wish to register.

### ***Selected 2014 Graduate Admissions Statistics***

- Applications for graduate study were received from 23,884 candidates.
- Of the 3,390 candidates who received offers of admission, 2,168 (64 percent), registered in advanced degree programs at MIT.

For more information, visit <http://mitadmissions.org>.

## Enrollments 2014–2015

### Undergraduate Enrollment: 4,512

First-year, undeclared second-year, and special undergraduate students	Number	
First-year*	1,050	
Undeclared second-year*	5	
Special undergraduate students	36	
By school	Major	2nd Major
Architecture and Planning	36	5
Engineering	2,447	70
Humanities, Arts, and Social Sciences	101	37
Management	53	26
Science	784	118

\*MIT students do not enroll in an academic department until the start of their sophomore year, and may defer decision on a course of study until the end of that year.

### Graduate Enrollment: 6,807

School	Master's	Doctoral	Special
Architecture and Planning	410	176	0
Engineering	1,028	2,115*	151
Humanities, Arts, and Social Sciences	28	297	3
Management	1,274	154	6
Science	10	1,147	8

\*Includes 174 students working on Harvard degrees only through the Harvard-MIT Health Sciences and Technology Program.



Women have attended MIT since 1871. In fall 2014, 2,055 women were enrolled as undergraduates (46 percent) and 2,171 as graduate students (32 percent).

US minority groups were represented by 2,317 undergraduates (51 percent) and 1,379 graduate students (20 percent).

### **Minority Group Representation among Students**

<b>Minority Group</b>	<b>Undergraduate</b>	<b>Graduate</b>
African American	369	141
American Indian or Alaska Native	71	62
Asian American	1,217	840
Hispanic	650	329
Native Hawaiian or other Pacific Islander	10	7

In 2014–2015, MIT students come from all 50 states, the District of Columbia, three territories, and 116 foreign countries.

For more information, visit <http://web.mit.edu/registrar>.

## **International Students and Scholars**

There are 3,220 international students enrolled in degree programs at MIT—436 undergraduates and 2,784 graduate students—for the current academic year. Additionally, there are 405 exchange, visiting, and special students on campus.

During academic year 2013–2014, MIT hosted 2,305 international scholars from 90 countries, who engaged in teaching and research in 70 different departments, laboratories, and centers.

### **International Students and Scholars by Region**

<b>Region</b>	<b>Students*</b>	<b>Scholars</b>
Asia	49%	42%
Europe	24%	37%
Canada	7%	6%
Latin America and the Caribbean	10%	5%
Middle East	6%	7%
Africa	3%	2%
Oceania	1%	1%

\*Percentages are rounded.

## **Tuition and Financial Aid**

### **Undergraduate Tuition and Living Expenses**

Nine months' tuition and fees for 2014–2015 is \$44,720. In addition, undergraduate room and board is approximately \$13,224, depending on the student's housing and dining arrangements. Books and personal expenses are about \$2,790.

### **Undergraduate Financial Aid**

The Institute's undergraduate financial aid program ensures that an MIT education is accessible to all qualified candidates regardless of their financial circumstances. MIT provides financial aid to meet the full price of an MIT education, based on the calculated financial need of the family. For 2013–2014, 91 percent of undergraduates received \$125.7 million in financial aid from all sources, with MIT

being the largest source. For students with a family income under \$75,000, the Institute ensures that scholarship funding from all sources will allow them to attend MIT tuition-free.

Financial need is the difference between the price to attend MIT and the family's ability to finance that price, which is determined using information parents provide on the Free Application for Federal Student Aid (FAFSA) and the College Scholarship Service (CSS) Profile. The first \$6,000 of financial need is met with an offer of a student loan/term-time job. The remaining need, if any, is met with an MIT scholarship. Students receiving scholarships and grants from sources outside MIT may use this financial aid to replace the student loan/term-time job.

### **Selected Undergraduate Financial Aid Statistics, 2013–2014**

Average net price of an MIT education*	\$40,023
Average need-based MIT scholarship	\$34,551
Average need-based financial aid award	\$42,007
Students awarded a need-based MIT scholarship	56%
Students attending tuition-free	32%
Class of 2014 graduates with student loan debt	40%
Average student loan debt for those who borrowed	\$19,000
Average term-time earnings for those who worked	\$3,088

\*Cost of attendance minus MIT scholarships averaged across all undergraduates.

## **Graduate Tuition and Living Expenses**

Graduate students generally incur greater expenses than undergraduates. Most attend the Institute for a calendar year rather than an academic year, increasing the cost of tuition. In 2014–2015, nine months' tuition and fees is \$44,720 (specific programs and departments may have different tuition amounts). Summer term tuition in 2014 was \$14,900 for students enrolled in courses.

MIT's residential system can accommodate about one-third of its graduate students; the rest find housing in the Boston/Cambridge area. Graduate students' costs for housing, food, books, medical insurance, and incidentals vary widely, depending on marital status, quality-of-life expectations, and housing arrangements. For example, monthly charges for on-campus housing range from \$845 to \$1,436 for single students and from \$1,277 to \$1,890 for family housing.

## **Graduate Financial Aid**

Financial aid for graduate students is in large part provided by individual departments, and the amount of aid varies significantly. Financial support includes fellowships, traineeships, teaching and research assistantships, and loans. Most forms of support are granted for merit, while others are granted for financial need or a combination of merit and need.

## Academics

### Undergraduate Education

MIT's strength—as represented by its official seal and motto, *mens et manus*, mind and hand—is the fusion of academic knowledge with practical purpose. MIT believes the best education occurs when students are self-motivated and engaged participants in a dynamic community of learners. Consequently, an MIT undergraduate education combines rigorous academics with a “learning-by-doing” approach.

One avenue for student engagement is the Undergraduate Research Opportunities Program (UROP), pioneered at MIT in 1969 and now emulated in academic institutions around the globe. UROP offers students the opportunity to join a faculty-led research team or to initiate their own research project. Projects may be conducted on a pay, credit, or voluntary basis, and may last for one semester or continue for a full year or more. Another unique feature of an MIT education is the Independent Activities Period, a special four-week term in January that encourages students to set their own agenda within a creative and flexible environment.

