PLATE 2

Part of
WARDS 4 & 6
CITY OF
Cambridge.

2016

MIT
Facts
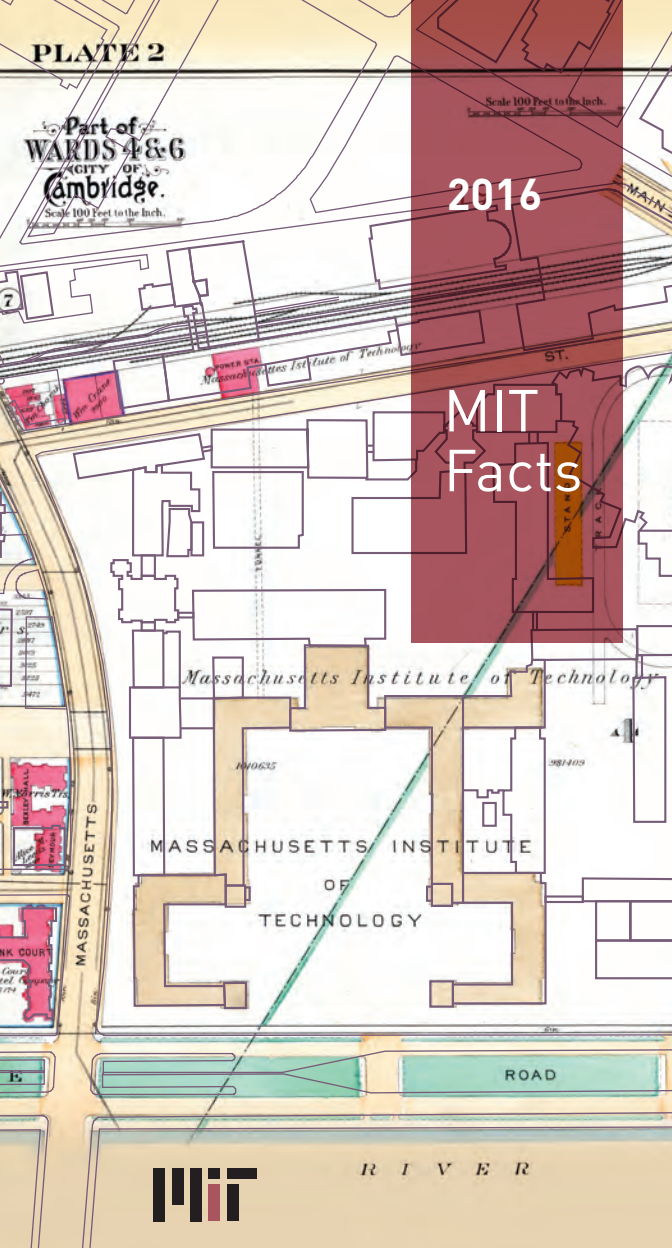
MIT Facts
2016

Massachusetts
Institute of
Technology

Contents

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
20 gardens and greenspace areas
100+ public works of art

Employees
Approximately 12,110, including faculty

Faculty
Professors (all ranks): 1,036
Other teaching staff: 827
Student-faculty ratio: 8:1

Selected Honors
(MIT Community, Current and Former)
85 Nobel Laureates
58 National Medal of Science winners
29 National Medal of Technology and Innovation winners
45 MacArthur Fellows

Undergraduate Financial Aid 2014–2015

Students attending tuition-free: 33%
Students awarded need-based MIT scholarship: 56%
Average need-based MIT scholarship: $36,566

Freshman Admission Class of 2019

Applicants: 18,306
Admits: 1,519 (8%)

Students, 2015–2016

Total: 11,331
Undergraduates: 4,527
Women: 2,082 (46%)
Minorities: 2,327 (51%)
Graduate students: 6,804
Women: 2,265 (33%)
Minorities: 1,381 (20%)

Undergraduate Costs, 2015–2016

Tuition: $46,400
Room, board, and fees: $13,500

Undergraduate Majors and Minors

Major programs: 46
Minor programs: 50
(Plus a pirate certificate!)

International Students, 2015–2016

Undergraduate students: 440
Graduate students: 2,849
Exchange, visiting, special students: 539

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.

Presidents of the Institute

L. Rafael Reif, 2012–
Susan Hockfield, 2004–2012
Charles Marstiller 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 and treasurer, senior vice president and secretary of the Corporation, associate provosts, deans of the schools, vice presidents, chancellor for academic advancement, dean for graduate education, dean for undergraduate education, dean for student life, dean of digital learning, director of libraries, Institute community and equity officer, and deputy executive vice president.

MIT's academic departments and institutes—each under the leadership of a head or director—are organized within five schools that encompass numerous degree-granting programs and inter-disciplinary centers, laboratories, and programs whose work cuts across traditional departmental 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 employs approximately 12,110 individuals on campus.
- There are 1,036 faculty members (professors of all ranks), including 230 women.
- Minority group representation among faculty includes American Indian or Alaska Native, Native Hawaiian/Pacific Islander, Black, Hispanic, and Asian.
- The student-faculty ratio is 8:1.

