MIT

MIT Facts

2023

MIT Facts 2023

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 (0.68 km^2) in Cambridge, Massachusetts
19 student residences on campus
26 acres (0.11 km^2) of playing fields
40+ gardens and green spaces
60+ public works of art

Employees
16,327, including Lincoln Laboratory

Faculty
Professors (all ranks): 1,080
Other teaching staff: 1,007
Student-faculty ratio: 3:1

Selected Honors
100 Nobel Laureates
81 MacArthur Fellows
60 National Medal of Science winners
30 National Medal of Technology and Innovation winners

Undergraduate Financial Aid 2021–2022

Students attending tuition-free: 37%
Students awarded need-based MIT scholarship: 58%
Average need-based MIT scholarship: $53,997
Class of 2022 graduates with no student loan debt: 85%

First-year Admission Class of 2026

Applicants: 33,767
Admits: 1,337 (3.96%)

Undergraduate Costs, 2022–2023

Tuition and fees: $57,590
Housing and meals: $18,790
Books and personal expenses: $3,074

Students, 2022–2023

Total: 11,858
Undergraduates: 4,657
Graduate students: 7,201

Undergraduate Majors and Minors

Major programs: 57
Minor programs: 59
Pirate certificate: 1

International Students, 2022–2023

Undergraduate students: 513
Graduate students: 2,952
Exchange, visiting, special students: 643

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.

Origins

MIT is independent, coeducational, and privately endowed. The Institute admitted its first students in 1865, four years after the approval of its founding charter, and admitted its first woman student shortly thereafter in 1871. MIT's 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 and transforming society for the better as guiding principles—continue to be its primary purpose.

Leadership

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, vice president and secretary of the Corporation, associate provosts, deans of the schools and college, vice chancellors, vice presidents, chancellor for academic advancement, director of libraries, and Institute community and equity officer.

MIT's academic departments and institutes—each under the leadership of a head or director—are organized within five schools and one college that encompass numerous degree-granting programs and interdisciplinary 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 MIT Corporation, includes 74 members who are distinguished leaders in engineering, science, industry, education, and other professions. Eight members serve ex officio: the chair of the Corporation, president, executive vice president and treasurer, secretary of the Corporation, president of the MIT Alumni Association, and three representatives of the Commonwealth of Massachusetts. The Corporation also includes 32 emeritus members. Approximately 70% of the members of the Corporation are MIT alumni.

Presidents of the Institute

2023–present	Sally Kornbluth
2012–2022	L. Rafael Reif
2004–2012	Susan Hockfield
1990–2004	Charles Marstiller Vest
1980–1990	Paul Edward Gray
1971–1980	Jerome Bert Wiesner
1966–1971	Howard Wesley Johnson
1959–1966	Julius Adams Stratton
1948–1958	James Rhyne Killian, Jr.
1930–1948	Karl Taylor Compton
1923–1930	Samuel Wesley Stratton
1921–1922	Ernest Fox Nichols
1909–1920	Richard Cockburn Maclaurin
1900–1907	Henry Smith Pritchett
1897–1900	James Mason Crafts
1881–1897	Francis Amasa Walker
1879–1881	William Barton Rogers
1870–1878	John Daniel Runkle
1862–1870	William Barton Rogers

Employees

16,327

**Employees
(including Lincoln Laboratory)**

6,668

Women employees

Employees by Category, October 2022		
Category	**Number**	**%**
Administrative staff	4,560	28%
Research staff	3,940	24%
Other academic staff	2,026	12%
Support staff	1,730	11%
Postdoctoral scholars	1,427	9%
Service staff	1,423	9%
Faculty	1,080	7%
Clinical/Medical staff	141	1%
Total	**16,327**	**100%**

In 2022, over 3,700 staff members had worked at MIT from between 10 and 25 years; another 1,459 had worked from between 25 and 50 years, and almost 50 employees had been at MIT for over 50 years.

International Scholars

International scholars come to MIT from around the world to teach, conduct research, collaborate, and for other purposes. This diverse group of

professionals includes visiting scientists, professors, artists, and scholars, as well as postdoctoral fellows and associates, research associates and scientists, faculty, and other instructional staff. During academic year 2021–2022, MIT hosted 1,805 international scholars from 93 countries in 66 departments, laboratories, and centers. Seventy-five percent were men and 25% were women.

International Scholars by Region, October 2022		
Region	**Number**	**%**
Asia	847	47%
Europe	624	35%
North America	108	6%
Mexico, Latin America, and the Caribbean North America	82	4%
Middle East	73	4%
Africa	46	3%
Oceania	25	1%
Total	**1,805**	**100%**

Faculty and Instructional Staff

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

1,080

Faculty (professors of all ranks)

285

Women faculty

Two-hundred forty-eight faculty (23%) identify as a member of a US minority group.

US Minority Group Representation among Faculty, October 2022			
Category	**Female**	**Male**	**Total**
Asian	48	117	165
Hispanic of Latino	11	45	56
Black or African American	13	31	44
Native American or other Pacific Islander	1	0	1
American Indian or Alaska Native	0	1	1

Note: Minority group representation is self-identified, and faculty may identify with more than one group.

Distribution of Faculty by School/College, October 2022

School/College	Number
School of Engineering	393*
School of Science	289
School of Humanities, Arts, and Social Sciences	186
Schwarzman College of Computing	139*
Sloan School of Management	116
School of Architecture and Planning	82
Other	11

*136 faculty shared between the School of Engineering and the Schwarzman College of Computing are included in both counts.

Instructional Staff, October 2022

Category	Number
Professors	692
Associate professors	218
Assistant professors	170
Senior lecturers, lecturers, and professors emeriti	807
Instructors (including technical instructors)	159
Professors of the practice and adjunct faculty	41
Total	**2,087**

Postdoctoral Scholars

Postdoctoral scholars pursue a program of research and training under the direction of an MIT faculty member. As of October 2022, there were 1,427 post-doctoral scholars at MIT—962 men and 465 women.

Distribution of Postdoctoral Scholars by School/ Area, October 2022		
School/Area	Number	%
School of Engineering	436	31%
School of Science	431	30%
Vice President for Research	251	18%
Schwarzman College of Computing	127	9%
Provost and other areas	87	6%
School of Architecture and Planning	44	3%
School of Humanities, Arts, and Social Sciences	35	2%
Sloan School of Management	16	1%
Total	**1,427**	**100%**

Awards and Honors

MIT community members have received numerous accolades. The MIT Excellence Awards—now in their 22nd year—celebrate the extraordinary efforts made by members of our community toward fulfilling the goals, values, and mission of the Institute. The Collier Medal was created in 2014 to honor the memory of Officer Sean Collier, who gave his life protecting the MIT community. As of October 2022, there have been 410 MIT Excellence Award and nine Collier Medal recipients. The MIT Staff Award for Distinction in Service was introduced in 2022, with one recipient to date.

The MIT Awards honor students, staff, faculty, and community members who have made outstanding contributions to the shared life of the Institute. The awards recognize excellence in academics and teaching, public service, community building, diversity and inclusion, achievements in the arts and athletics, leadership, and entrepreneurship.

The title of Institute Professor is an honor bestowed by the faculty and administration on a faculty colleague who has demonstrated exceptional distinction through leadership, accomplishment, and service in the scholarly, educational, and general intellectual life of the Institute or wider academic community.

Several of the most notable honors and awards won by MIT community members over the years are highlighted below, with winners currently on faculty and staff listed.

63
Institute Professors

The current Institute Professors are Daron Acemoglu (2019), Suzanne Berger (2019), Arup K. Chakraborty (2021), Sallie W. Chisholm (2015), Ann M. Graybiel (2008), Paula T. Hammond (2021), Robert S. Langer (2005), Thomas L. Magnanti (1997), Phillip A. Sharp (1999), and Marcus A. Thompson (2015). Institute Professors emeriti are Emilio Bizzi (2002), Noam Chomsky (1976), John M. Deutch (1990), Peter A. Diamond (1997), Jerome I. Friedman (1991), John H. Harbison (1995), Barbara H. Liskov (2008), John D. C. Little (1989), Ronald L. Rivest (2015), Robert M. Solow (1973), and Sheila Widnall (1998).