As part of a complete MIT experience, undergraduates are encouraged to add an international dimension to their education. Students may choose from Institute-wide or departmental study-abroad programs. They may also decide to conduct research abroad, assist with building sustainable communities overseas, or venture out on fieldwork or internships arranged through MIT International Science and Technology Initiatives or the International Development Initiative.

MIT undergraduates can also take advantage of cross-registration at several Boston-area universities and art schools. Leadership training opportunities include the Bernard M. Gordon-MIT Engineering Leadership Program and ROTC programs in the United States Army, Navy/Marine Corps, and Air Force.

### ***Selected Undergraduate Facts***

- MIT offers 46 undergraduate major and 49 minor programs.
- Freshmen seeking a more collaborative environment can choose to participate in an alternative learning community, such as the Concourse Program, Experimental Study Group, Media Arts and Sciences Freshman Program, or Terrascope.
- MIT's General Institute Requirements ensure that all students are broadly educated in the physical, natural, and social sciences.
- The first semester at MIT is graded on a pass/no record basis.
- Each year nearly 60 percent of MIT undergraduates participate in UROP, with 89 percent having done so by the time they graduate.
- MIT has 510 active student groups, including academic organizations, activism groups, arts groups, ethnic and cultural associations, religious organizations, sports clubs, and many others.
- In 2013–2014, approximately 1,900 students were affiliated with a fraternity, sorority, or independent living group (FSILG); approximately 1,100 of them chose to live in a FSILG community as an alternative to a traditional residence hall.
- Nearly 42 percent of graduating seniors in the Class of 2014 reported participating in an international experience while at MIT.

## **Graduate Education**

MIT graduate programs provide collaborative environments for advanced study by students and faculty working together to extend the boundaries of knowledge.

Traditionally a leader in engineering and science graduate education, MIT has also attained national prominence for its doctoral programs in mathematics and the physical and life sciences. Top-ranked graduate programs in economics; political science; linguistics; science, technology, and society; architecture; media studies; urban studies; and management have broadened the spectrum of graduate education at the Institute.

Graduate students may pursue the following degrees:

- Master of Science (SM)
- Master of Architecture (MArch)
- Master of Business Administration (MBA)
- Master in City Planning (MCP)
- Master of Engineering (MEng)
- Master of Finance (MFin)
- Engineer
- Doctor of Philosophy (PhD)
- Doctor of Science (ScD)

Cross-registration opportunities at Harvard, Wellesley, and with the Graduate Consortium in Women's Studies are available for graduate students. The Harvard-MIT Health Sciences and Technology Program and the joint degree program with the Woods Hole Oceanographic Institution are also significant resources for graduate students. Other study opportunities are available at Brandeis, Tufts, and Boston University.

## ***Selected Graduate Facts***

- The admissions process for graduate programs at MIT is decentralized. Applicants apply directly to the academic department or degree-granting program of interest.
- There is no cap on the number of graduate students admitted to MIT. Departments admit as many as they can support based on their research assistantship, teaching assistantship, and fellowship resources, as well as the number of faculty available to advise on research.
- In the 2013–2014 academic year, doctoral students were supported with research assistantships (49 percent), fellowships (33 percent), and teaching assistantships (10 percent). Eight percent received some other form of support or no support.
- There were 6,807 graduate students enrolled at MIT in the fall term of 2014. Forty-two percent were international students. Thirty-six percent of all graduate students were housed on campus.
- Graduate students constitute 60 percent of the total 2014–2015 student population.

## **MIT Libraries**

MIT's libraries advance the Institute's programs of research and study in both innovative and traditional ways. Students, faculty, and researchers can tap into a vast array of library resources from classrooms, dorm rooms, or on the go through the Libraries' mobile-friendly website. Library locations offer technology-enabled rooms for group collaboration and virtual meetings with peers across the globe, as well as quiet spaces for individual study. Students can learn about the Libraries' resources and research tools in workshops, online tutorials, and in-person consultations.



### ***Selected Library Facts***

- The Libraries have over five million items in print and digital formats, including electronic journals and books, images, maps, musical scores, and sound and video recordings.
- Several libraries offer secure 24/7 study spaces accessible with a student ID.
- Library partnerships allow students, faculty, and researchers to visit or request materials from more than 25 academic libraries in the Northeast, and to borrow articles and other materials from libraries worldwide.
- The Libraries' open access efforts have helped make scholarly articles by MIT authors freely available to the world. Over 70,000 items, including MIT theses and the scholarly works of MIT faculty and researchers, can be found in the Libraries' digital repository, DSpace@MIT.
- The Institute Archives and Special Collections, a unit of the Libraries, contains MIT's founding documents and the personal papers of noted faculty. The adjacent Maihaugen Gallery features ongoing exhibits of rare and unique items from the collections.

For more information about the MIT Libraries, visit <http://libraries.mit.edu>.

### **Computing on Campus**

The computing environment at MIT supports an impressive array of information technologies and resources, many of them notable to MIT.

*MITnet*. The MIT Regional Optical Network—a 2,500-mile optical ring connecting Boston, New York City, and approximately 10 other locations—

connects Institute researchers with peers in the region and beyond via key internet exchange points.

*Mobility.* MIT is a fully wireless campus with an extensive mobile web—m.mit.edu—featuring customized applications for the iPhone and Android platforms.

*Devices.* About 62,000 devices access MIT’s network regularly. Close to 90 percent of MIT students arrive on campus with a laptop or a mobile device (and often both), with a 2:1 ratio of Macintosh to Windows machines across the campus.

*Kerberos.* Kerberos was originally developed at MIT to secure network services on Athena, MIT’s main academic computing environment, and is now the widely adopted protocol for network authentication. The Kerberos Consortium was launched in 2007 to create a “universal authentication platform” to protect the world’s computer networks. Athena provides academic software, courseware, and public computing facilities primarily to students.