MIT's Teaching Staff, as of October 2015	
Category	Number
Professors	665
Associate professors	194
Assistant professors	177
Senior lecturers, lecturers, and professors emeriti	635
Instructors (including technical instructors)	160
Professors of the practice and adjunct faculty	32
Total	1,863

Distribution of Faculty by School

26%
School of Science
273

17%
School of Humanities, Arts, and Social Sciences
174

37%
School of Engineering
378

11%
Sloan School of Management
117

1%
Other
10

8%
School of Architecture and Planning
84
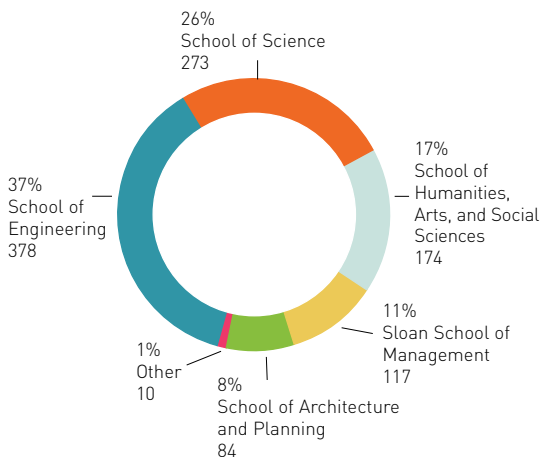
Members of the MIT community have received accolades too numerous to list. Several of the most notable honors and awards follow.

Eighty-five 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).

Forty 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), Phillip A. Sharp (2004), Susan Solomon (1999), JoAnne Stubbe (2008), and Robert A. Weinberg (1997). Five 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).

Five 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 members Deborah Blum (1992) and 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 61 Guggenheim Fellows, 11 Fulbright Scholars, and 23 MacArthur Fellows among current MIT faculty and staff. The MacArthur Fellows are Angela Belcher, Tim Berners-Lee, James J. Collins, 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, Heidi L. Williams, and Jack Wisdom.

Seventy-nine current MIT faculty and staff are members of the National Academy of Sciences, 66 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, Sallie (Penny) Chisholm, Ann M. Graybiel, John H. Harbison, Robert S. Langer, John D. C. Little, Thomas Magnanti, Joel Moses, Ronald Rivest, Phillip A. Sharp, Marcus A. Thompson, 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, Barbara Liskov, 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)
Materials Science and Engineering (Course 3)
Mechanical Engineering (Course 2)
Nuclear Science and Engineering (Course 22)
Institute for Data, Systems, and Society
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 21G)
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)

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 2015 Undergraduate Admissions Statistics

- Applications for freshman admission were received from 18,306 candidates.
- Admission was offered to 1,519 candidates (8 percent), of whom 1,109 enrolled.
- Approximately 47 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 69 countries.
- All 50 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 2015 Graduate Admissions Statistics

- Applications for graduate study were received from 23,750 candidates.
- Admission was offered to 3,307 candidates (13.9 percent), of whom 2,165 (65.5 percent), registered in advanced degree programs.

For more information, visit mitadmissions.org

Enrollments 2015–2016

In fall 2015, there were 11,331 students enrolled at MIT: 4,527 undergraduates (40 percent) and 6,804 graduate students (60 percent).

Women have attended MIT since 1871. In fall 2015, 2,082 women were enrolled as undergraduates (46 percent) and 2,265 as graduate students (33 percent).

US minority groups were represented by 2,327 undergraduates (51 percent) and 1,381 graduate students (20 percent).

In 2015–2016, MIT students come from all 50 states, the District of Columbia, three territories, and 120 foreign countries.

For more information, visit web.mit.edu/registrar.

Undergraduate Enrollment by School		
First-year, undeclared second-year, and special undergraduate students		**Number**
First-year*		1,113
Undeclared second-year*		12
Special undergraduate students		53
By school	**Majors**	**2nd Majors**
Architecture and Planning	37	4
Engineering	2,455	63
Humanities, Arts, and Social Sciences	81	33
Management	52	21
Science	724	98

*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 by Degree Level and School

School	Master's	Doctoral	Special
Architecture and Planning	413	181	0
Engineering	1,009	2,114*	160
Humanities, Arts, and Social Sciences	25	312	0
Management	1,266	164	12
Science	9	1,138	1
Total	2,722	3,909	173

*Includes 177 students working on Harvard degrees only through the Harvard-MIT Health Sciences and Technology Program.

Minority Group Representation among Students

Minority group	Undergraduate	Graduate
African American	380	144
American Indian or Alaska Native	79	57
Asian American	1,254	831
Hispanic	602	340
Native Hawaiian or other Pacific Islander	12	9
Total	2,327	1,381

International Students and Scholars

There are 3,289 international students enrolled in degree programs at MIT—440 undergraduates (10 percent) and 2,849 graduate students (42 percent)—for the current academic year. Additionally, there are 539 exchange, visiting, and special students on campus.

During academic year 2014–2015, MIT hosted 2,403 international scholars from 93 countries, who engaged in teaching and research in 70 different departments, laboratories, and centers.

International Students and Scholars by Region*		
Region	Students	Scholars
Asia	48%	43%
Europe	25%	36%
Latin America and the Caribbean	10%	5%
Canada	7%	6%
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 for 2015–2016 is $46,400. In addition, undergraduate room and board is approximately $13,730, depending on the student's housing and dining arrangements. Books and personal expenses are about $2,816.