100
Nobel Prizes

Faculty members Joshua Angrist, economics (2021), Abhijit Banerjee, economics (2019), Esther Duflo, economics (2019), H. Robert Horvitz, medicine/physiology (2002), Wolfgang Ketterle, physics (2001),

Robert C. Merton, economics (1997), 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), Frank Wilczek, physics (2004), and staff member Jean Marcel Tirole, economics (2014).

60

National Medals of Science

Faculty members Sallie W. Chisholm (2012), Ann M. Graybiel (2001), Rudolf Jaenisch (2011), Robert S. Langer (2006), Phillip A. Sharp (2004), Susan Solomon (1999), and Robert A. Weinberg (1997).

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National Medals of Technology and Innovation

Faculty member Robert S. Langer (2012).

81

MacArthur Fellows

Faculty members Regina Barzilay (2017), Angela M. Belcher (2004), James J. Collins (2003), Erik D. Demaine (2003), Junot Díaz (2012), Esther Duflo (2009), Amy Finkelstein (2018), Danna Freedman (2022), Linda G. Griffith (2006), Moriba Jah (2022), Dina Katabi (2013), Laura Kiessling (1999), Eric Lander (1987), Heather N. Lechtman (1984),

Nergis Mavalvala (2010), John A. Ochsendorf (2008), David C. Page (1986), J. Taylor Perron (2021), Daniela L. Rus (2002), Sara Seager (2013), Peter W. Shor (1999), Marin Soljačič (2008), Joshua B. Tenenbaum (2019), Frank Wilczek (1982), Jack Wisdom (1994), and staff members Amy B. Smith (2004), and George Zweig (1981).

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John Bates Clark Medals

Faculty members Daron Acemoglu (2005), Esther Duflo (2010), Amy Finkelstein (2012), and Parag Pathak (2018).

16

A. M. Turing Awards

Staff members Butler W. Lampson (1992) and Michael Stonebraker (2014).

6

Pulitzer Prizes

Faculty member Junot Díaz (2008) and staff member Deborah Blum (1992).

2

Millennium Technology Prizes

Faculty member Robert S. Langer (2008).

273

**National Academy
of Sciences
Members**

667

**National Academy
of Engineering
Members**

67

**National Academy
of Medicine
Members**

213

Guggenheim Fellows

37

Fulbright Scholars

Schools and College

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)*
Institute for Medical Engineering and Science
Materials Science and Engineering (Course 3)
Mechanical Engineering (Course 2)
Nuclear Science and Engineering (Course 22)

*Electrical Engineering and Computer Science (Course 6) reports jointly to
the dean of engineering and the dean of computing.

School of Humanities, Arts, and Social Sciences

Anthropology (Course 21A)
Comparative Media Studies/Writing
(CMS/Course 21W)
Economics (Course 14)
Global 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 Stephen A. Schwarzman College of Computing

Electrical Engineering and Computer Science
(Course 6)*
Institute for Data, Systems, and Society

*Electrical Engineering and Computer Science (Course 6) reports jointly to the dean of engineering and the dean of computing.

Degrees Offered

Bachelor of Science (SB)
Master of Applied Science (MASc)
Master of Architecture (MArch)
Master of Business Administration (MBA)
Master of Business Analytics (MBAn)
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 student centered: each application is evaluated within its unique context. No school, state, or regional quotas are applied, and we do not consider legacy/alumni relations in our process. 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
- Risk taking
- Hands-on creativity
- Intensity, curiosity, and excitement
- Balancing hard work with downtime

Selected Class of 2026 Undergraduate Admissions Statistics

33,767

Applications for first-year admission

1,337 (3.96%)

Offers of admission

1,136

First-year students enrolled

43%

Female

67%

Attended public high schools

11%

International citizens from 63 countries

50

US states represented

18%

Among the first generation in their family to attend college

For more information, visit mitadmissions.org.

Graduate Admission

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

Selected 2022 Graduate Admissions Statistics

33,480

Applications for graduate study

3,551 (10.6%)

Offers of admission

2,217 (62.4%)

First-year students registered in advanced degree programs

40.6%

Female

46.6%

International citizens from 106 countries

For more information, visit gradadmissions.mit.edu.

Enrollments, 2022–2023

11,858
All students

4,657
Undergraduates (39%)

2,244
Women (48%)

2,640
US minority groups (57%)

7,201
Graduate students (61%)

2,830
Women (39%)

1,610
US minority groups (22%)

In 2022–2023, MIT students come from all 50 states, the District of Columbia, four territories, and 135 foreign countries.

Undergraduates by School/College, 2022-2023

School/College	Majors	2nd majors
Architecture and Planning	62	7
Engineering*	2,501 (1,530)	113 (103)
Humanities, Arts, and Social Sciences	60	48
Management	132	45
Science	732	135
Computing*	(1,530)	(103)

Note: Excludes 1,140 first-year students, 11 undesignated sophomores, and 19 special students. 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.

*Students in interdisciplinary programs are included in the totals of the school or college that administers the program. Students in joint programs with the College of Computing are included in the totals for Engineering, with the number of shared students in parentheses. See the Registrar's enrollment reports for details.

Graduate Students by School/College, 2022-2023

School/College	Master's	Doctoral	Special
Architecture and Planning	388	182	0
Engineering*	962 (264)	2,220† (863)	97
Humanities, Arts, and Social Sciences	12	281	0
Management*	1,528 (13)	162 (78)	18
Science*	8	1,223 (5)	0
Computing*	83 (277)	37 (946)	0
Total	**2,981**	**4,105**	**115**

*Students in interdisciplinary programs are included in the totals of the school or college that administers the program. Students in joint programs with the College of Computing are included in the totals for Engineering and Management (with the number of shared students in parentheses), but not in the Computing totals. See the Registrar's enrollment reports for details.

†Includes 186 students working on Harvard degrees only through the Harvard-MIT Health Sciences and Technology Program.

US Minority Group Representation among Students, 2022–2023

Minority group	Undergraduate	Graduate
Asian American	1,581	893
Hispanic	687	501
African American	362	212
American Indian or Alaska Native	8	3
Native Hawaiian or other Pacific Islander	2	1
Total	**2,640**	**1,610**

International Students

There are 3,465 international students enrolled in degree programs at MIT—513 undergraduates (11%) and 2,952 graduate students (41%)—in 2022-2023. Additionally, 643 exchange, visiting, and special students participated in MIT programs.

International Students, by Region, 2022–2023

Region	%
Asia	53%
Europe	20%
Latin America and the Caribbean	9%
North America	6%
Middle East	6%
Africa	4%
Oceania	2%
Total	**100%**

Tuition and Financial Aid

Tuition rates are set by Academic Council each spring for the following academic year.

Undergraduate Tuition and Living Expenses

$57,590

2022–2023 tuition (9 months)

$18,790

Housing and meals

$3,074

Books and personal expenses

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 demonstrated financial need. In 2021–2022, 90% of undergraduates received $178.5 million in financial aid from all sources, with MIT being the largest source. For students with a family income under $140,000 (and typical assets), the Institute ensures that scholarship funding from all sources will allow them to attend MIT tuition-free.

Financial need is the difference between the cost to attend MIT and a family's ability to pay that amount. Need is determined using information provided on the Free Application for Federal Student Aid (FAFSA) and the College Scholarship Service (CSS) Profile. The first $5,400 of financial need is designated as a student contribution and can be met through a combination of summer savings and a student job during the academic year, outside scholarships or grants (including Pell Grants), or student loans. The remaining need, if any, is met with an MIT Scholarship. Students receiving scholarships and grants from sources outside MIT may use that aid to replace the student contribution.

Selected Undergraduate Financial Aid Statistics, 2021-2022

Average need-based MIT Scholarship	$53,997
Students awarded a need-based MIT Scholarship	58%
Students attending tuition-free	37%
Class of 2022 graduates with no student loan debt	85%
Average student loan debt for Class of 2022 graduates who borrowed	$25,080
Average yearly earnings for those who worked	$3,509

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.

$57,590

2022–2023 tuition (9 months)
Specific programs and departments may have different tuition amounts.

$19,895

2022 summer tuition for students enrolled in courses

MIT's residential system can accommodate 37% 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 $928 to $3,299, depending on housing type and location.

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.

Approximately 2,635 graduate students are primarily supported as research assistants and 605 are appointed as teaching assistants; 1,680 are supported on fellowships.