*Systems.* Stellar, MIT’s course management system, currently houses 1,000 sites containing course materials, assignments, and other class activities. WebSIS, the student information system, provides access to personal records, course information, and scheduling.

*Support.* The central IT Service Desk handles approximately 200 telephone and email requests per day. Managed IT Support Services provides desk-side support to 35 departments, labs, and centers across campus. Additionally, an extensive knowledge base draws on the cumulative IT expertise at MIT

to deliver approximately 8,000 articles of self-help information to the community.

For more information about MIT's computing environment, visit <http://ist.mit.edu>.

## **Digital Learning**

The Office of Digital Learning (ODL) is transforming teaching and learning at MIT and worldwide through the innovative use of digital technologies. ODL supports the entire MIT community in creating and leveraging digital technologies and instructional content, and enabling unprecedented insights into the science of learning. ODL is also building strategic alliances and programs in corporate training, executive education, and educational partnerships, and actively supports digital learning research across MIT.

ODL empowers faculty to reengineer the classroom experience with online and blended learning models that engage students at a deeper level. From fall 2012 through spring 2014, 90 instructors and 65 percent of MIT undergraduates used the MITx Residential platform, and more than 2,500 MIT students used the edX platform in over 60 courses.

Beyond MIT, ODL provides educational opportunities to learners through OpenCourseWare (OCW) and MITx on edX.

OCW makes core academic materials freely available online under an open license. As of November 2014, there were 2,251 active OCW courses, including 77 full video courses, 349 mirror sites, and 1,018 translated courses. Of these, 1,074 are undergraduate

level, 189 are both undergraduate and graduate level, and 988 are graduate level. Sixty-six percent of MIT's tenure-track faculty are participating in OCW. OCW's materials have been accessed by approximately 170 million people worldwide since it published its first course in September 2002.

In contrast with OCW, which is self-paced, MITx courses run on a specific schedule. Since 2012, over 1.3 million learners from 190 countries have enrolled in over 34 MITx courses on edX. In the 2013–2014 academic year, MIT launched 27 new MITx courses, and edX awarded 29,601 certificates to students who signed up for verified certificates and successfully completed MITx courses.

For more information about ODL and its programs, visit <http://odl.mit.edu>.

## **Campus Life**

### **The Campus**

MIT occupies 168 acres that extend more than a mile along the Cambridge side of the Charles River Basin (see center spread). The central group of interconnecting buildings, dedicated in 1916, was designed by architect W. Welles Bosworth (Class of 1889) to facilitate communication among schools and departments. Subsequent landmark buildings on campus were designed by leading architects such as Alvar Aalto, I. M. Pei '40, and Eero Saarinen.

Early in this century, MIT added new buildings to meet the changing needs of teaching, research, and the community. These remarkable structures include the Ray and Maria Stata Center for Computer, Information, and Intelligence Sciences designed

by Frank Gehry; Simmons Hall, an undergraduate residence designed by Steven Holl; the Media Lab Complex (E14) by Fumihiko Maki; and the Zesiger Sports and Fitness Center by Kevin Roche.

In 2013, MIT completed its newest building: the David H. Koch Childcare Center (W64), which nearly doubles MIT's on-campus childcare capacity. Opened in fall 2011 and named in recognition of Fariborz Maseeh ScD '90, the undergraduate residence Maseeh Hall represents a thorough renovation of Building W1, the Institute's oldest graduate residence. Two new academic buildings were completed in 2010: the Koch Institute for Integrative Cancer Research (76) and the new home of the MIT Sloan School of Management, Building E62, which brought together all the Sloan faculty in one building.

MIT's new buildings reflect its commitment to sustainability. Maseeh Hall, Sloan (E62), and the Koch Institute all received LEED Gold Certification from the US Green Building Council.

Comprehensive renovations currently in progress include Building 2, Building 66, E52, and the MIT Chapel, designed by Eero Saarinen.

Information about these and other recent buildings may be found at <http://capitalprojects.mit.edu>.

## **Housing**

### ***Undergraduates***

Most undergraduates live on campus in one of MIT's 11 Institute houses or 36 MIT-affiliated fraternities, sororities, and living groups. All unmarried first-year students must live in one of the Institute's residence

halls—except those who commute from home. Each dormitory has a live-in housemaster, who is usually a senior faculty member. Students may elect to remain on campus following their freshman year, or move to a fraternity, sorority, or independent living group. The current number of undergraduates living on campus is 3,370.

### ***Graduate Students***

More than 1,900 single graduate students live in MIT's five campus houses—Ashdown House (NW35), Edgerton House (NW10), Sidney-Pacific (NW86), Tang Hall (W84), and the Warehouse (NW30). Two campus apartment complexes, Westgate (W85) and Eastgate (E55), accommodate over 400 graduate and undergraduate students with families. More than 90 graduate students live in undergraduate dorms as graduate resident tutors.

### **The Arts**

Arts on the MIT campus are rooted in experimentation, risk taking, and imaginative problem solving. Eminent artists teaching at MIT have received numerous awards, among them the Pulitzer Prize, Grammy Award, Guggenheim Fellowship, and MacArthur Fellowship received by faculty Erik Demaine, Junot Díaz, John Harbison, Joan Jonas, Keeril Makan, John A. Ochsendorf, Jay Scheib, and Evan Ziporyn.

- The Institute offers degrees in studio art; history, theory, and criticism of architecture and art; and architectural design through the School of Architecture and Planning, and in music, theater, comparative media studies, and writing through the School of Humanities, Arts, and Social Sciences.

- Nearly 80 percent of incoming freshmen have prior training in the arts.
- Over 50 percent of all MIT undergraduates enroll in arts courses each year—with nearly half of students participating in music and theater classes and performance groups.
- Students can participate in more than 60 music, theater, visual arts, writing, and dance groups.

MIT's program in architecture was the first established in the United States. Notable alumnus and Pritzker Prize winner I. M. Pei '40 designed four buildings for the MIT campus.