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. In 2014–2015, 91 percent of undergraduates received $129.7 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 $5,500 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, 2014–2015	
Average net price of an MIT education*	$40,451
Average need-based MIT scholarship	$36,566
Average need-based financial aid award	$43,298
Students awarded a need-based MIT scholarship	56%
Students attending tuition-free	33%
Class of 2015 graduates with student loan debt	32%
Average student loan debt for those who borrowed	$23,537
Average term-time earnings for those who worked	$3,167

*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 2015–2016, nine months' tuition is $46,400 (specific programs and departments may have different tuition amounts). Summer term tuition in 2015 was $15,460 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 $874

to $1,816 for single students and from $1,322 to $1,956 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 50 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, and in the humanities and arts.
- 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 2014–2015, approximately 1,900 students were affiliated with a fraternity, sorority, or independent living group (FSILG); approximately 1,100 of them chose to live in an FSILG community as an alternative to a traditional residence hall.
- Nearly 43 percent of graduating seniors in the Class of 2015 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 2014–2015 academic year, doctoral students were supported with research assistantships (52 percent), fellowships (29 percent), and teaching assistantships

(12 percent). Eight percent received some other form of support or no support.

- Thirty percent of all graduate students were housed on campus.

MIT Libraries

Supporting teaching, learning, research, and innovation at MIT and globally, the Libraries connect faculty and students—wherever they are—to the best scholarly information available. Expert staff, state-of-the-art technologies, and abundant resources serve every part of the Institute, bridging disciplines and communities across campus. The Libraries advance knowledge at MIT and beyond in many ways, including the following:

- *Enabling discovery*. Experts in a range of disciplines help students and faculty find the best sources from a vast collection of books, journals, databases, and archival and rare materials.
- *Increasing access*. Each year, the MIT community downloads tens of millions of items from the Libraries, and performs more than 45 million searches on scholarly databases. The Libraries are a leader in Open Access, making more than 70,000 scholarly works by MIT authors freely available to the world.
- *Preserving knowledge*. MIT is at the forefront of disseminating groundbreaking research and scholarship and of ensuring its accessibility for future use, tackling the complex issues of preserving digital information.
- *Providing community spaces*. Library locations offer secure spaces for quiet study or collaboration, some with 24/7 access. The Maihaugen Gallery exhibits rare and unique

items from MIT's collections, while the Institute Archives and Special Collections contains MIT's founding documents and the personal papers of noted faculty.

- *Connecting to a vast scholarly network.* Partnerships with other top research libraries enable the MIT community to access materials from libraries worldwide and staff to tackle complex 21st-century information challenges.

Learn more at 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. MIT's network infrastructure in the Cambridge/Boston area is made up of 7,288 miles of fiber, 5,500 wireless access points, and 3,000 switches that provide on-campus wired connectivity. The Institute also owns and operates the MIT Regional Optical Network—a 2,500-mile optical ring connecting researchers in Boston, New York City, and about 10 other locations across the Northeast. In addition, MIT has 10-gigabit dedicated connections to Internet 2, Akamai, Amazon, VMware, and the Energy Sciences Network, and a 100-gigabit connection to the CERN Large Hadron Collider.

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

Devices. About 60,000 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 1:1 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 a widely adopted protocol for network authentication. Athena provides academic software, courseware, and public computing facilities, primarily to students.

Systems. Stellar/LMOD, MIT's course management system, currently houses 1,000 sites containing course materials, assignments, and other resources. WebSIS, the student information system, provides access to personal records, course information, and scheduling.

Support. The central IT Service Desk handles approximately 160 telephone and email requests per day. Distributed Support Teams provides deskside support to 42 departments, labs, and centers across campus. Additionally, an extensive knowledge base draws on the cumulative IT expertise at MIT to deliver over 8,800 articles of self-help information to the community.

For more information about MIT's computing environment, visit ist.mit.edu.

Digital Learning

The Office of Digital Learning (ODL) works to transform teaching and learning at MIT and around the globe through the innovative use of digital technologies. Specifically, ODL:

- Supports MIT faculty and students in bold experiments in digital teaching and learning to enhance residential education
- Facilitates research on how people learn and on new technologies that might improve understanding, retention, and application of knowledge
- Provides platforms for technological advances in education
- Partners with companies, universities, governments, and organizations that wish to develop new learning capabilities and enhance the competencies of their workforce, students, and citizens
- Extends MIT's knowledge and classroom to the world

Digital learning technologies enable students to do more outside of the class so that class time can focus on deeper discussion, practical experiments, and other forms of active learning. Digital technology can deliver lecture content, provide students rapid feedback on their understanding, and engender more active reading and discussion through annotation tools. Digital platforms can also augment understanding via visualizations, simulations, and games. These technologies further provide flexibility in course delivery allowing students to access content anytime anywhere.

To enable digital learning, MIT and Harvard launched edX in 2012, a not-for-profit platform that allows universities to leverage learning technologies. For teaching on campus, MIT uses a residential MITx platform. To reach students globally, MIT offers massive open online courses (MOOCs) on the edX platform.

