

## MANAGEMENT

### Graduate Study

The MIT Sloan School of Management offers opportunity for graduate study leading to the degrees of Master of Business Administration, Master of Science in Management, Master of Science in Management of Technology, Master of Finance, Master of Business Analytics, Master of Science in Management Studies, and Doctor of Philosophy. In addition, there are two dual degree options: an MBA/SM with the MIT School of Engineering, known as the Leaders for Global Operations (LGO) program; and an MBA/MPP or MPA with the Harvard Kennedy School.

#### **Admission Requirements for Graduate Study**

Applications are welcome from college graduates in all areas of concentration—the humanities, social sciences, physical sciences, and engineering. Please see the individual program websites for specific entrance requirements and more information.

#### **Master of Business Administration**

The MIT Sloan School MBA program (<http://mitsloan.mit.edu/mba>) offers a course of study in graduate management education, leading to a master's degree in Business Administration (MBA) or Master of Science in Management (SM). Degree candidates are admitted in winter or spring to a program that begins with a mandatory orientation program in August. The two-year program of study requires candidates to complete a core curriculum plus 144 units of graduate elective subjects. The program of study focuses on management science, preparing students to analyze and solve organizational and performance issues in a management context. Students also fulfill research and leadership requirements through activities in the mid-term Sloan Intensive Period and through elective coursework. Residency for four academic terms is required. A grade point average (GPA) of 4.0/5.0 (B) is required at the time of graduation.

The MBA curriculum is designed for maximum flexibility, allowing students to create an individual program best suited to their needs and career interests. During the first term, students take a sequence of core subjects with the option of one of three elective subjects.

In the first term, MBA students are assigned to one of 60 teams consisting of six to seven people. These teams are combined into six larger sections, called cohorts or oceans, for the fall core subjects. Students take all the core subjects in the same assigned section, which facilitates cohort integration and the formation of study groups.

After the first term, students have a wide range of elective subject choices. Students are given a great deal of independence in choosing their subjects, and they may design a program that includes a depth of focus as well as breadth. This includes the option

of earning a certificate by enrolling in and completing the elective requirements for a track or certificate program. The MBA Program currently offers six certificates: in finance, enterprise management, entrepreneurship and innovation, healthcare, sustainability, and business analytics.

The Sloan Intensive Period, offered each term, provides students and faculty with the opportunity to explore jointly, in a nontraditional setting, what makes MIT Sloan unique: exceptional research expertise, leadership acumen, and the hands-on application of knowledge.

Practical exposure to management takes place in the MIT Sloan School through a variety of activities. Students in the MBA program have the opportunity to spend the summer between their first and second years working in an internship that contributes to their understanding of and effectiveness in dealing with management problems, by registering in an optional elective internship course under faculty guidance.

During the academic year students have additional opportunities both in and outside the classroom to apply their learning. Many Sloan subjects incorporate action learning into their pedagogy and require students to complete projects within companies and organizations as a deliverable for the subject. These subjects may include a 1–3 week international or domestic experience within a host organization. Corporate leaders are often invited to work with students either through guest lectureships in classes or through interaction with one of the more than 60 student organizations. Some students may also have the opportunity to work as paid teaching and research assistants to the Sloan faculty.

Outside of the classroom, the MBA community's student organizations and clubs provide students the opportunity to practice leadership through the execution of conferences, international study tours and treks, business plan and case competitions, and other club-related activities.

#### **Master of Business Analytics**

The Master of Business Analytics (<http://mitsloan.mit.edu/master-of-business-analytics>) program is a specialized advanced master's degree designed to prepare students for careers in data science and business analytics.

The program is tailored for students in their final year of their undergraduate education or recent college graduates who plan to pursue a career in the data science industry, as well as those seeking career advancement or change, especially engineers, mathematicians, physicists, computer programmers, and other high-tech professionals.

The full-time, 12-month program is divided into three semesters: fall, spring, and summer. From spring until the summer session, students complete a mandatory 7-month analytics capstone project course. During this capstone course, students work in small teams with a US or international company on a real data science problem and go

onsite to the company for a summer professional experience. Each group completes a written report and gives a final oral presentation to the company and MIT Sloan and MIT Operations Research Center faculty.