The MIT Museum draws nearly 125,000 visitors each year to programs and exhibitions exploring the foundations and frontiers of science and technology. Highlights include the world's finest collection of holograms, robots and robotic devices, and Arthur Ganson's kinetic sculptures. The Mark Epstein Innovation Gallery gives visitors direct access to some of the latest MIT research, and the Kurtz Gallery for Photography features changing exhibitions of renowned photographers. The museum also produces the annual Cambridge Science Festival, featuring 10 days of programs and activities citywide serving 50,000 people. The Institute's Architecture and Design Collection, housed at the MIT Museum, ranks among the top architectural drawing collections in the world.

The MIT List Visual Arts Center explores contemporary art making in all media. In addition to presenting six to eight exhibitions annually, the List presents a broad range of education programs in conjunction with its exhibitions. The center maintains and adds to MIT's permanent collection of

over 3,500 artworks that includes dozens of publicly sited sculptures and hundreds of paintings, prints, photographs, and drawings located throughout MIT's campus. The center is also responsible for commissioning new works for the MIT Public Art Collection through the MIT Percent-for-Art Program, and organizing and administering the Student Loan Art Program that allows MIT students to borrow hundreds of works of art to hang in their living spaces.

The Eugene McDermott Award in the Arts at MIT celebrates innovative talents in all arts disciplines and is one of the most generous cultural honors in the United States. Recent recipients of the award include conductor Gustavo Dudamel (2010), renowned director, filmmaker, playwright, and actor Robert Lepage (2012), and artist Olafur Eliasson (2014).

The MIT Center for Art, Science & Technology, established in 2012, facilitates and creates opportunities for artists to exchange and collaborate with engineers and scientists. The center fosters a culture where the arts, science, and technology thrive as interrelated, mutually informing modes of exploration, knowledge, and discovery.

### **Athletics and Recreation**

MIT's Athletics, Physical Education, and Recreation Department offers opportunities for sports instruction and participation at all levels.

As part of the General Institute Requirement, each student must earn eight points through physical education courses and complete the swim require-



ment. Each quarter, MIT offers over 50 sections and more than 25 types of classes. Seasonal offerings include golf, sailing, broomball, and ice-skating, while additional specialty courses include scuba, backpacking, top-rope climbing, kayaking, cross-country skiing, downhill skiing, and snowboarding.

- With 33 varsity sports, MIT supports one of the broadest intercollegiate athletic programs in the world.
- There are 16 varsity sports for men, 15 for women, and two coeducational programs.
- Approximately 20 percent of undergraduates join a team during their time at MIT.
- MIT competes mainly against Division III New England colleges, but also routinely participates in regional and national championships.
- The Institute has earned 220 Academic All-America citations, the most for any Division III program in the nation.
- The intramural program offers competition in 18 sports with 4,000 students, faculty, alumni, spouses, and partners participating.
- MIT features one of the nation's most expansive club programs, with more than 800 participants and 33 teams.
- For those who wish to engage in other recreational programs, MIT provides group exercise and mind and body classes, personal and group training, a variety of aquatic classes, and sport skill instruction.

With 10 buildings and 26 acres of playing fields, MIT boasts one of the most expansive athletic complexes in New England. The Zesiger Sports and Fitness Center on the west side of campus features two swimming pools, a fitness center, international-

scale squash courts, and a multi-activity court. Roberts Field and Barry Field, lighted sports-turf venues, are adjacent to the Zesiger Center. The east side of campus is served by the Alumni Pool and Wang Fitness Center, located in the Stata Center at the edge of Kendall Square.

### **Hacking at MIT**

MIT culture distinguishes itself not only for its seriousness of purpose, but also for its unique sense of humor, as expressed in the arena of “hacking.” Hacks at the Institute are elaborate but benign practical jokes, perpetrated anonymously on campus, around Cambridge, or even farther afield, and that amaze for their creativity, cleverness, and difficulty of execution. A 1958 prank in which the Harvard Bridge was measured in increments of fraternity pledge Oliver Smoot has achieved such fame that “smoot” has been incorporated into the American Heritage Dictionary and is included as a unit of measure in Google Earth. The bridge still displays its quirky unit of measure today.

Although not officially sanctioned, hacks can be appreciated for their technical prowess and humorous digs at rival institutions, for example in the astonishing emergence of a large black weather balloon with MIT written all over it in the middle of a Harvard-Yale football game in 1982, or in the 2006 cross-country theft of Caltech’s Fleming Cannon. Other famous hacks involve rather large objects falling from building rooftops (the Baker House Piano Drop) or appearing where they don’t belong, most notably on MIT’s Great Dome, which over the years has been graced by a Hilltop Steakhouse plastic cow, a Campus Police cruiser, the Wright Flyer, an MIT fire truck, and the Apollo Lunar Module.

## MIT and the Community

MIT is an integral part of its host city of Cambridge, a diverse and vibrant community noted for its intellectual life, history, and thriving innovation climate. With a campus nestled between the active Central and Kendall Squares, and across the Charles River from Boston's Seaport District, the Institute is in an optimal position to engage in collaborative endeavors with its neighbors and contribute to the growing innovation community.

*MIT and Cambridge.* The city's approximately 105,000 residents, including more than 36,000 college and university students, together build a vibrant community within its 6.26 square miles. Cambridge is pedestrian- and bicycle-friendly, with 80 parks and playgrounds, six subway stations, a commuter rail line, 29 bus routes, multiple shuttles, 33 bike sharing stations, and numerous dedicated bicycle lanes, enabling visitors and students to get around the city and the MIT campus without a car.

*Service to the community.* Since its founding, MIT has maintained a commitment to be a good neighbor and serve the local community. The Institute actively supports nonprofit organizations that address local challenges by providing educational programs, financial resources, representation on boards and committees, volunteer engagement, and the use of MIT facilities. In addition, members of the MIT community support the Institute's Community Service Fund, which provides assistance for nonprofits where MIT volunteers are at work.