On campus, more than 90 MIT instructors have taught over 120 courses using the residential platform. As of spring 2015, 83 percent of MIT undergraduates had used the residential MITx system for a substantial portion of their course-work.

Globally, as of summer 2015, ODL had launched 130 MITx courses on edX, with more than 1.5 million participants from over 200 countries earning nearly 100,000 course certificates. In 2014–2015, MIT launched 50 MITx courses. More than 100 faculty from 19 departments have partici-pated in offering MITx MOOCs on edX.

To further serve global learners, MIT's OpenCourseWare (OCW) offers free, open, publicly accessible web-based materials from more than 2,250 MIT courses, including 97 full video courses. MIT's OCW site logged an average of 2.2 million visitors per month in 2014–2015. In addition, OCW offers Highlights for High School to better serve high school constituencies, and OCW Educator, aimed at helping educators understand more about how courses are taught at MIT.

For more information about ODL and its programs, visit odl.mit.edu.

Campus Life

The Campus

In 1916, MIT moved from its Boston location to Cambridge; the current campus now encompasses 168 acres that extend more than a mile along the Cambridge side of the Charles River Basin. The heart of the campus is the initial group of interconnecting buildings, designed by architect W. Welles Bosworth (Class of 1889) to facilitate interaction and communication among MIT's schools and departments.

The architecture on campus now showcases a range of styles, from neoclassical through modernist, brutalist, and deconstructivist. Among the remarkable landmarks on campus are buildings designed by leading architects such as Alvar Aalto, Frank Gehry, Steven Holl, I. M. Pei '40, and Eero Saarinen. Many of the buildings are compelling inside as well, housing state-of-the-art facilities designed to support MIT's ongoing research efforts in multiple disciplines. These facilities include wind tunnels, linear accelerators, robot test labs, and—soon to be in construction—a 200,000-square-foot nanotechnology and advanced imaging center.

For students, the campus has 18 residence halls, each with its own distinctive personality and community. The campus also offers on-site bicycle benefits for students and staff, including fix-it stations, secure bicycle cages, and a bike-share program. As a whole, the campus is urban and walkable, with more than 20 gardens and greenspace areas and more than 100 public works of art. At its edges, the campus merges with various Cambridge neighborhoods, including Kendall

Square—where the close association of industry and research expertise has made this area the most innovative square mile on the planet.

As the campus continues to develop and improve, MIT is focused on enhancing its sustainability and conservation features. To date, seven buildings have achieved LEED-Gold Certification, including Fariborz Maseeh Hall (W1), Building E62 (home of MIT Sloan), and the Koch Institute for Integrative Cancer Research (76). For existing buildings, MIT's proactive Capital Renewal program is engaged in continuous renewal and renovation projects that ensure the buildings are able to support the community's educational, research, and student life activities.

Information about building construction and renovation projects may be found at 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 such as Erik Demaine, Junot Díaz, John Harbison, Joan Jonas, Keeril Makan, John A. Ochsendorf, Jay Scheib, and Evan Ziporyn teach at MIT, and have collectively received numerous awards, among them the Pulitzer Prize, Grammy Award, Guggenheim Fellowship, and MacArthur Fellowship.

- The Institute offers degrees in architectural design, studio art, and in history, theory, and criticism of architecture and art through the School of Architecture and Planning, and in comparative media studies, music, theater, and writing through the School of Humanities, Arts, and Social Sciences.
- Nearly 80 percent of incoming freshmen have prior training in the arts.
- More than 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 architect David Adjaye (2016), artist Olafur Eliasson (2014), and director, filmmaker, playwright, and actor Robert Lepage (2012).

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 requirement. 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.

MIT Traditions
Hacking

MIT culture distinguishes itself not only for its seriousness of purpose but also for its unique sense of humor, as expressed through "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.

Pirate Certificate

Not content to just produce exceptional graduates in the usual fields of study, the Institute also offers its swashbuckling students the opportunity to become certified pirates. How is this possible? Students who complete four physical education courses—archery, fencing, pistol (or rifle), and sailing—are eligible to receive a Pirate Certificate, officially awarded by the Department of Athletics, Physical Education, and Recreation. In addition to receiving a tangible document printed on faux parchment, newly minted pirates are rumored to swear a secret oath. Although they are no longer lily-livered landlubbers, their pirating activities nevertheless are limited to "entertainment purposes only."

Brass Rat

In a ritual long enjoyed by MIT undergraduates, a committee of sophomores gathers each year to redesign their class ring, which is ceremoniously revealed during the spring term. The history of MIT's class ring dates back to 1929 when a student committee convened to design what is formally known as the "Standard Technology Ring." Featuring a beaver on top (an industrious, nocturnal, American animal), the Boston and Cambridge skylines on the sides, and the MIT seal and dome on the shank, the ring also incorporates unique design elements related to each individual graduating class. Made of gold, the ring's nickname, "the Brass Rat," derives from its color—similar to brass—and the prominence of the beaver mascot—resembling a rat.

A concrete symbol of an MIT education, the distinctive Brass Rat is recognized worldwide and

instantly identifies MIT alumni to one another, serving as a reminder of the bond that all MIT students share.