### **Master of Finance**

The Master of Finance (MFin) (<https://mitsloan.mit.edu/mfin>) is an 18-month program, with a 12-month accelerated option, that prepares students for a broad range of careers in finance requiring analytical rigor and the ability to innovate around market challenges. The program consists of required fundamental and advanced subjects, restricted electives, action learning, ethics modules, a programming literacy test, and an optional master's thesis. Students are able to complete a concentration in financial engineering, capital markets, or corporate finance. While not required, those in the 18-month program are eligible to conduct an internship between their spring and final fall term.

Required summer-term coursework provides the foundation in finance, accounting, and financial mathematics for continuing with more advanced required and elective subjects in the subsequent terms. Restricted electives ensure appropriate depth as well as opportunities for breadth of study, depending on the student's interest. Students are required to take an action learning course, either a proseminar or Finance Lab, project-based classes in which students work in teams to address current problems identified by finance professionals. A thesis option is available for students who wish to research a topic of particular interest.

Frequent seminars, conferences, and major lectures present students with opportunities to hear from recognized leaders from a variety of industries. MFin students have full access to the extensive resources of the MIT Sloan Career Development Office as well as Career Advising and Professional Development. In addition, students participate in a wide array of professional clubs, student government, sports teams, and organizations at the school and campus level.

To graduate, students must attain at least a B (4.0/5.0) for finance core and restricted classes as well as their overall GPA at the time of graduation. Residency for all academic terms is required.

Students may not pursue another degree program while enrolled in the MFin. Except in the case of core requirements, coursework completed at MIT prior to matriculation in the MFin program may not be applied toward the MFin degree without the approval of the MFin faculty director.

In addition to the traditional synergies among finance, economics, and accounting, the program exploits intellectual ties among finance and mathematics, statistics, psychology, management, computer science, and engineering. The program is primarily targeted at recent graduates with zero to three years of experience. Recent graduates of postgraduate programs in mathematics, science, and engineering who wish to enter the finance profession are also encouraged to

apply. MFin prepares students for a wide variety of finance roles in the private and public sector as well as doctoral studies.

Typically, applications to the MFin program are due in early January; decisions are usually announced by mid-March. This is subject to change. For exact deadlines (<https://mitsloan.mit.edu/mfin/#apply>), please refer to the Master of Finance website.

### **Master of Science in Management Studies**

The Master of Science in Management Studies (MSMS) (<http://mitsloan.mit.edu/msms>) program is a customizable advanced master's degree that complements an overseas management education. Designed for students in the process of completing, or who have already completed, their MBA (or comparable master's) degree at one of Sloan's international partner schools, the MSMS program allows students to pursue their area of interest in management and construct an individualized curriculum of all-elective subjects from the offerings at MIT Sloan, other MIT departments, and Harvard University. Students specialize in a specific area within management by designating a concentration, taking elective subjects, and working with a Sloan faculty member to write a compulsory master's thesis in their area of study.

The 9-month program, which runs from September to June, requires full-time residence. In addition, MSMS students are required to meet MIT's requirement of at least 66 units of graduate subjects, and a master's thesis. To graduate, students must attain a GPA of 4.0/5.0 (B) by the time of graduation. For more information, visit the MSMS website (<http://mitsloan.mit.edu/msms>).

### **Doctor of Philosophy**

The PhD Program (<http://mitsloan.mit.edu/phd>) is the heart of MIT Sloan's research community and develops some of the best management researchers in the world. Approximately 19 new students join the program each year, and concentrate in one of nine research groups.

Students are funded for a period of five years, with the funding package consisting of full tuition, health insurance, a fellowship with a Teaching Assistant (TA) or Research Assistant (RA) component, a new laptop in years one and four, and conference travel funds.

MIT Sloan's PhD students are immersed in our distinctive research culture. Working closely with faculty, students conduct innovative research and lay the groundwork for lifelong careers in academic research. There are two separate research requirements within the program: the master's thesis and the PhD dissertation.

In the second or third year of the program, students are expected to complete their first major research paper, which will become a master's thesis, thereby earning them an SM in Management Research. General Exams are usually taken at the end of the second year or beginning of the third year of study, and after successful completion, work begins on choosing and defining a doctoral research topic. The PhD dissertation consists of significant, original

scholarly research. Candidates typically require two or three years of full-time work to complete their doctoral theses.