Students, faculty, and staff at MIT are involved in a broad range of volunteer activities in the community. The Institute's Public Service Center provides programming, guidance, information, and support to those interested in public service, and serves as a resource for both MIT and the community-at-large. More information is available at <http://web.mit.edu/mitpsc>.

*Economic impact and innovation catalyst.* MIT has a far-reaching impact on the economy of the region. The Institute is Cambridge's second largest employer and largest taxpayer, representing almost 13 percent of the city's revenue stream. MIT pays taxes on its commercial property and provides an annual payment in lieu of taxes (PILOT) for property that is used for academic purposes while being legally tax exempt. In fiscal year 2014, the Institute made a voluntary PILOT contribution of \$2.2 million to the City of Cambridge and paid over \$41.8 million in real estate taxes.

MIT is also a magnet for investment and fuels the innovation economy with the research, start-ups, and talent pool that it generates. Kendall Square, at the eastern end of MIT's campus, is the seat of a growing innovation cluster in which MIT plays a catalyzing role, and the area has attracted offices of numerous life science and technology-related companies.

For more information about MIT and the community, visit <http://ogcr.mit.edu>.

## Alumni

### **MIT Students after Graduation**

During 2013–2014, 247 employers recruited in MIT Global Education and Career Development (GECD). Computer technology companies (18 percent), consulting (15 percent), financial services (15 percent), engineering (12 percent), and energy (3 percent) were the top five industries participating in on-campus recruiting, accounting for 63 percent of total recruiters.

### ***Undergraduates after Graduation***

- Twenty-one percent of 2014 bachelor's degree graduates found jobs through on-campus recruiting and MIT-sponsored job listings.
- Nineteen percent had internships that led to a full-time job offer.
- Nineteen percent found jobs through a career fair.
- Eighteen percent found jobs through various networking venues, including MIT faculty and administrators, GECD contacts, and professional conferences.

Fifty-seven percent of MIT undergraduates took jobs after graduation; 32 percent went on to graduate school. The top graduate school destinations were MIT, Harvard, Stanford, University of California at Berkeley, Boston University, Princeton, University of Illinois, University of Michigan, and University of Wisconsin.

### ***Graduate Students after Graduation***

- Eighty percent of master's students graduating from MIT entered the work sector and 12 percent went on to graduate school.

- While 90 percent of PhD students planned to work after graduation, one percent continued their education. Forty-six percent of those who continued working had postdoctoral positions.

### **Top Employment Sectors for MIT Graduates**

<b>Employment sector</b>	<b>Bachelor's</b>	<b>Master's</b>	<b>PhDs</b>
Aerospace/defense	6%	6%	5%
Computer technologies	28%	13%	8%
Consulting	12%	20%	6%
Education	1%	1%	25%
Energy/utilities	6%	3%	4%
Engineering (all fields)	20%	21%	21%
Finance/banking	10%	13%	3%
Health/medicine	6%	2%	7%

The top employers for bachelor's degree recipients were Google, Oracle, McKinsey, Morgan Stanley, Accenture, Amazon, AthenaHealth, ExxonMobil, Microsoft, Boston Consulting Group, Goldman Sachs, Palantir, and Shell. The top employers for master's degree recipients were McKinsey, Amazon, Apple, Bain, Boston Consulting Group, Google, Deloitte, MIT, Microsoft, the US Air Force, Goldman Sachs, and the US Navy. The top employers for doctoral degree recipients were MIT, Harvard, Google, Stanford, McKinsey, UC Berkeley, Exponent, Apple, ExxonMobil, Boston Consulting Group, Harvard Medical School, and Princeton.

## Average Salaries Earned by MIT Graduates Entering Industry Positions

Degree	Mean	Median
Bachelor's degree	\$74,980	\$72,500
Master of Science	\$84,580	\$80,000
Master of Engineering	\$90,505	\$100,000
Master of Business Administration	\$128,807	\$125,000
PhD entering postdoctoral positions	\$65,343	\$50,000
PhD entering other positions	\$110,296	\$105,000

### MIT Alumni Association

The MIT Alumni Association is a gateway to one of the most diverse, talented, and invigorating communities in the world: the 130,431 living MIT alumni. It provides services and resources that strengthen alumni's ties to MIT and to each other, from face-to-face gatherings to a suite of online services.

More than 13,245 alumni volunteer their services for the Institute, serving as class and club officers, educational counselors, and members of the MIT Corporation and its visiting committees. In fiscal year 2014, the Annual Fund reported \$63.2 million in gifts from 44,939 alumni, students, parents, and friends.

## Geographic Distribution of Alumni\*

United States and Possessions	100,106
Mid-Atlantic	26,142
New England	25,828
West	19,445
Southwest and South Central	8,198
Great Lakes	7,554
Southeast	6,583
Northwest and Great Plains	5,616
Alaska and Hawaii	509
Puerto Rico, the Virgin Islands, and other US territories	231
Asia	7,648
Europe	5,902
North America (other than US)	2,256
South America	1,490
Pacific Ocean Islands and Australia	617
Africa	476
Central America	73
<b>Total</b>	<b>118,568</b>

\*Includes only alumni with known addresses.



## Research

The soul of MIT is research. For more than 150 years, the Institute has married teaching with engineering and scientific studies—and produced an unending stream of advancements, many of them world-changing. Among MIT’s historical achievements:

- Achieving the first chemical synthesis of penicillin
- Developing the inertial guidance systems for the Apollo space program
- Pioneering high-speed photography
- Engineering practical microwave radar
- Building the magnetic core memory that made digital computers possible
- Developing the world’s first biomedical prosthetic device

This stream of discovery continues. Here are a few sample accomplishments from this decade:

- Genetically reprogramming skin cells to cure a mouse model of sickle-cell anemia
- Developing a new form of wireless power transmission
- Inventing a way to duplicate photosynthesis in order to store solar energy
- Re-engineering viruses to produce both ends of a lithium ion battery
- Finding a way to use RNA interference to silence multiple genes at once
- Designing computer techniques that automatically decipher ancient languages
- Engineering a soft autonomous earthworm-like robot that can inch away unscathed even when stepped upon

- Discovering evidence of water ice and organic material on Mercury
- Developing ceramics that bend without breaking

Undergraduates can plunge directly into this world of exploration through the Undergraduate Research Opportunities Program, which offers students a chance to collaborate on cutting-edge research as junior colleagues of Institute faculty.