MIT and the Community

MIT is an integral member 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 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 45,000 college and university students, together form a lively community within its 6.26 square miles. Cambridge is pedestrian- and bicycle-friendly, with 82 parks and playgrounds, six subway stations, a commuter rail line, 29 bus routes, multiple shuttles, 33 bike sharing stations, and numerous dedicated bicycle lanes and bikeways, 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 Commu-

nity 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 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 13 percent of the city's tax 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 and is legally tax exempt. In fiscal year 2015, the Institute made a voluntary PILOT contribution of approximately $2 million to the City of Cambridge and paid approximately $45 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 thriving innovation cluster in which MIT plays a catalyzing role, and the area has attracted offices of over 150 life science and technology-related companies.

For more information about MIT and the community, visit ogcr.mit.edu.

Sustainability

MIT is committed to leadership in sustainability and strong climate action at the local level, making strides to reduce the greenhouse gas emissions of the MIT campus, using the campus as a living laboratory for sustainability innovation and education, and partnering with the cities of Cambridge and Boston. In a five-year Plan for Action on Climate Change, released in 2015, the Institute set a goal to reduce its campus emissions by at least 32 percent by 2030. As a founding member of the Cambridge Compact for a Sustainable Future, MIT works with Cambridge, Harvard University, and more than 15 local businesses and organizations to achieve a more healthy, livable, and sustainable future. MIT is also a member of the Boston Green Ribbon Commission.

New construction and major renovation projects on campus aim to meet the national LEED Gold (version 4) certification standard, reflecting MIT's dedication to building healthy, high performance facilities that meet the highest standards of sustainability. Six buildings have achieved LEED gold or silver certification for new construction.

Eighty-four percent of MIT commutes to campus in ways other than driving alone in a car, such as by using public transportation, or by bicycling, walking, and ride-sharing to work.

The Institute offers many courses focused on understanding or solving challenges in sustainability, some of which use the campus itself as a test bed, such as one that explored the solar energy potential of MIT rooftops.

MIT has a vibrant ecosystem of student and staff groups promoting sustainability on campus, such as the Graduate Student Council and Undergraduate Association's committees on sustainability as well as the Green Committee, Staff for Sustainability. Initiatives range from a monthly swapfest called Choose to Reuse to student hackathons, which engage students, industry, and thought partners in finding real-life solutions to sustainability challenges.

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. Examples of some of MIT's historical achievements follow:

- 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 just a few accomplishments from this decade:

- Genetically reprogramming skin cells to cure a mouse model of sickle-cell anemia
- 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
- Building a new radar technology system that can see through walls up to 60 feet away
- Demonstrating experimentally the existence of a fundamentally new magnetic state called a quantum spin liquid
- Developing a new steelmaking process that produces no emissions other than pure oxygen
- Designing a new paper strip diagnostic test to rapidly diagnose Ebola and other viral hemorrhagic fevers

Research Expenditures, by Primary Sponsor (in Millions),* Fiscal Year 2015
Total: $696.89

17%
Department of Health and Human Services
$116.47

12%
Department of Energy
$81.53

17%
Industry
$119.24

11%
National Science Foundation
$78.95

18%
Department of Defense
$125.85

11%
Foundations and other nonprofits
$78.67

2%
MIT internal
$11.06

2%
All other federal
$15.44

4%
State, local, and foreign governments
$27.95

6%
NASA
$41.74
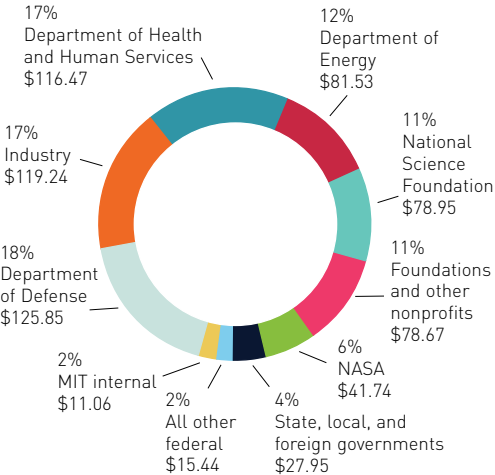
*Figures are rounded.

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 3,775 researchers (including 550 visiting faculty and scientists) work with MIT faculty and students on projects funded by government, foundations, and industry. Approximately 2,565 graduate students are primarily supported as research assistants and 610 are appointed as teaching assistants; 1,640 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 and the David H. Koch Institute for Integrative Cancer Research.

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 Poverty Action Lab
Abdul Latif Jameel World Water and Food
    Security Lab

Center for Archaeological Materials
Center for Collective Intelligence
Center for Computational Engineering
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
Clinical Research Center
Computer Science and Artificial Intelligence
    Laboratory
Concrete Sustainability Hub
Deshpande Center for Technological Innovation
Division of Comparative Medicine
Francis Bitter Magnet Laboratory
Haystack Observatory
Initiative on the Digital Economy
Institute for Data, Systems, and Society
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 Energy Initiative
MIT Environmental Solutions Initiative
MIT Innovation 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
Howard Hughes Medical Institute
Massachusetts Green High Performance
    Computing Center
Northeast Radio Observatory Corporation
Ragon Institute of MGH, MIT and Harvard
Whitehead Institute for Biomedical Research

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. Other areas of innovative research and development are cybersecurity, autonomous systems, and homeland protection. The laboratory has a strong focus on developing and field-testing unique prototype systems, and is very engaged in transitioning technologies to industry. Approximately 3,325 MIT employees work at Lincoln Laboratory.