School/College	RA	FE	TA	Other or self supported
Architecture and Planning	52%	21%	18%	8%
Engineering	59%	7%	21%	13%
Humanities, Arts, and Social Sciences	36%	20%	32%	12%
Management	34%	21%	45%	1%
Science	48%	10%	35%	7%
College of Computing	68%	7%	18%	7%
Total	**53%**	**10%**	**27%**	**10%**

Doctoral Student Support by Type and School, 2021-2022

Note: RA=research assistantship, FE=fellowship, TA=teaching assistantship

Academics

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.

Undergraduate Education

MIT believes the best education occurs when students are self-motivated and engaged participants in a dynamic community of learners. Thus, an MIT undergraduate education combines rigorous academics with a "learning-by-doing" approach. MIT's rich experiential learning ecosystem enables students to pursue a wide variety of educational

opportunities in such areas as research, public service and social impact, and entrepreneurship, to name a few.

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 world. UROP offers students the opportunity to join a faculty-led research team or to initiate their own research project.

Another unique feature of an MIT education is the Independent Activities Period, a special four-week term in January that enables students to set their own agenda within a creative and flexible environment.

Undergraduates are encouraged to add an international dimension to their education as well. Students may choose from Institute-wide or departmental study-abroad programs. They may also conduct research abroad, assist with building sustainable communities overseas, or venture out on fieldwork or internships arranged through MIT International Science and Technology Initiatives.

Leadership training opportunities include the Undergraduate Practice Opportunities Program, the Bernard M. Gordon–MIT Engineering Leadership Program, and ROTC programs in the United States Army, Navy/Marine Corps, and Air Force. In addition, Career Advising & Professional Development guides all students as they explore and prepare for careers, graduate study, and life after MIT.

Selected Undergraduate Facts
- MIT has a 3-to-1 ratio of undergraduate students to faculty and instructional staff.
- MIT offers 57 undergraduate major and 59 minor programs.

- The first semester at MIT is graded on a pass/no record basis, giving first-year students time to adjust to the rigor of MIT before receiving letter grades.
- MIT's General Institute Requirements are designed to give every student a broad and strong foundation in core fields of human knowledge, including mathematics; physical, natural, and social sciences; and the humanities and arts.
- First-year students can choose to participate in a first-year learning community, such as the Concourse Program, DesignPlus, Experimental Study Group, or Terrascope.
- In a typical year, more than half of graduating seniors report participating in an international experience while at MIT.
- Nearly 60% of MIT undergraduates participate each year in the Undergraduate Research Opportunities Program, with more than 93% having done so by the time they graduate.

Majors

Aerospace Engineering
African and African Diaspora Studies
American Studies
Ancient and Medieval Studies
Anthropology
Archaeology and Materials
Architecture
Art and Design
Artificial Intelligence and Decision Making
Asian and Asian Diaspora Studies
Biological Engineering
Biology
Brain and Cognitive Sciences
Business Analytics
Chemical Engineering
Chemical-Biological Engineering
Chemistry
Chemistry and Biology

Civil and Environmental Engineering
Comparative Media Studies
Computation and Cognition
Computer Science and Engineering
Computer Science and Molecular Biology
Computer Science, Economics, and Data Science
Earth, Atmospheric, and Planetary Sciences
Economics
Electrical Engineering and Computer Science
Electrical Science and Engineering
Finance
French
German
History
Humanities and Engineering
Humanities and Science
Latin American and Latino/a Studies
Linguistics and Philosophy
Literature
Management
Materials Science and Engineering
Mathematical Economics
Mathematics (General, Applied, or Pure)
Mathematics with Computer Science
Mechanical Engineering
Mechanical and Ocean Engineering
Music
Nuclear Science and Engineering
Philosophy
Physics
Planning
Political Science
Russian and Eurasian Studies
Science, Technology, and Society
Spanish
Theater Arts
Urban Science and Planning with Computer
    Science
Women's and Gender Studies
Writing

Graduate Education

MIT's graduate students and postdocs represent one of the most talented and diverse cohorts of scholars in the world.

The Institute's graduate programs provide collaborative environments and leading-edge facilities, such as MIT.nano, for advanced study. Students work together with faculty to extend the boundaries of knowledge in fields ranging from quantum computing to medicine to political science to the arts. MIT boasts globally prominent master's and doctoral programs in engineering, mathematics, architecture, management, the social sciences, and the humanities.

The Institute for Medical Engineering and Science, the Institute for Data, Systems, and Society, the Center for Real Estate, the Program in Media Arts and Sciences at the MIT Media Lab, and other programs offer interdisciplinary graduate degrees. The Harvard-MIT Health Sciences and Technology Program and the MIT-Woods Hole Oceanographic Institution Joint Program in Oceanography/Applied Ocean Science and Engineering provide opportunities for graduate students to engage with other local institutions.

Roughly one-third of graduate students remain in academia after graduation and the rest pursue careers in industry, government, nonprofits, and other sectors. MIT offers a number of professional/career development and leadership opportunities to prepare students for their chosen career path, such as teaching development through workshops and certificate programs offered by the MIT Teaching+Learning Lab, the Path of Professorship Program for women, and leadership development through the Graduate Community Fellows Program and the Bernard M. Gordon–MIT Engineering Leadership Program.

MIT Libraries

The MIT Libraries are an engine for creating, sharing, and safeguarding knowledge at the Institute and beyond. The Libraries work to improve access to the world's collective knowledge and support the MIT community in many ways.

Equipping scholars with the best content and the skills to use it. The Libraries provide access to tens of millions of items, both physical and digital, and to collections from libraries worldwide. Library specialists help people navigate resources, manage data, and think critically as consumers and creators of information; they play a vital role in supporting data-intensive and computational research across MIT.

Providing an intellectual crossroads. Through thought-provoking programs, free workshops, and the MIT Reads shared reading and discussion program, the Libraries foster connections across the MIT community. Welcoming spaces—including the renovated Hayden Library and Building 14 courtyard—invite users to recharge, find inspiration, and create new knowledge.

Sharing knowledge with the world. The Libraries work to ensure that research is openly and equitably available to the broadest possible audience. Launched in 2019, the Center for Research on Equitable and Open Scholarship investigates how disparate communities can participate in scholarship with minimal bias or barriers and hosts a postdoctoral fellowship program. Since 2009, articles by Institute authors made freely available on DSpace@MIT have been downloaded more than 22 million times, with 57% of faculty articles shared openly.

Stewarding collections unique to MIT. Distinctive Collections preserves and fosters the use of unique and rare items, both tangible and digital, including

MIT-produced materials, archival collections, rare books, visual materials, and the Aga Khan Documentation Center collections.

Information Technolgy and Computing on Campus

Information Systems and Technology (IS&T) strives to maximize the impact of information technology across the Institute's research and education enterprise in support of MIT's mission.

IS&T manages the digital infrastructure, technology architecture, software development, cybersecurity, and overall IT ecosystem of core Institute platforms, including the computing and communications infrastructure and applications. Together, these systems provide the digital foundation for MIT's research, academic, and administrative activities.

Connected campus. IS&T supports and maintains MITnet, the network that powers the Institute's communication and collaboration capabilities.

- MIT's network infrastructure in the Cambridge/Boston area is made up of more than 7,500 miles (12,070 km) of fiber, over 10,000 wireless access points, and 4,000 switches that provide on-campus connectivity.
- MIT maintains high-speed dedicated connections to several global research and education networks, collaborators, and enterprise cloud platforms, including Amazon Web Services, Google Cloud Platform, and Microsoft Azure, ensuring our ability to meet the needs of MIT's research and academic programs.
- The MIT Kendall WiFi network covers approximately 1,000,000 ft^2 (92,903 m^2) of outdoor space, providing high-speed internet service at no cost to residents and visitors to

the Kendall Square area and surrounding neighborhoods as a community service.

Research computing. The Office of Research Computing and Data, the Office of the Vice President for Research, and IS&T collaborate closely to provide efficient and sustainable research computing resources. They support a broad range of research collaborations and the digital infrastructure supporting MIT's core research computing facilities, including Bates Research and Engineering Center and the Massachusetts Green High Performance Computing Center.

MIT's 100-gigabit backbone supports high-speed connectivity across its research enterprise, providing seamless access to the computational resource facilities located throughout campus and beyond, such as Internet2 and the Energy Sciences Network, which in turn provides access to the CERN Large Hadron Collider.