During the academic year, approximately 3,750 researchers (including 574 visiting faculty and scientists) work with MIT faculty and students on projects funded by government, foundations, and industry. Approximately 2,550 graduate students are primarily supported as research assistants and 610 are appointed as teaching assistants; 1,675 are supported on fellowships.

As an institution, MIT encourages interdisciplinary research across department and school boundaries while focusing on tackling great challenges for society at large. Two examples of such initiatives include the MIT Energy Initiative (MITEI) and the David H. Koch Institute for Integrative Cancer Research (KI).

The MIT Energy Initiative is MIT's energy hub, linking researchers to organizations dedicated to energy innovation. MITEI is supported by 72 industry members, as well as government, foundation, and philanthropic programs, and alumni and individual donors. Nearly one-third of the MIT faculty is engaged in energy-related classes or research. In its eight years, MITEI has granted 129 seed-fund research projects, placed 185 UROP students, and awarded more than 300 graduate

Society of Energy fellowships. Last year, the Energy Studies minor, the third largest minor at MIT, graduated 35 students.

The Koch Institute conducts interdisciplinary research to solve the complex problems of cancer and rapidly translate innovations to benefit patients. The KI is a National Cancer Institute–designated cancer center that includes more than 50 laboratories and 1,000 researchers, among them cancer biologists; materials, chemical, and biological engineers; chemists; computer scientists; and clinicians, who engage in genuine collaboration to accelerate solutions and impact for cancer patients. To add strength to their efforts, the KI also has a strong network of relationships with clinical, industrial, and organizational partners.

More interdisciplinary teams are found off-campus in nearby Lexington, Massachusetts, at MIT Lincoln Laboratory, a federally funded research and development center focused on national security.

### **Interdisciplinary Centers, Labs, and Programs**

Today’s researchers tackle complex problems that cannot be resolved within a single academic discipline—and MIT constantly creates and evolves academic organizations that foster interdisciplinary work.

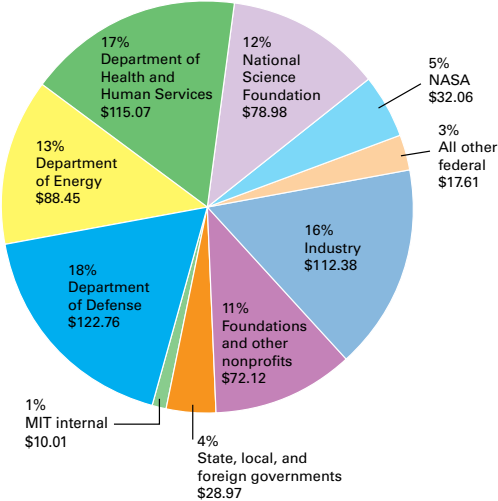
Abdul Latif Jameel World Water and Food Security  
Lab

Center for Archaeological Materials

Center for Collective Intelligence

Center for Computational Engineering

**Research Expenditures by Primary Sponsor for Fiscal Year 2014 (figures in millions)\*  
Total: \$678.41 million**



\*Figures are rounded

- Center for Computational Research in Economics and Management Science
- Center for Energy and Environmental Policy Research
- Center for Environmental Health Sciences
- Center for Global Change Science
- Center for International Studies
- Center for Materials Science and Engineering
- Center for Real Estate
- Center for Transportation and Logistics
- Computer Science and Artificial Intelligence Laboratory
- Concrete Sustainability Hub
- Deshpande Center for Technological Innovation

Division of Comparative Medicine  
Francis Bitter Magnet Laboratory  
Haystack Observatory  
Institute for Medical Engineering and Science  
Institute for Soldier Nanotechnologies  
Institute for Work and Employment Research  
Joint Program on the Science and Policy of  
Global Change  
Knight Science Journalism Program  
Koch Institute for Integrative Cancer Research  
Laboratory for Financial Engineering  
Laboratory for Information and Decision Systems  
Laboratory for Manufacturing and Productivity  
Laboratory for Nuclear Science  
Legatum Center for Development and  
Entrepreneurship  
Lincoln Laboratory  
Martin Trust Center for MIT Entrepreneurship  
Materials Processing Center  
McGovern Institute for Brain Research  
Microsystems Technology Laboratories  
MIT Center for Art, Science, and Technology  
MIT Center for Digital Business  
MIT Clinical Research Center  
MIT Energy Initiative  
MIT Environmental Solutions Initiative  
MIT Kavli Institute for Astrophysics and Space  
Research  
MIT Media Lab  
MIT Portugal Program  
MIT Professional Education  
MIT Program in Art, Culture, and Technology  
MIT Sea Grant College Program  
Nuclear Reactor Laboratory  
Operations Research Center  
Picower Institute for Learning and Memory  
Plasma Science and Fusion Center

Research Laboratory of Electronics  
Simons Center for the Social Brain  
Singapore–MIT Alliance  
Singapore–MIT Alliance for Research and  
Technology  
Sociotechnical Systems Research Center  
Technology and Development Program  
Transportation@MIT  
Women’s and Gender Studies Program

## **Research Alliances**

MIT’s research extends out through collaborations with leading institutes and consortia around the world.