Lincoln Laboratory Program Funding, by Mission Area (in Millions),* Fiscal Year 2015
Total: $937

21%
Communication
Systems
$196.77

1%
Other
$9.37

8%
Cybersecurity
and Information
Sciences
$74.96

14%
Air and Missile
Defense
$131.18

14%
Space
Control
$131.18

9%
Advanced
Technology
$84.33

13%
Tactical
Systems
$121.81

9%
Homeland Protection
and Air Traffic Control
$84.33

11%
Intelligence,
Surveillance, and
Reconnaissance
Systems and Technology
$103.07
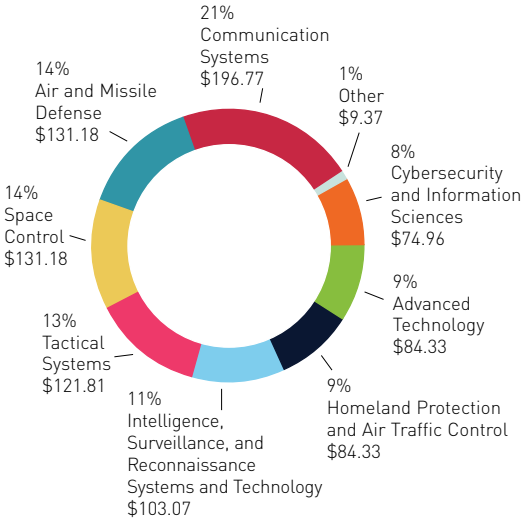
*Figures are rounded.

Lincoln Laboratory Program Funding, by Sponsor, Fiscal Year 2015		
Sponsor	**%**	
Department of Defense		79%
Air Force	31%	
Army	7%	
Defense Advanced Research Projects Agency	4%	
Missile Defense Agency	7%	
Navy	4%	
Office of the Secretary of Defense	3%	
Other Department of Defense	23%	
Government Agencies		21%
DHS, FAA, NASA, NOAA	10%	
Other Government Agencies	11%	

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.

Approximately 700 companies are working with faculty and students both in Institute-wide programs such as the Industrial Liaison Program (part of the Office of Corporate Relations and the main conduit between corporations and MIT) and the MIT Energy Initiative, and in smaller collaborations.

Research sponsored directly by industry totaled $134 million in fiscal year 2015, 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.

The Technology Licensing Office (TLO) oversees MIT's vibrant patenting and licensing activity. Fiscal year 2015 saw 795 new invention disclosures and $46.2 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 MIT 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 and Innovation

MIT's preeminence in entrepreneurship is rooted in its founding. As one of the first land-grant colleges, the Institute was designed to deliver a practical education rather than to focus on the classical education that was provided by many private universities of that era 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 2014–2015 academic year, 60 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.

MIT's educational efforts in entrepreneurship and innovation have an impressive impact at local, regional, and global levels. A 2015 report suggested that 30,000 companies founded by MIT alumni were active as of 2014, employing 4.6 million people and producing annual revenues of $1.9 trillion, equivalent to the world's 10th largest economy. MIT alumni form hundreds of new companies each year, and approximately 40 percent of MIT founders are serial entrepreneurs, starting multiple companies. Twenty-three percent of MIT alumni's new firms are founded outside the United States.

Several MIT departments, labs, and centers foster entrepreneurship and innovation 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 MIT Innovation Initiative educates the next generation of global innovators, preparing them to move ideas to impact more effectively

by combining practical opportunities for building expertise in the innovation process with insights developed from the evidence-based science of innovation.

- 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 Bernard M. Gordon–MIT Engineering Leadership Program promotes leadership and communications skills among undergraduate engineers.
- The Legatum Center for Development and Entrepreneurship supports entrepreneurship in developing economies 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, part of Technology Review, produces programs and events through its worldwide network of chapters for the broader external entrepreneurial community.

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 well regarded university presses in the world, the MIT Press publishes books and journals in established and emerging fields in the humanities, social sciences, and sciences for an international audience. Its authors are likewise drawn from the global academic community. The Press is known locally for the MIT Press Bookstore, a popular Kendall Square destination, and more widely for its beautifully designed books, for producing works of equal rigor in the sciences and the visual arts, and for a distinguished legacy of experimentation in both content and format.

MIT Technology Review

Through serious journalism, written in clear language by a knowledgeable editorial staff, *MIT Technology Review* creates technology journalism on multiple platforms for a worldwide audience of millions. Technologyreview.com gives readers daily news and analysis. The magazine—published since 1899—features business reports, photo essays, and reviews. The company also produces live events and manages the global entrepreneurial organization MIT Enterprise Forum.

MIT Sloan Management Review

The mission of *MIT Sloan Management Review (MIT SMR)* is to lead the conversation among thinkers, researchers, and professors about advances in management practice that are transforming how people innovate and lead. Since 1959, *MIT SMR* has disseminated new management research and innovative ideas so that executives can capitalize

on the opportunities generated by rapid organizational, technological, and societal change. Content is sourced primarily through independent research from global thought leaders and through *MIT SMR*–generated research and the Big Ideas Initiative. Topics covered in 2015 range from adapting to the sharing economy to the dark side of information technology.