Applications and support. IS&T develops and supports an extensive catalog of software and services, including the following:

- Widely used productivity tools (e.g., Office 365, Adobe, Zoom, Slack, CrowdStrike, and Dropbox) as well as technical software (e.g., MATLAB, SolidWorks) to support education and research activities.
- Access to multiple enterprise cloud platforms and provides managed servers in a hybrid cloud environment for developers.
- 24/7 IT help by phone or email to the MIT community, as well as direct support to more than 50 departments, labs, and centers. Support teams field nearly 100,000 questions annually.

- Nearly 11,000 self-help articles in the Knowledge Base, drawing on the IT expertise at MIT.

Makerspaces

"Learning by doing" is a cornerstone of MIT's educational philosophy, and "making" is an important part of the MIT experience. Makerspaces located throughout the campus offer access to tools and space for members of the MIT community to invent, prototype, and bring their ideas to physical life. The Institute has over 40 design/build/project spaces that add up to over 130,000 ft^2 (12,077 m^2). Tools and facilities for CNC routing, 3D printing, glassblowing, wood and metal working, moldmaking and casting, robotics, circuitry, textiles, ceramics, biomaking, and more are available for class, research, and personal projects. The Institute is building a next-generation campus-wide makerspace in the Metropolitan Storage Warehouse (Met), scheduled to open in 2025.

Project Manus is charged with enhancing campus making and fostering student maker communities. Current projects include Maker-Lodge, a first-year maker training program; The Deep and Metropolis, open-access makerspaces optimizing hands-on trainings for the MIT community; Mobius, an app for locating maker resources on campus and paying for materials; and developing programming for the new campus-wide makerspace in the Met.

Open Learning

MIT Open Learning works to transform teaching and learning at MIT and around the globe through the innovative use of digital technologies by:

- Supporting MIT faculty and students in bold digital teaching and learning experiments to enhance residential education.
- Promoting and enabling quantitative, rigorous, and interdisciplinary research on teaching and learning.
- Providing platforms for technological advances in education.
- Sharing research and best practices by convening and partnering with teachers, schools, universities, and organizations.
- Extending MIT's knowledge and classroom to the world.

MIT Open Learning offers an array of programs and services.

- **Residential Education** facilitates online teaching and learning in MIT on-campus courses. It supports the MITx residential platform that undergraduate students use for their coursework, Canvas, and other learning management systems on campus.
- **Digital Learning Lab** scientists and fellows advance learning strategies and initiatives across campus.
- **OpenCourseWare** offers free, open, publicly accessible web-based materials from more than 2,550 MIT courses.
- **MITx** extends MIT learning to the world through online courses developed and taught by MIT instructors. MIT faculty can put their MITx courses on edX or on MITx Online.
- **MITx MicroMasters** programs provide an affordable, accelerated, and convenient path to a master's degree. Learners who pass a set of MITx graduate-level courses and exams earn a MicroMasters credential

and can apply to an accelerated, on-campus master's degree program at MIT or at one of dozens of pathway universities around the world.

- **MIT xPRO** provides professional development opportunities to a global audience via online courses and programs.
- The **Abdul Latif Jameel World Education Lab** leads a consortium of approximately 20 members to promote excellence and transformation in education worldwide.
- **MIT Bootcamps** offer intensive weeklong programs that challenge participants to develop a sustainable new venture. Innovators come from around the world to learn from MIT faculty and MIT-trained mentors.
- The **MIT Center for Advanced Virtuality** pioneers innovative experiences using technologies of virtuality (e.g., extended reality, video games, and social media) and investigates the impacts of these technologies on learning, simulation, and cognition, as well as their social and ethical implications.
- **MIT Horizon** offers bite-sized articles, videos, and podcasts for workforce learning on emerging technologies.
- **MIT Integrated Learning Initiative** furthers our understanding of learning and education through rigorous, interdisciplinary research.
- **MIT ReACT** (Refugee Action Hub) designs and deploys new learning opportunities for displaced populations around the world.
- The **MIT pK-12 Action Group** takes MIT's learning approach beyond campus to pre-kindergarten through grade 12 learners and teachers around the world, building upon existing efforts and developing new ones.
- **Responsible AI for Social Empowerment and Education (RAISE)**, a collaboration

between Open Learning, the Media Lab, and the Schwarzman College of Computing, is a new MIT initiative to innovate learning in the era of artificial intelligence.

MIT Open Learning also leads the Digital Credentials Consortium, a group of nine universities building an infrastructure for digital academic credentials that can support the education systems of the future.

Campus Life

The Campus

168	**40+**
Acres **(0.68 km^2)**	**Gardens and** **green spaces**
19	**60+**
Residence halls **on campus**	**Public works** **of art**

Originally founded in Boston, MIT relocated to Cambridge in 1916. The Institute is an integral part of the city, a diverse and vibrant community of approximately 117,000 residents noted for its history, intellectual life, and thriving innovation climate. The city hosts more than 47,000 college and university students, many of whom live within its 6.26 mi^2 (16.21 km^2).

MIT's campus extends more than a mile (1.6 km) along the Charles River. At its heart is a group of interconnecting buildings, designed by architect

W. Welles Bosworth (Class of 1889), that facilitate interaction and communication among MIT's schools and departments.

The campus architecture showcases a range of styles, from neoclassical through modernist, brutalist, and deconstructivist. Among the timeless landmarks on campus are buildings designed by leading architects such as Alvar Aalto, Frank Gehry, Steven Holl, Fumihiko Maki, I. M. Pei '40, and Eero Saarinen. Inside, state-of-the-art facilities support MIT's research efforts in multiple disciplines. These facilities range from wet labs, clean rooms, and makerspaces to wind tunnels, robot and drone test labs, and a nanotechnology and advanced imaging center.

MIT has also recently relocated and reopened the MIT Museum in an inviting new space and has several major projects underway on campus, including a new music building, the MIT Schwarzman College of Computing, and a substantial renovation of the historic Metropolitan Storage Warehouse as a hub for design and the new home for the School of Architecture and Planning.

For students, the campus has 19 residence halls (11 for undergraduates and 8 for graduate students and families), each with its own distinctive personality and community. Newer additions to this lineup include the New Vassar Residence Hall for undergraduates and the E37 graduate tower in Kendall Square.

Urban and walkable, the campus encourages sustainable practices in many ways, offering gardens and green spaces, bike-share stations, and free shuttles. 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.

Pedestrian- and bicycle-friendly, Cambridge has six subway stations, a commuter rail line, 29 bus routes, 73 bike-share stations, dedicated bicycle lanes, and numerous shuttles and bikeways, all of which enable visitors and residents to get around without a car.

Housing
Undergraduate Students

Most undergraduates live in one of MIT's 11 on-campus houses or in one of 35 MIT-affiliated fraternities, sororities, and independent living groups (FSILGs). All unmarried first-year students must live in one of the Institute's residence halls. Each on-campus residence hall has a live-in house team comprising a head of house (usually a senior faculty member) as well as a house operations manager and other professional staff, including an area director and graduate resident advisors, who support residents. On-campus housing is guaranteed for four consecutive years, and many students elect to remain on campus following their first year or move to an FSILG. Currently, more than 3,500 under-graduates live on campus.

In 2022–2023, approximately 1,700 students were affiliated with an FSILG; approximately 1,000 of them chose to live in an FSILG community as an alternative to a traditional residence hall.

Graduate Students

More than 2,200 graduate residents live in MIT's eight graduate houses conveniently located on campus. Five of the available houses are able to accommodate graduate students and their partners. In addition, two of the eight graduate residences can accommodate over 400 students with families. Approximately 90 graduate students live in undergraduate residence halls as graduate resident advisors.

Sustainability

MIT's comprehensive commitment to sustainability aims to transform the Institute into a powerful model that generates just, equitable, applicable, and scalable solutions for responding to the unprecedented challenges of a changing planet. In these efforts, MIT has mobilized its community—from researchers to students to faculty and staff—to tackle climate change at the level of the campus and beyond.