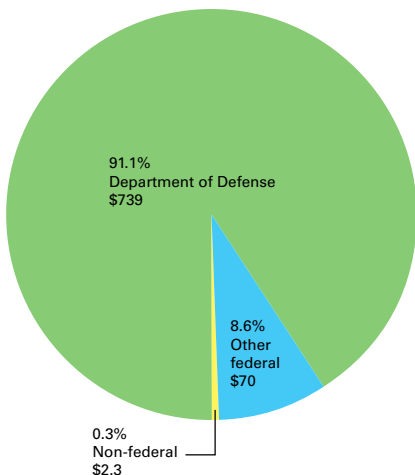
Alliance for Global Sustainability  
Broad Institute  
Charles Stark Draper Laboratory  
Massachusetts Green High Performance Center  
Northeast Radio Observatory Corporation  
Ragon Institute of MGH, MIT and Harvard

## **Lincoln Laboratory**

MIT’s Lincoln Laboratory, located in Lexington, Massachusetts, is a federally funded research and development center focused on applying advanced technology to problems of national security. Lincoln Laboratory’s core competencies are in sensors, information extraction (signal processing and embedded computing), communications, integrated sensing, and decision support, all founded in a broad research base in advanced electronics. The laboratory is engaged in innovative research and the development and field-testing of prototype systems. The transition of technologies to industry is strongly emphasized. Approximately 3,200 MIT employees work at Lincoln Laboratory.

## Lincoln Laboratory Research Expenditures Fiscal Year 2014 (in millions)\*

Total: \$811.3 million



\*Figures are rounded

## MIT and Industry

Since its founding, MIT has fostered a problem-solving approach that encourages researchers to work together across departments, fields, and institutional boundaries. The resulting collaborations have included thousands of fruitful partnerships with industry and other leading research institutions.

Currently, approximately 800 companies are working with faculty and students both in Institute-wide programs such as the Industrial Liaison Program and the MIT Energy Initiative, and in smaller collaborations. Among these corporate sponsors are such global leaders as Accenture, Boeing, BMW, BP,

Chevron, eni, ExxonMobil, Novartis, Pfizer, Quanta Computer, Raytheon, Samsung, Sanofi, Saudi Arabian Oil Co., Schlumberger, Shell, Siemens, Tata Motors and TOTAL.

Research sponsored directly by industry totaled \$128 million in fiscal year 2014, or 19 percent of all MIT research funding. According to the National Science Foundation, MIT ranks first in industry-financed research and development expenditures among all universities and colleges without a medical school.

Part of the Office of Corporate Relations, the Industrial Liaison Program is the largest conduit between corporations and MIT. More than 200 companies partner with the program to improve their access to MIT and advance their research agendas.

The Technology Licensing Office (TLO) oversees MIT's vibrant patenting and licensing activity. Fiscal year 2014 saw 743 new invention disclosures and \$78.6 million in total licensing income. The TLO's mission is to benefit the public by moving results of MIT research into societal use via technology licensing, through a process that is consistent with academic principles, demonstrates a concern for the welfare of students and faculty, and conforms to the highest ethical standards. This process benefits the public by creating new products and promoting economic development.

MIT Sloan Executive Education provides mid- to senior-level executives with the tools and frameworks needed to create and lead successful organizations. Its programs are led by senior faculty, and combine innovation and entrepreneurship with strategic thinking and global leadership. MIT Professional Education



provides engineering, science, and technology professionals a gateway to renowned MIT expertise, research, and knowledge through advanced education programs designed for working professionals.

MIT's strong corporate connection also is reflected in its extensive business-oriented curricula, many spearheaded by the MIT Sloan School of Management in collaboration with other schools. Examples include:

*Leaders for Global Operations.* This dual-degree graduate program combines an engineering and management curriculum with an internship at a partner company. Students earn an SM from one of seven engineering programs and an MBA from MIT Sloan. The six-month internship focusing on real-world operations and manufacturing challenges is the basis for the dual-degree master's thesis.

*System Design and Management.* This program educates future technical leaders in architecting, engineering, and designing complex products and systems, and fosters the leadership and management skills needed to connect technical and nontechnical organizations.

*Sloan Fellows Program in Innovation and Global Leadership.* This program enrolls 100 mid-career fellows from around the world and offers a demanding academic curriculum and frequent interactions with international business and government leaders.

*Supply Chain Management.* This nine-month program combines master's level coursework, professional development, and industry interaction for business professionals to gain proficiency in problem solving and change leadership.

## Entrepreneurship

MIT's preeminence in entrepreneurship is rooted in its founding. The Institute was one of the first land-grant colleges, and was designed to deliver a practical education instead of the focus on the classics at many private universities that were founded to train clergy. Its emphasis on *mens et manus*, mind and hand, is infused into the entrepreneurship curriculum and programming, which emphasizes learning by doing. Over the course of the 2013–2014 academic year, 48 entrepreneurship courses were offered, as well as not-for-credit boot camps over the Independent Activities Period and the summer MIT Global Founders' Skills Accelerator program, showing that entrepreneurship is a year-round endeavor at MIT.

A 2009 study based on data from 2001 and 2003 suggested that 25,800 companies founded by MIT alumni were active as of 2006, employing 3.3 million people and producing annual revenues of \$2 trillion, equivalent to the 11th largest economy in the world. Hundreds of new companies are started each year, and 41 percent of MIT founders are serial entrepreneurs, having started multiple companies. Founders are getting younger as well. The average new entrepreneur who graduated in the 1990s starts a company at age 28, whereas founders who graduated in the 1950s started their first companies on average at age 40.5. Around 30 percent of international students at MIT go on to found companies, half of them located in the United States. By contrast, around 20 percent of MIT's US students have founded companies.

Several MIT departments, labs, and centers foster entrepreneurship at MIT:

- The Martin Trust Center for MIT Entrepreneurship supports students with an entrepreneurship curriculum, programming, guidance, and connections to the MIT and broader entrepreneurial communities.
- The Technology Licensing Office assists MIT inventors in protecting their technology and in licensing that technology to startups and to existing companies.
- The Deshpande Center for Technological Innovation funds innovative faculty research and supports faculty in technology commercialization.
- The Venture Mentoring Service matches student, faculty, staff, and alumni entrepreneurs with talented mentors.
- The Media Lab Entrepreneurship Program is a set of classes that help students leverage Media Lab technologies to create new businesses.
- The Bernard M. Gordon–MIT Engineering Leadership Program promotes leadership and communications skills among undergraduate engineers.
- The Legatum Center for Development and Entrepreneurship supports social entrepreneurship among MIT students.
- The Lemelson-MIT Program promotes invention at MIT, in particular among students through the Lemelson-MIT National Collegiate Student Prize Competition.
- The MIT Enterprise Forum, originally founded under the Alumni Association and now managed by MIT Technology Review, informs, connects, and coaches technology entrepreneurs, enabling

them to rapidly transform their ideas into world-changing companies. Its global network currently maintains 25 chapters.