Alumni

MIT Students after Graduation

During 2014–2015, 305 employers recruited in MIT Global Education and Career Development (GECD). Computer technology companies (24 percent), consulting (17 percent), financial services (17 percent), engineering (11 percent), and energy (5 percent) were the top five industries participating in on-campus recruiting and accounted for 74 percent of total recruiters.

Undergraduates after Graduation

- Twenty-one percent of 2015 bachelor's degree graduates found jobs through various networking venues, including MIT faculty and administrators, GECD contacts, and professional conferences.
- Twenty percent found jobs through a career fair.
- Eighteen percent had internships that led to a full-time job offer.
- Seventeen percent found jobs through on-campus recruiting and MIT-sponsored job listings.
- Eighty-four percent of all graduating seniors completed internships while at MIT.

Fifty-eight percent of MIT undergraduates took jobs after graduation; 33 percent went on to graduate school. The top graduate school destinations were MIT, Stanford, University of California at Berkeley, Harvard, Columbia, University of California at San Diego, Princeton, University of Illinois, and University of Massachusetts.

Graduate Students after Graduation

- Eighty percent of master's students graduating from MIT entered the work sector and 11 percent went on to graduate school.
- While 92 percent of PhD students planned to work after graduation, one percent continued their education. Of those with confirmed employment, 41 percent were postdoctoral positions.

Top Employment Sectors for MIT Graduates, by Degree Type			
Employment sector	**Bachelor's**	**Master's**	**PhD**
Aerospace/defense	7%	5%	6%
Computer technologies	26%	17%	11%
Consulting	16%	21%	5%
Education	1%	1%	28%
Energy/utilities	4%	3%	3%
Engineering (all fields)	22%	16%	21%
Finance/banking	11%	17%	4%
Health/medicine	4%	5%	9%

The top employers for bachelor's degree recipients were Google, Oracle, Amazon, McKinsey, Accenture, Apple, Boeing, Microsoft, ExxonMobil, General Motors, Boston Consulting Group, Morgan Stanley, Booz Allen Hamilton, Goldman Sachs, and SpaceX. The top employers for master's degree recipients were Google, McKinsey, Amazon, Boston Consulting Group, Deloitte, Bain, Microsoft, Apple, Goldman Sachs, the US Air Force, US Navy, Boeing, Nike, Parthenon-EY, and Shell. The top employers for doctoral degree recipients were MIT, UC Berkeley, Harvard, Stanford, Columbia, Google, Oracle, Princeton, UCLA, Exponent, Facebook, Lam Research, Massachusetts General Hospital, and MIT Lincoln Laboratory.

Average Salaries Earned by MIT Graduates Entering Industry Positions, by Degree

Degree	Mean	Median
Bachelor of Science	$83,455	$80,350
Master of Science	$85,842	$80,165
Master of Engineering	$101,424	$110,000
Master of Business Administration	$129,586	$135,000
PhD entering postdoctoral positions	$62,750	$52,000
PhD entering other positions	$117,922	$110,000

MIT Alumni Association

The MIT Alumni Association is a gateway to one of the most diverse, talented, and invigorating communities in the world: the 132,370 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 13,774 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 2015, the Annual Fund reported $69.5 million in gifts from 44,993 alumni, students, parents, and friends.

Geographic Distribution of Alumni*		
United States and Possessions		100,796
Mid-Atlantic	25,974	
New England	25,855	
West	20,013	
Southwest and South Central	8,337	
Great Lakes	7,514	
Southeast	6,652	
Northwest and Great Plains	5,698	
Alaska and Hawaii	520	
Puerto Rico, the Virgin Islands, and other US territories	233	
Asia		7,713
Europe		5,900
North America (other than US)		2,160
South America		1,467
Pacific Islands and Australia		586
Africa		483
Central America		73
Total		119,178

*Includes only alumni with known addresses.

Building MIT's Resources

During the 2014–2015 fiscal year, organizations and individuals gave or pledged a total of $575 million to support the community and the work of MIT. These contributions provide critically needed unrestricted funds and vital resources designated to a range of priorities. Unrestricted gifts, which give the Institute the ultimate flexibility to seize opportunities and address unforeseen challenges as they arise, serve to strengthen existing programs and supply seed funding for new projects. MIT is also working to develop new resources for areas such as undergraduate scholarships, professorships, research, building construction and renovation, athletics, and the arts. At the center of these efforts is an energetic group of MIT volunteers who give their time, talent, and energy to the Institute.