- Launched in 2021, Fast Forward: MIT's Climate Action Plan for the Decade calls for the elimination of direct campus emissions by 2050, with a near-term milestone of a net-zero MIT by 2026.
- To reach its climate goals, the Institute is focused on making buildings dramatically more energy efficient, transitioning to electric vehicles, and enabling large-scale renewable energy projects, among other strategies.
- Since 2014, MIT has reduced its net emissions by approximately 20%.
- The Access MIT program provides generous subsidies for staff, faculty, and postdocs for low-carbon commuting—including subway, bus, bicycling, and commuter rail.
- MIT sponsors four Bluebike stations on campus, with a total of 207 docks. The MIT community completed more than 485,900 bike-share trips in 2022.
- New campus construction and major renovation projects aim to meet the national LEED Gold (version 4) certification standard. To date, MIT has completed more than 24 LEED projects, including three LEED Platinum projects.

MIT's Fast Forward climate action plan is both outward facing—addressing climate challenges on the global scale—and focused on the campus level. Campus climate action is organized around 14 commitments

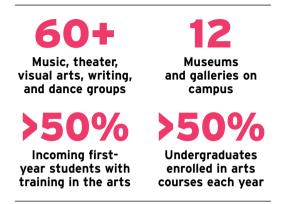related to climate mitigation, resiliency, and leadership and is supported by cross-departmental teams.

More than two dozen offices, programs, and initiatives at MIT work to address sustainability and climate change issues, including the MIT Office of Sustainability, the Environmental Solutions Initiative, the MIT Energy Initiative, the MIT Climate & Sustainability Consortium, and the Abdul Latif Jameel Water and Food Systems Lab. MIT community groups also contribute significantly to sustainability work, with no fewer than 20 student- and staff-led groups advocating for and advancing climate change solutions. Recurring initiatives of the Graduate Student Council and Undergraduate Association's committees on sustainability and the staff Working Green Committee include a monthly Choose to Reuse swapfest and hackathons that engage students, industry, and thought partners in finding real-life solutions to sustainability challenges.

An Environment and Sustainability Minor offers undergraduates an opportunity to delve into interdisciplinary coursework and investigations into real-world challenges facing people and the planet. Coursework includes opportunities to devise solutions for the campus itself.

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. The Institute also partners with the cities of Cambridge and Boston to develop sustainability solutions for MIT and the world and is a member of the Boston Green Ribbon Commission.

Visit sustainability.mit.edu and datapool.mit.edu to learn more.

The Arts

60+
Music, theater, visual arts, writing, and dance groups

12
Museums and galleries on campus

>50%
Incoming first-year students with training in the arts

>50%
Undergraduates enrolled in arts courses each year

The arts at MIT are rooted in experimentation, risk taking, and imaginative problem solving. The Institute offers highly regarded degree programs in architectural design; art, culture, and technology; comparative media studies; history, theory, and criticism of architecture and art; music; theater arts; and writing. Undergraduate minors are also offered in several of these fields. Many MIT faculty have received awards in recognition of their work in the arts, including the Pulitzer Prize, Grammy Award, Guggenheim Fellowship, and MacArthur Fellowship. MIT students are also strong contributors to the vibrant arts culture that permeates campus life.
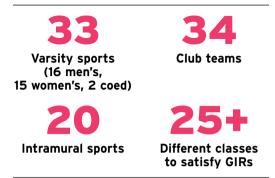
The MIT Museum presents programs, exhibitions, and events inspired by the spirit and drive of innovation, welcoming all to participate in public dialogue and conversation. The Institute's past achievements are celebrated through the museum's extensive and unique collections, while MIT's current research, innovation, and design provide a catalyst for exhi-

bitions and ongoing programs. The museum also produces the annual Cambridge Science Festival, featuring multiple days of programs and activities. In October 2022, a reimagined museum opened in its new location at MIT's Kendall Square gateway.

The MIT List Visual Arts Center is the Institute's contemporary art museum. Its core mission is to exhibit, collect, and commission visual arts for MIT. The List presents six to eight exhibitions annually in conjunction with a broad range of education programs free to both the MIT community and the general public. It also maintains and adds to MIT's permanent collection of more than 3,500 artworks that includes over 60 public sculptures and hundreds of paintings, prints, photographs, and drawings located throughout campus. The List Center commissions new works for the MIT Public Art Collection through the MIT Percent-for-Art Program, and oversees the Student Lending Art Program that allows MIT students to annually borrow original works of art from the collection to hang in their living spaces.

The MIT Center for Art, Science & Technology facilitates and creates opportunities for artists at MIT and beyond to exchange ideas 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.

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 multidisciplinary artist and composer Pamela Z (2022), designer Thomas Heatherwick (2020), and singer and actress Audra McDonald (2018).

Athletics and Recreation

33
**Varsity sports
(16 men's,
15 women's, 2 coed)**

34
Club teams

20
Intramural sports

25+
**Different classes
to satisfy GIRs**

MIT's Department of Athletics, Physical Education, and Recreation offers opportunities for sports instruction and participation at all levels. The Institute supports one of the broadest intercollegiate athletic programs in the world, as well as an expansive club sport program. MIT provides group exercise and wellness classes, personal and group training, a variety of aquatic classes, and sport skill instruction for those who wish to engage in other recreational programs.

As part of the General Institute Requirements (GIRs), each student must earn eight points through physical education and wellness courses and complete the swim requirement. Seasonal offerings include golf, sailing, broomball, and ice-skating, while additional specialty courses include scuba, backpacking, top-rope climbing, kayaking, downhill skiing, and snowboarding.

- Approximately 25% of undergraduates join a team while at MIT.
- MIT competes mainly against NCAA Division III New England colleges but also routinely participates in regional and national championships.

- The Institute has earned 385 Academic All-America honors, the most among all NCAA Divisions.

With 10 buildings and 26 acres (0.11 km^2) 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 Jack Barry Field, lighted sports-turf venues, are adjacent to the Zesiger Center. In 2018, the duPont Outdoor Tennis courts were outfitted with a new playing surface, fencing, and top-level lighting for all 12 courts. 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.

Fun and Culture
MIT Colors

Cardinal red and silver grey first came to represent MIT in 1876, following the recommendation of the "School Color Committee," convened in February that year expressly for the purpose of defining its official colors. According to committee chair Alfred T. Waite (Class of 1879), cardinal red was selected because it was reminiscent of the American flag and "has always stirred the heart and mind of man." Gray, on the other hand, was chosen for its "quiet virtues of modesty and persistency and gentleness." The committee's choices were affirmed by the Alumni Association and approved by the faculty that May.

Today, MIT's colors are displayed in myriad ways, one of the most prominent being through the Cardinal and Gray Society, the alumni group for those who have reached the 50th anniversary of their graduation. The group plays an important role at Commencement, as newly inducted members–

wearing the society's distinctive cardinal red jacket and gray slacks or skirt–head the processional and lead the graduates into Killian Court.

Tim the Beaver

Tim the Beaver has represented MIT since 1914, when he was adopted as the mascot at the suggestion of the Technology Club of New York during their annual dinner, at which President Richard Maclaurin was presented with two handsomely mounted real beavers. Other contenders included the kangaroo, who goes forward by leaps and bounds, and the elephant, who is wise, patient, strong, hardworking, and has a good, tough hide. The club chose the beaver–nature's engineer, or in Lester Gardner's (Class of 1898) words, "an industrious American animal noted for its mechanical skills who does its best work after dark."

Brass Rat

In a ritual long enjoyed by MIT undergraduates, a committee of sophomores gathers each year to design their class ring, which is ceremoniously revealed during the spring term. 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 (the Institute's mascot) on top, 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 graduating class. Made of gold, the ring's nickname, "the Brass Rat," derives from its color and the prominence of the beaver mascot. A concrete symbol of an MIT education, the distinctive Brass Rat is recognized worldwide and instantly identifies MIT alumni to one another.

Pi Day

In true MIT spirit, the Institute typically releases admission decisions on Pi Day (March 14), an annual celebration of the mathematical constant. Frequently, these admissions decisions are released at 6:28 p.m., which is known colloquially as "Tau time" (ϖx2). An exception was made for the early release time of decisions on March 14, 2015—known as Super Pi Day—as the date reflects the full first five digits of Pi (3.1415)—when admissions decisions were released at 9:26 a.m. in order to continue with the next three digits of Pi. MIT Admissions creates an engaging video to accompany the announcements and celebrate the tradition, which it posts to the MIT Admissions Blog.

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—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.

Though not officially sanctioned, hacks can be appreciated for their technical prowess and humorous digs at rival institutions. Examples include 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 and the 2006 cross-country theft of Caltech's Fleming Cannon.