MIT also has over 20 student clubs and initiatives involved in entrepreneurship or innovation, including the MIT \$100K Entrepreneurship Competition and the MIT Clean Energy Prize business plan contests.

## **Publishing**

### **MIT Press**

One of the largest and most distinguished university presses in the world, the MIT Press is known for quality, innovation, and distinctive design. The Press publishes in selected disciplines within the humanities, social sciences, and sciences. Its authors are drawn from the global academic community. The Press publishes 30 scholarly journals and 220 new books annually, in a variety of print and electronic formats. More than 750,000 publications carrying the MIT name are disseminated by the Press to scholars and general readers around the world each year. The MIT Press is especially noted for its support of emerging fields, for its strong international distribution, and for pioneering digital projects.

### **MIT Technology Review**

MIT Technology Review is a global media company. Read by millions of business leaders, innovators, and thought leaders, *MIT Technology Review* magazine features news, analysis, and business reports. MIT Technology Review also produces events such as the international EmTech conferences, and its global organization, the MIT Enterprise Forum, supports early-stage technology entrepreneurs.

## **MIT Sloan Management Review**

A media company based at the MIT Sloan School of Management, MIT Sloan Management Review (MIT SMR) makes new management research and ideas accessible to business executives and provides a forum for innovators around the globe. Through its quarterly journal founded in 1959, MIT SMR presents ideas and research about advances in management practice that are transforming how people lead and innovate. Content is distributed on the web, in print and on mobile and portable platforms, as well as via licensees and libraries around the world.

## **Building MIT's Resources**

During the 2013–2014 fiscal year, organizations and individuals gave or pledged a total of \$458 million. Such contributions are vital to MIT, providing critically needed undesignated funds along with resources designated to a range of key priorities. MIT continues efforts to develop new resources for faculty, focused educational needs, new and renovated facilities, and other priorities. Playing a central role in these efforts is an energetic group of MIT volunteers. Priorities include support for faculty and students, research and educational programs, and buildings. Unrestricted giving, which can be designated by MIT to especially critical areas, strengthening existing programs and providing seed funding for new initiatives, is also a high priority.

## Financial Data

### Year-end Statistics, Fiscal Year 2014 (in millions)

#### *Value of Plant and Invested Assets*

Asset	Value (in millions)
Land, buildings, and equipment, net book value	\$2,624.3
Market value of endowed funds	\$12,425.1
Market value of total investments	\$16,228.8

#### *Gifts and Pledge Payments to MIT*

Source	Amount (in millions)
Individuals	\$175.7
Foundations	\$140.0
Corporations	\$64.7
Other	\$0.4
<b>Total</b>	<b>\$380.8</b>

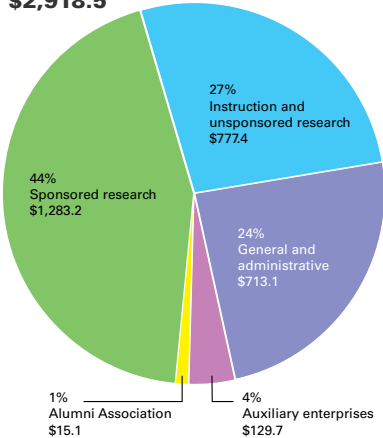
#### *Gift and Pledge Payment Designations*

Designations	Amount (in millions)
Faculty chairs	\$18.1
Scholarships and other undergraduate aid	\$14.1
Undergraduate education and student life	\$12.7
Graduate fellowships	\$38.8
Research and education programs	\$197.4
Construction and renovations	\$22.6
Unrestricted	\$57.0
Undesignated and miscellaneous	\$20.1
<b>Total</b>	<b>\$380.8</b>

**Fiscal Year 2014**

**Operating Expenditures (in millions)\***

**Total: \$2,918.5**

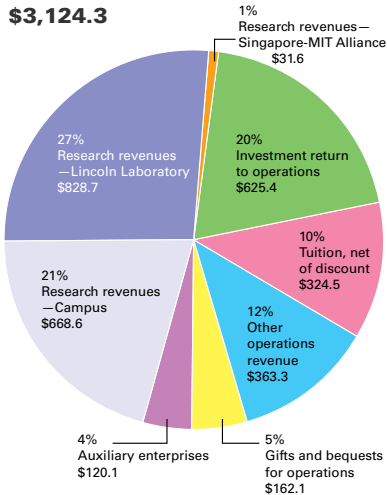


\*Figures are rounded

**Fiscal Year 2014**

**Operating Revenues (in millions)\***

**Total: \$3,124.3**



\*Figures are rounded

## Accreditation

MIT is accredited by the New England Association of Schools and Colleges, Inc., through its Commission on Institutions of Higher Education.

Inquiries regarding MIT's accreditation status should be directed to the Office of the Vice President and Secretary of the Corporation, Massachusetts Institute of Technology. Individuals may also contact:

Commission on Institutions of Higher Education  
New England Association of Schools and Colleges  
3 Burlington Woods Drive, Suite 100  
Burlington, MA 01803-4531  
781.425.7714  
cihe@neasc.org

Many degree programs at MIT are accredited by specialized professional accrediting bodies, including ABET, the American Chemical Society, the Association to Advance Collegiate Schools of Business, the National Architectural Accrediting Board, and the Planning Accreditation Board. Academic departments can provide information on the accreditation of the specific degree programs they offer.



*MIT specializes in achieving breakthroughs by  
encouraging widely different minds to tackle  
hard problems together.*

*—L. Rafael Reif*