Financial Data

Year-end Statistics (in Millions), Fiscal Year 2015

Value of Plant and Invested Assets	
Asset	**Value (in millions)**
Land, buildings, and equipment, net book value	$2,822.3
Market value of endowed funds	$13,474.7
Market value of total investments	$17,533.8

Gifts and Pledge Payments to MIT	
Source	**Amount (in millions)**
Individuals	$139.0
Corporations	$104.8
Foundations	$200.3
Other	$5.5
Total	**$449.6**

Gift and Pledge Payment Designations	
Designation	**Amount (in millions)**
Faculty chairs	$16.3
Scholarships and other under-graduate aid	$19.5
Undergraduate education and student life	$15.1
Graduate fellowships	$32.8
Research and education programs	$243.3
Construction and renovations	$51.5
Unrestricted	$64.7
Undesignated and miscellaneous	$6.4
Total	**$449.6**

Operating Expenditures (in Millions)*
Fiscal Year 2015
Total: $3,111.1

26.1%
Instruction and
unsponsored research
$811.5

44.6%
Sponsored
research
$1,386.3

24.5%
General and
administrative
$763.7

0.5%
MIT Alumni
Association
$15.5

4.3%
Auxiliary enterprises
$134.1
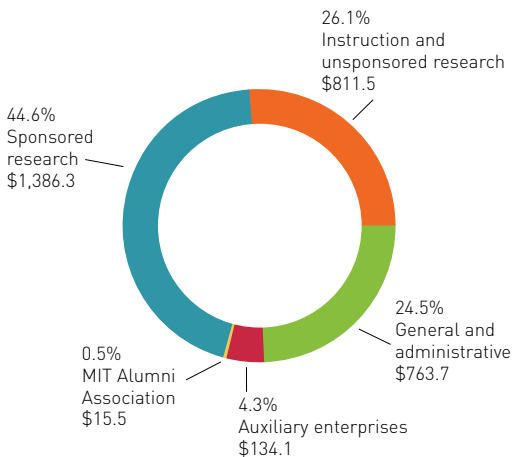
*Figures are rounded.

Operating Revenues (in Millions)*
Fiscal Year 2015
Total: $3,290.8

1%
Research revenues—
Singapore–MIT Alliance for
Research and Technology
$31.7

20.4%
Investment return
to operations
$671.4

10.1%
Tuition, net
of discount
$331.8

6.7%
Gifts and
bequests for
operations
$221.8

3.7%
Auxiliary
enterprises
$120.9

11.2%
Other operations
revenues
$368.3

20.2%
Research
revenues—
Campus
$665.6

26.7%
Research revenues—
Lincoln Laboratory
$879.3
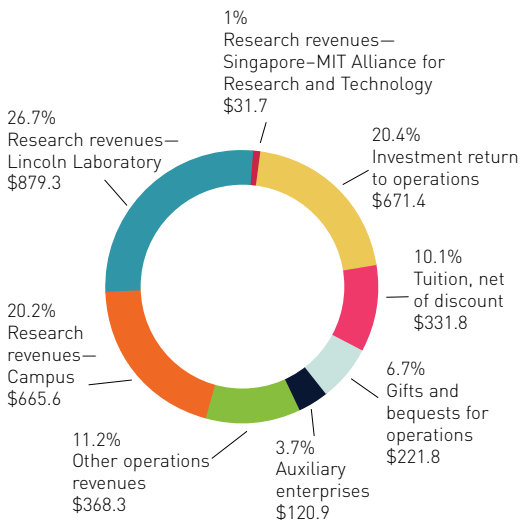
*Figures are rounded.

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 Senior 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.

About the Cover

This year, MIT commemorates the 100th anniversary of its campus's move from its original home in Boston to its current location along the Charles River in Cambridge, Massachusetts. MIT alumnus William Welles Bosworth designed the new Cambridge campus; its footprint is seen in the 1916 map on the cover.

As Professor Mark Jarzombek ('71) described in his book *Designing MIT: Bosworth's New Tech*, Bosworth's vision encompassed several key goals that are as important today as they were 100 years ago. These include interconnected buildings and interiors that encourage and support interdisciplinary interaction and communication, and the ability of the physical complex to adapt to the constantly evolving nature of science, technology, and the MIT community.

The cover overleaf shows the outlines of the campus in the present day, its growth clearly evident. The darker lines of the Institute's building footprints demonstrate that MIT's commitment to Bosworth's ideals of fostering communication and interaction through physical connection, and of adaptation to changing times and needs remains unchanged.

A goal without a plan is just a wish.

—Antoine de Saint-Exupéry

MIT

Massachusetts Institute of Technology

A few of the most visited locations on campus are highlighted below:

- W16   Kresge Auditorium
- W20   Student Center
- N52   MIT Museum
- 7   Information Center
- 10   Lobby 10 and Great Dome
- K   Killian Court
- N   North Court
- 32   Stata Center
- E14   Media Lab
- E15   List Visual Arts Center
- E51   Wong Auditorium, Tang Center
- E62   Sloan School
- T   Kendall T Station

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West Campus

East Campus

Charles River

Charles River

Memorial Drive

Memorial Drive

Memorial Drive

To Boston

Downtown Boston

77 Massachusetts Avenue

Henry G. Steinbrenner Stadium

Briggs Field

Jack Barry AstroTurf Field

du Pont Tennis Courts

du Pont Court

Lowell Court

Killian Hall

Eastman Court

McDermott Court

Compton Court

Saxon Tennis Courts

Walter C. Wood Sailing Pavilion

Le Meridien Cambridge Hotel

Hyatt Regency

Technology Square

The Charles Stark Draper Laboratory, Inc.

Whitehead Institute

Broad Institute

Kendall Square

Kendall Hotel

Marriott Hotel

MIT Corp

1 Broadway

88 Sidney Street

65 Landsdowne Street

40 Landsdowne Street