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. 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 certificate printed on faux parchment, newly minted pirates are rumored to swear a secret oath.

MIThenge

The Infinite Corridor runs through the center of MIT's campus, connecting its east and west sides. Twice a year, an astronomical event lights up the length of the hallway that runs through Buildings 7, 3, 10, 4, and 8. In November and again in January, the setting sun aligns with that particular section, flooding its third-floor windows with a stream of direct sunlight that dazzles spectators observing from the west end of Building 8. The assumed azimuth is 245.75 degrees. Now an annual tradition known as "MIThenge," this phenomenon was originally discovered, calculated, and publicized in 1975-1976 by students from the Department of Architecture.

MIT Mystery Hunt

The MIT Mystery Hunt is a puzzlehunt competition that takes place in January. The hunt challenges participating teams to solve a series of puzzles that lead to "the coin" (physical or virtual) hidden somewhere on campus. Puzzles can be as creative, complex, collaborative, unusual, physical, and solvable as hunt organizers decide to make them. The winning team gets to write the subsequent year's hunt—and redefine the rules.

Launched in 1981, the MIT Mystery Hunt continues today as strong as ever. It is widely regarded as one of the oldest and most complex puzzlehunts in the world, attracting as many as 2,000 people annually and inspiring similar competitions at universities, companies, and cities around the world.

MIT and the Community

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 financial resources, the use of MIT facilities, representation on boards and committees, educational programs, and volunteer engagement. 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.

Departments, labs, and centers at MIT often create programming to inspire K-12 student interest in science, technology, engineering, and math. The Institute is working to increase awareness of these offerings to local schools and ensure equitable access to these opportunities.

The Institute's Priscilla King Gray Public Service Center provides programming, guidance, information, and support to students, faculty, and staff interested in public service and serves as a resource for both MIT and the community at large.

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 15.5% of the city's revenue stream. MIT pays taxes on its

commercial property and provides an annual voluntary payment in lieu of taxes (PILOT) for property that is used for academic purposes and is legally tax exempt. In fiscal year 2022, the Institute made a PILOT contribution of approximately $2.2 million to the city and paid approximately $76 million in real estate taxes.

The research, startups, and talent pool that MIT generates are a magnet for investment that catalyzes and fuels the local innovation economy. Kendall Square, at the eastern end of MIT's campus, is the seat of a thriving innovation hub. To provide expanded opportunities in the local innovation economy, the Job Connector by MIT serves as a free workforce development hub for Cambridge residents to explore opportunities for job readiness, skill training, internships, and apprenticeships. The Institute's Kendall Square Initiative and Volpe mixed-use development projects will also enhance the life and character of the area by adding over 2.5 million ft^2 (232,000 m^2) of retail, office, and residential space and more than four acres (16,000 m^2) of open space. MIT's Open Space Programming office creates diverse and vibrant events and activities in MIT's Kendall open spaces.

Research at MIT

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 include:

1930s Pioneering high-speed photography

1940s Engineering practical microwave radar

1950s Building the magnetic core memory that made digital computers possible

1960s Developing the inertial guidance systems for the Apollo space program

1970s Inventing the first workable public key cryptographic system

1980s Discovering the smallest known, most abundant photosynthetic bacteria in the ocean

1990s Using new genetic and multiple-cell monitoring technologies to demonstrate how animals form memory about new environments

2000s Creating a new type of matter, a gas of atoms that shows high-temperature superfluidity

2010s Making the first direct detection of gravitational waves reaching the Earth (in collaboration with Caltech and others around the world), confirming Albert Einstein's prediction from a century ago

This stream of discovery continues. Here are just a few accomplishments from the last 10 years:

- Developing a new steelmaking process that produces no emissions other than pure oxygen
- Adapting a CRISPR protein that targets RNA, rather than DNA, for use as a rapid, inexpensive, highly sensitive diagnostic tool with the potential to transform research and global public health
- Developing with scientists from Brigham and Women's Hospital a way to power and communicate with devices implanted within the human body. The implants are the size of a grain of rice, have no batteries, and are powered by radio frequency waves.

- Capturing the first direct image of a black hole as part of an international team of over 200 scientists
- Ramping up a high-temperature superconducting electromagnet to a field strength of 20 tesla, the most powerful magnetic field of its kind ever created on Earth
- Reliably producing oxygen on the surface of Mars using an instrument the size of a lunchbox that can do the work of a small tree

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

During fall 2022, approximately 5,370 researchers (including 1,430 postdoctoral scholars and 430 visiting faculty and scientists) worked with MIT faculty and students.

As an institution, MIT encourages interdisciplinary research across department and school boundaries while focusing on tackling great societal challenges. 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.

Primary sponsor	Expenditures (in millions)	%
Industry	$149.90	19%
Department of Health and Human Services	$145.59	19%
Department of Defense	$131.29	17%
Foundations and other nonprofits	$93.86	12%
National Science Foundation	$87.35	11%
Department of Energy	$82.12	10%
NASA	$37.67	5%
State, local, and foreign governments	$24.85	3%
All other federal agencies	$16.67	2%
MIT internal	$13.86	2%
Total	**$783.17**	**100%**

Research 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.

Centers, Labs, and Institutes

Independent interdisciplinary centers, laboratories, and institutes:

Abdul Latif Jameel Clinic for Machine Learning in Health
Abdul Latif Jameel Poverty Action Lab
Center for Environmental Health Sciences
Center for Global Change Science
Center for International Studies

Center for Real Estate
Center for Transportation and Logistics
Computer Science and Artificial Intelligence
    Laboratory
Division of Comparative Medicine
Haystack Observatory
Institute for Data, Systems, and Society
Institute for Medical Engineering and Science
Institute for Soldier Nanotechnologies
Koch Institute for Integrative Cancer Research
Laboratory for Information and Decision Systems
Laboratory for Nuclear Science
Leventhal Center for Advanced Urbanism
Lincoln Laboratory
Materials Research Laboratory
McGovern Institute for Brain Research
MIT Energy Initiative
MIT Kavli Institute for Astrophysics and Space
    Research
MIT Media Lab
Nuclear Reactor Laboratory
Picower Institute for Learning and Memory
Plasma Science and Fusion Center
Research Laboratory of Electronics
Singapore–MIT Alliance for Research and
    Technology
Sociotechnical Systems Research Center

Institute Initiatives

Institute-wide research and educational activities:

Abdul Latif Jameel World Water and Food
    Systems Lab
Center for Clinical and Translational Research
Internet Policy Research Initiative
MIT Environmental Solutions Initiative
MIT Innovation Initiative
MIT.nano
Morningstar Academy for Design

Prominent Programs

Notable centers, laboratories, institutes, and programs that engage the efforts of multiple MIT faculty:

Abdul Latif Jameel World Education Lab
Art, Culture, and Technology Program
Center for Archaeological Materials
Center for Bits and Atoms
Center for Collective Intelligence
Center for Computational Science and
    Engineering
Center for Constructive Communication
Center for Energy and Environmental Policy
    Research
Center for Information Systems Research
Concrete Sustainability Hub
Deshpande Center for Technological Innovation
Edgerton Center/D-Lab
Initiative on the Digital Economy
Institute for Work and Employment Research
Joint Program on the Science and Policy of
    Global Change
Knight Science Journalism Program
Laboratory for Financial Engineering
Laboratory for Manufacturing and Productivity
Legatum Center for Development and
    Entrepreneurship
Martin Trust Center for MIT Entrepreneurship
Microsystems Technology Laboratories
MIT Center for Art, Science, and Technology
MIT-IBM Watson AI Lab
MIT Portugal Program
MIT Quest for Intelligence
MIT Sea Grant College Program
MIT-Woods Hole Oceanographic Institution Joint
    Program in Oceanography/Applied Ocean
    Science and Engineering
Operations Research Center
Simons Center for the Social Brain
Women's and Gender Studies Program

Key Local Collaborators

MIT's research extends out through collaborations with leading institutes and consortia both locally and around the world. These are the notable local centers, institutes, and laboratories that have a close research affiliation with the Institute:

  Advanced Functional Fabrics of America
  Broad Institute
  Charles Stark Draper Laboratory
  Howard Hughes Medical Institute
  Massachusetts Green High Performance
     Computing Center
  Ragon Institute of MGH, MIT and Harvard
  Whitehead Institute for Biomedical Research

Lincoln Laboratory

MIT's Lincoln Laboratory, in Lexington, Massachusetts, is a federally funded research and development center (FFRDC) that develops advanced technology to address national security needs. Its core competencies are in sensors, information extraction (signal processing), communications, and decision support—all supported by a broad research base in computing and advanced electronics. Other areas of innovative research and development are cybersecurity, biotechnology, novel engineered materials, autonomous systems, and humanitarian assistance and disaster relief systems. Field-testing prototype systems is strongly emphasized. As a Department of Defense FFRDC, the laboratory transitions technologies to both the military services and industry. Approximately 4,140 MIT employees and 469 subcontracted personnel worked at Lincoln Laboratory in fiscal year 2022.