### **Interdisciplinary Programs**

#### **Computational Science and Engineering**

The Master of Science in Computational Science and Engineering (CSE SM) (<https://cse.mit.edu/programs/sm>) is an interdisciplinary program that provides students with a strong foundation in computational methods for applications in science and engineering. The CSE SM program trains students in the formulation, analysis, implementation, and application of computational approaches via a common core, which serves all science and engineering disciplines, and an elective component which focuses on particular disciplinary applications. The program emphasizes:

- Breadth through introductory courses in numerical analysis, simulation, and optimization
- Depth in the student's chosen field
- Multidisciplinary aspects of computation
- Hands-on experience through projects, assignments, and a master's thesis

Current MIT graduate students may qualify to apply to pursue a CSE SM in conjunction with a department-based master's or PhD program. More information (<https://cse.mit.edu/admissions/sm/currentstudents>) is available on CSE's webpage for current students.

For more information, visit the departmental website (<https://cse.mit.edu>) or see the full program description (<https://catalog.mit.edu/interdisciplinary/graduate-programs/computational-science-engineering>) under Interdisciplinary Graduate Programs.

#### **Leaders for Global Operations**

The 24-month Leaders for Global Operations (LGO) (<https://catalog.mit.edu/interdisciplinary/graduate-programs/leaders-global-operations>) program combines graduate degrees in engineering and management for those with previous postgraduate work experience and strong undergraduate degrees in a technical field. During the two-year program, students complete a six-month internship at one of LGO's partner companies, where they conduct research that forms the basis of a dual-degree thesis. Students finish the program with two MIT degrees: an MBA (or SM in management) and an SM from one of eight engineering programs, some of which have optional or required LGO tracks. After graduation, alumni lead strategic initiatives in high-tech, operations, and manufacturing companies.

#### **System Design and Management**

The System Design and Management (SDM) (<http://sdm.mit.edu>) program is a partnership among industry, government, and the university for educating technically grounded leaders of 21st-century enterprises. Jointly sponsored by the School of

Engineering and the Sloan School of Management, it is MIT's first degree program to be offered with a distance learning option in addition to a full-time in-residence option.

### **Master's Degree Programs for Mid-Career Executives**

#### **MIT Sloan Fellows MBA Program**

This full-time, 12-month (June–May) immersive MBA program is designed for high-performing mid-career professionals. The program typically enrolls about 115 outstanding individuals with 10–20 years of professional experience from more than 30 nations, representing a wide variety of for-profit and nonprofit industries, organizations, and functional areas. About half of the participants are sponsored by or have the strong support of their employers, with the other half being self-sponsored participants, many with unique entrepreneurial experiences and perspectives.

The program is characterized by a rigorous academic curriculum, frequent interactions with international business and government leaders, and a valuable exchange of global perspectives. The fellows work together in a team environment, tackling practical issues with a spirit of intellectual adventure. After collaborating across disciplines, cultures, and backgrounds in this intense learning environment, they leave the program with a robust alumni network and the skills necessary to create change, build alliances, and drive global ventures.

For more information about the MIT Sloan Fellows MBA Program and how to apply, visit the website (<http://mitsloan.mit.edu/fellows>) or contact the admissions office ([sfadmissions.mitsloan@mit.edu](mailto:sfadmissions.mitsloan@mit.edu)), 617-258-5434.

#### **MIT Executive MBA**

The MIT Executive MBA (EMBA) (<https://emba.mit.edu>) is a rigorous 20-month, executive schedule Master of Business Administration that builds on MIT Sloan's history of distinguished MBA programs and mid-career education. The classroom-based program is designed to develop principled, innovative leaders, usually with a decade or more of work experience, who can transform the world's most important institutions. The MIT Executive MBA is an opportunity to join an elite forum for innovation and leadership in which mid-career executives develop an edge in their general management skills and build a business network that lasts a lifetime.

The program brings together rising executives from diverse industries to collaborate on the complex challenges they face now—and will face in years to come—within their organizations and within the larger international marketplace. Although a large proportion of MIT EMBA's come from careers in life science, engineering, and technology, our ranks also include leaders in government, startups, nonprofits, finance, and the military. All are inspired by this rare opportunity to drive positive change, master the science of management, and integrate global leadership and data-driven analytics.

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For more information about the MIT Executive MBA and how to apply, visit the EMBA website (<http://emba.mit.edu>) or contact the program office ([executivemba@mit.edu](mailto:executivemba@mit.edu)), Room E52-255, 617-253-5033.