Ninety percent of Lincoln Laboratory's funding comes from the US Department of Defense.

Lincoln Laboratory Program Funding, by Mission Area, Fiscal Year 2022*

Mission area	% of total funding
Space Systems and Technology	19%
Communication Systems	17%
Air, Missile, and Maritime Defense Technology	17%
Advanced Technology	12%
Tactical Systems	10%
Homeland Protection	9%
Cybersecurity and Information Sciences	6%
Intelligence, Surveillance, and Reconnaissance Systems and Technology	4%
Advanced Research Portfolio	3%
Air Traffic Control	3%
Total	**100%**

*Lincoln Laboratory's fiscal year runs from October 1 to September 30.

MIT and Industry

Since its founding, MIT has encouraged researchers to work collaboratively across departments, fields, and institutional boundaries to solve problems. This has led to thousands of fruitful partnerships with industry and other leading research institutions.

Approximately 800 companies work with faculty and students in Institute-wide programs such as MIT Corporate Relations' Industrial Liaison Program (the main conduit between corporations and MIT)

and MIT Startup Exchange (which promotes collaboration and partnerships between MIT-connected startups and industry), as well as in many other collaborations.

Research sponsored directly by industry totaled $166 million in fiscal year 2022, or 21% of total MIT research expenditures. According to the National Science Foundation, MIT consistently ranks first in industry-financed research and development expenditures among universities and colleges without a medical school.

The Technology Licensing Office (TLO) moves innovations and discoveries from the lab to the marketplace for the benefit of the public and to amplify MIT's global impact. The TLO cultivates an inclusive environment of scientific and entrepreneurial excellence and bridges connections from MIT's research community to industry and startups by strategically evaluating, protecting, and licensing technology. In fiscal year 2022, the TLO received 696 invention disclosures (including 111 from Lincoln Laboratory), filed 311 new US patents, had 354 US patents issued, executed 99 licenses and options, had 27 companies formed using MIT intellectual property, and received $82.7 million in total licensing revenue.

MIT's strong corporate connection also is reflected in its extensive business-oriented curricula, such as the Leaders for Global Operations program, System Design and Management program, Sloan Fellows Program in Innovation and Global Leadership, Supply Chain Management program, and other degree programs that offer an industry internship component.

MIT Sloan Executive Education offers custom programs for organizations, executive certificates, and more than 90 online and in-person short courses

for individuals. Led by MIT Sloan faculty, executive programs provide business professionals with a targeted and flexible means to advance their career goals and position their organizations for future growth.

MIT Professional Education provides technology professionals around the world a gateway to renowned MIT research, knowledge, and expertise through advanced education programs designed specifically for them. Programs are offered in person, online, and in multiple languages.

Innovation and Entrepreneurship

MIT was founded with the aim of providing students with an education that combines rigorous academic study with practical, hands-on learning. This emphasis on practice is infused into the Institute's innovation and entrepreneurship (I&E) curriculum, student groups, I&E hubs, and programming.

MIT promotes diversity, equity, and inclusion in I&E by elevating opportunities for community members who are traditionally underrepresented in STEM and innovation through Inclusive Innovation Programs and the Women in Innovation and STEM Database at MIT.

The Institute offers more than 150 courses that intersect with I&E as well as a minor in entrepreneurship and innovation, an MBA E+I Track, and Independent Activities Period and summer opportunities.

MIT has more than 50 I&E student clubs and initiatives, including the MIT $100K Entrepreneurship Competition and the MIT Clean Energy Prize, and events such as Hacking Arts and Hacking Medicine.

Innovation and Entrepreneurship Hubs

MIT InnovationHQ (iHQ) is a home for the Institute's thriving community of innovators and entrepreneurs. Offering 25,000 ft² (2,323 m²) of workspaces, meeting rooms, and event spaces, iHQ encourages the cross-pollination of ideas among MIT students, faculty, staff, and the global innovation community.

The Martin Trust Center for MIT Entrepreneurship provides frameworks, courses, co-curricular programs, facilities, advisory services, and processes to create a rigorous, practical, customized, and integrated educational experience.

Programs

More than 85 resources are dedicated to fostering I&E at MIT. Here are just a few:

- The Bernard M. Gordon–MIT Engineering Leadership Program supplements MIT's technical education with the leadership skills that prepare young engineers for effective careers in engineering through innovative experiential and theoretical coursework and practice and reflection exercises.
- The Deshpande Center for Technological Innovation awards research grants and provides other types of assistance to faculty members whose work shows the potential to benefit society, transform markets and industries, and improve the quality of life for people across the globe.
- The Legatum Center for Development and Entrepreneurship runs a fellowship program for students with a commitment to building ventures through principled entrepreneurial leadership and provides grants for students looking to experience global entrepreneurship opportunities.
- MIT D-Lab works with people around the world to develop and advance collaborative approaches

and practical solutions to global poverty challenges by offering more than 15 MIT classes and student research and fieldwork opportunities.

- The **MIT IDEAS Global Challenge** is a social entrepreneurship program that enables MIT student-led teams to apply their education and expertise in collaboration with community partners to address social and environmental challenges around the world.
- The **MIT Office of Innovation** supports MIT's innovative people, programs, and partnerships by catalyzing the iHQ infrastructure, enabling MIT's innovation programs, and stewarding the wider I&E community.
- The **MIT Sandbox Innovation Fund Program** provides seed funding, mentorship, and tailored entrepreneurship education that empowers student innovators to explore ideas, take risks, and prepare to launch.
- The **MIT Startup Exchange** promotes collaboration and partnerships between MIT-connected startups and industry, principally members of MIT's Industrial Liaison Program.
- **MITdesignX** is a design innovation and entrepreneurship program that empowers students to build new business ventures and forward-thinking solutions designed to address critical challenges facing the future of cities and the human environment.
- **Mission Innovation X** enables mission-driven organizations and dual-use ventures to better solve the world's biggest challenges. It also runs high-impact venture development programs such as the Venture Exploration Program and Proto Ventures.
- The **Technology Licensing Office** helps MIT's research community connect to industry and startups by strategically evaluating, protecting, and licensing technology.

- **Venture Mentoring Service** is a confidential service for entrepreneurs in the MIT community that connects entrepreneurs with teams of carefully selected mentors to help turn their ideas into ventures.

Alumni

MIT Students after Graduation

Upon graduation, MIT students are well prepared and successful applicants for jobs or graduate school. They use a variety of MIT resources, including networking; career fairs; attending employer programs; advising; and professional development services, clubs, and organizations. MIT Career Advising and Professional Development (CAPD) and other Institute resources, along with faculty, advisors, departmental staff, and alumni, help guide students applying to graduate and professional schools. Students interact with employers and graduate schools through career fairs, employer information sessions, and recruiting partnerships. In the 2021–2022 academic year, the majority of company engagements took place via virtual career fairs, virtual recruiting, virtual information sessions and programs, and through formal partnerships with individual companies.

2022 Graduating Students' Post-Graduation Plans			
Plan	Bachelor's	Master's	Doctoral
Graduate school	43%	13%	–
Work	52%	81%	99%

Sources: 2022 Graduating Student Survey, Doctoral Exit Survey. Institutional Research, Office of the Provost.

Graduating bachelor's students going on to graduate school indicated pursuing one or more of the following: master's (62%), doctoral (32%), and medical (6%) degrees. In 2022, the top universities for bachelor's recipients pursuing graduate study were MIT, Stanford, Harvard, UC Berkley, University of Washington, Columbia, Georgia Tech, and Oxford. Master's students seeking further study were primarily pursuing doctoral (94%) and master's (6%) degrees. Most master's students (72%) continued their studies at MIT.

Approximately 14% of graduating bachelor's and 18% of graduating master's students indicated they would be working at an employer considered to be a start-up. More than half of doctoral students planning to work (58%) were choosing to work in academic or research institutions. Of those entering academia, 16% had tenure-track faculty appointments.

Additional 2022 Post-Graduation Employment Statistics

Plan	Bachelor's	Master's	Doctoral
Expect to work in the US	97%	84%	91%
Had an internship/externship that led to accepted job offer	42%	31%	–

Sources: 2022 Graduating Student Survey, Doctoral Exit Survey. Institutional Research, Office of the Provost.

MIT graduates who continue to employment are offered competitive salaries after graduation. Typically, they receive salary offers 30–40% above the national average for new college graduates, depending on the industry. Additional salary data is available on the CAPD website.

Organizations that Hire MIT Graduates

Many companies and organizations regularly recruit at MIT. The following is a brief list:

Accenture
Amazon
Amgen
Apple
Boston Consulting Group
Capital One
Citadel
Ginkgo Bioworks
Goldman Sachs
Google
IBM
Intel
Jane Street Capital
Massachusetts General Hospital
Mathworks
Meta
McKinsey
Microsoft
NASA, Jet Propulsion Lab
National Institutes of Health
NVIDIA
Rivian
SpaceX
US Air Force

MIT Alumni Association

The MIT Alumni Association seeks to engage and inspire the MIT global community to make a better world. It serves as a platform to strengthen the ties of MIT's 144,788 living alumni and its students and friends with the Institute and with one another, and it offers opportunities for connection through various resources, programs, services, and channels.

Geographic Distribution of Alumni	
Region	**Number**
United States and Possessions	110,827
New England	27,968
Mid-Atlantic	27,282
West	22,949
Southwest and South Central	9,485
Great Lakes	7,782
Southeast	7,591
Northwest and Great Plains	6,896
Alaska and Hawai'i	591
Puerto Rico, the Virgin Islands, and other US territories	283
Asia	9,817
Europe	6,934
North America (other than US)	2,584
South America	1,774
Pacific Ocean Islands and Australia	722
Africa	594
Central America	80
Total	**133,332**

Note: Includes only alumni with known addresses. Data as of July 1, 2022.

In fiscal year 2022, 63% of living alumni engaged with MIT philanthropically, virtually, or face-to-face. More than 17,000 alumni volunteered in service to the MIT community. MIT Annual Giving reported $89.6 million in gifts, and more than 36,000 alumni, students, and friends gave to MIT.

Resource Development

During fiscal year 2022, nearly 33,000 individuals and organizations gave or pledged $725 million, the second-highest fundraising total in MIT's history, to support the talented people of MIT and their quest to invent, discover, and make a better world.

These contributions provide critically needed unrestricted funds and vital resources designated to a range of priorities. Unrestricted funds—which can be directed where they are most needed—have helped MIT accelerate its commitment to action on climate change and have enabled the Institute to realize opportunities such as the redevelopment of Kendall Square.

MIT continues to cultivate the support of its alumni and friends for ongoing core needs—such as undergraduate scholarships, graduate fellowships, professorships, campus construction, athletics, and the arts—and seeks opportunities to focus fundraising efforts on what drives the Institute's giving community: the creation of new knowledge and solutions for the world's most difficult problems.

Operating Financials

Value of Plant and Invested Assets, Fiscal Year 2022	
Asset	**Value (in millions)**
Land, buildings, and equipment, net book value	$4,686.5
Market value of endowed funds	$24,600.8
Market value of total investments	$32,548.6

Gifts and Pledge Payments to MIT, Fiscal Year 2022	
Source	**Amount (in millions)**
Foundations	$364.3
Individuals	$210.4
Corporations	$103.9
Other	$0.2
Total	**$678.8**

Gift and Pledge Payment Designations, Fiscal Year 2022

Designation	Amount (in millions)
Research and education programs	$390.0
Undergraduate education and student life	$112.0
Faculty chairs	$53.0
Construction and renovations	$50.0
Unrestricted	$32.9
Scholarships and other undergraduate aid	$27.0
Graduate fellowships	$9.0
Undesignated and miscellaneous	$4.9
Total	**$678.8**

Operating Expenditures, Fiscal Year 2022

Category	Expenditures (in millions)	%
Sponsored research	$1,830.0	44%
Instruction and unsponsored research	$1,272.9	30%
General and administrative*	$1,088.4	26%
Total	**$4,191.3**	**100%**

*Includes auxiliary enterprises and Alumni Association.

Operating Revenues, Fiscal Year 2022

Category	Revenues (in millions)	%
Sponsored support– Lincoln Laboratory	$1,119.8	26%
Investment return to operations	$1,022.2	24%
Sponsored support–Campus	$846.0	20%
Gifts and bequests for operations	$455.7	11%
Tuition, net of discount	$415.3	9%
Other revenue	$242.0	6%
Auxiliary enterprises	$142.1	3%
Sponsored support– Singapore-MIT Alliance for Research and Technology	$22.1	1%
Total	**$4,265.2**	**100%**

Accreditation

MIT is accredited by the New England Commission of Higher Education.

Inquiries regarding MIT's accreditation status may be submitted to MIT at accreditation@mit.edu or directly to the commission:

New England Commission of Higher Education
301 Edgewater Place, Suite 210
Wakefield, MA 01880
telephone 781-425-7785
email info@neche.org

Many degree programs at MIT are accredited by specialized professional accrediting bodies, including ABET, the Association to Advance Collegiate Schools of Business, the American Chemical Society, 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
Massachusetts Institute of Technology

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

W16	Kresge Auditorium
W20	Student Center
7	Information Center
10	Lobby 10 and Great Dome
K	Killian Court
N	Hockfield Court
32	Stata Center
76	Koch Building
E14	Media Lab
E15	List Visual Arts Center
E28	MIT Museum
E38	MIT Welcome Center
E51	Wong Auditorium, Tang Center
E62	Sloan School
T	Kendall T Station

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m.mit.edu

NW98
NW86
NW23 NW22 NW17 NW16 NW10
NW35 NW12 NW13 NW14 NW15 NW21 NW30 NW32 NW20
W41 (Under construction)
W46 W59 W64 W79 W87 W88 W97 W98
W31 W32 W33 W34 W35 W36 W55
W53 W18 (Under construction) W15 W16 W11 W20
W91 W92 W83 W84 W85 W70 W71 W51 W51D W51C W61 W5 W4 W1 W2 W7 W8

West Campus

Henry G. Steinbrenner Stadium
Fran O'Brien Field
Briggs Field
Jack Barry AstroTurf Field
du Pont Tennis Courts
Amherst Alley
Amherst Street
du Pont Court
Lowell Court

Vassar Street
Sidney Street
Pacific Street
Landsdowne Street
88 Sidney Street
65 Landsdowne Street
35 Landsdowne Street
80 Landsdowne Street (garage)
40 Landsdowne Street
Albany Street
Cross Street
Main Street

Le Meridien Cambridge Hotel

N51 N52 N57 N56 N16 N9 N10 N16C N16B N10 N9
MIT P N4

41 42 43 45 (Under construction) 46 48
35 37 39 38 34 36 32D 32G 32
33 17 31 24 26 57 68
9 13 12 16 56 66
7A 11 10 8
7 6C 18 54
3 5 6B 14N 14W 14E
4 2 14S 50
Killian Hall
Compton Court
Eastman Court
McDermott Court
Saxon Lawn
K
62 64

700 TS NE48
600 TS
500 TS NE49
400 TS NE46
NE47 NE45
300 TS
200 TS
100 TS
Technology Square

The Charles Stark Draper Laboratory, Inc.
Whitehead Institute
Broad Institute
NE83 NE125A NE103 NE36 NE30 NE18 EE19

76
N
32
7
10
W16

E19 E17 E18 E25 E23 E15 E38 E37 E40 E53 E52 E60 E62 E51 E90 E94 E70 1 Broadway
East Campus
Kendall Square
Kendall Open Space
MIT Coop
Marriott Hotel
Kendall Hotel
E2 E1

Charles River
Memorial Drive
To Boston
Downtown Boston ▶
77 Massachusetts Avenue
Vassar Street
Richard J. Resch Boathouse
Walter C. Wood Sailing Pavilion
W8 51
Hyatt Regency
Loup Ellow Bridge