**MIT Schools & Masters Course Options Summary (researched 2019)**

Please note that what follows is a summary, indicating the breadth of what is available. It is not intended as a substitute for detailed searches by potential applicants, followed by contact with the relevant Admissions Team(s) and also with individual faculty with whom applicants may hope to study. Note that US admissions’ culture is different from the UK’s: questions – by phone if possible – are the norm once initial research has been done from what is on the web and personal approaches to faculty are expected. You will simply be doing what is expected and not regarded as a nuisance.

**SCHOOL OF ARCHITECTURE & PLANNING** [**http://sap.mit.edu/**](http://sap.mit.edu/)

*“The unifying theme of all our activities is design. Through the design of physical spaces, and through the design of policies and technologies that shape how those spaces are used, we aim to sustain and enhance the quality of the human environment at all scales, from the personal to the global.”*

***DEPT OF ARCHITECTURE*** [***http://architecture.mit.edu/overview/graduate-degrees***](http://architecture.mit.edu/overview/graduate-degrees)

***M Arch*** – 3-4 years
<http://architecture.mit.edu/architecture-and-urbanism/degree/march> Technology, is always already cultural and political, and vice versa, culture and politics are not separable from technology.
The great majority of students enter the program and graduate in 3.5 years. A small number of students who have completed a four-year undergraduate degree in architecture at another school may be admitted with advanced entry to the program and graduate in 2.5 years. The three semester options studios engage both MIT design faculty and a series of visiting studio professors noted for their work in contemporary practice.

C 25 places per year; professional degree for those with no prior architectural qualification

**SMArchS** - <http://architecture.mit.edu/architecture-and-urbanism/degree/smarchs-design> - a two-year program of advanced study founded on research and inquiry in architecture as a discipline and as a practice. The program is intended both for students who already have a professional degree in architecture and those interested in advanced non-professional graduate study. The degree may be pursued in one of six areas: Architectural Design, Architecture & Urbanism, Building Technology, Design & Computation, History, Theory & Criticism, and the Aga Khan Program in Islamic Architecture.

***Master of Science in Building Technology – SMBT***: <http://architecture.mit.edu/building-technology/degree/smbt>

*Basic engineering disciplines along with subjects that apply these topics to the built environment*; open to qualified students with a degree in a variety of engineering disciplines, the physical sciences or in architecture.

The program concentrates on the development of the next generation of technology for the built environment as well as the innovative application of state-of-the-art concepts to building and urban systems. The program is run jointly by the Departments of Architecture, Civil and Environmental Engineering, and Mechanical Engineering. The program accepts students with undergraduate degrees in a variety of engineering disciplines, in the physical sciences, or in architecture with a suitable background in technology. Students also come to the program with diverse job experiences

1 year plus summer or (usually) 2 years

***Master of Science in Art, Culture & Technology – SMACT***[***http://architecture.mit.edu/art-culture-and-technology/degree/smact***](http://architecture.mit.edu/art-culture-and-technology/degree/smact)

ACT emphasizes experimentation and transdisciplinary approaches to studio production in both traditional and new media including cinema, video, sound, performance, photography, experimental media and new genres, conceptual, sculptural, and spatial experiments, writings and publications. Students are encouraged to consider both the physical and the cultural context of their artworks/projects as central to their interpretation. Strong emphasis is placed on critical thinking, knowledge mining, and creative engagement, along with explorations of changing public and private spheres. The program facilitates artist-thinkers’ exploration of art’s broad, complex, global history and conjunction with culture, science, technology, and design via rigorous critical artistic practice and practice driven theory.
2 years 10 places per year

***PhD in Building Technology*** [***http://architecture.mit.edu/building-technology/degree/phd***](http://architecture.mit.edu/building-technology/degree/phd)The program is open to qualified students with a suitable background in technology and a degree in engineering, science or architecture. It provides a focus for those interested in the development and application of advanced technology for buildings. Students in this program take subjects in engineering disciplines along with subjects that deal with the application of these topics to buildings.

**PhD in Computation** [***http://architecture.mit.edu/computation/degree/phd***](http://architecture.mit.edu/computation/degree/phd)The PhD program is broadly conceived around computational ideas as they pertain to the description, generation, and construction of architectural form. Issues range from the mathematical foundations of the discipline to the application and extension of advanced computer technology. The mission of the program is to enhance and enrich design from a computational perspective, with clear implications for practice and teaching.

**PhD in History & Theory of Architecture or Art** [***http://architecture.mit.edu/history-theory-and-criticism/degree/phd***](http://architecture.mit.edu/history-theory-and-criticism/degree/phd)The program in History, Theory and Criticism (HTC) draws upon the unique range of disciplines and professions within the Department of Architecture. The program emphasizes the study of art, architecture, and urbanism, past and present, produced in a broad range of geographic areas, as well as methodological issues that inform or link the history of ideas and practices. HTC was founded in 1975 as one of the first PhD programs in a school of architecture. Its mission is to promote critical and theoretical reflection within the disciplines of architectural and art history. HTC differs from other programs in that it has art historians on its permanent faculty.

***DEPARTMENT OF URBAN STUDIES AND PLANNING*** [***http://dusp.mit.edu/***](http://dusp.mit.edu/)

***Master in City Planning - MCP*** [***http://dusp.mit.edu/degrees/masters***](http://dusp.mit.edu/degrees/masters)

*graduate professional education for persons who will assume planning roles in public, private, and nonprofit agencies, firms, and international institutions, in the United States and abroad.*

Focusses on skills and specialized knowledge needed to fill traditional and emerging planning roles & emphasizes the mastery of the tools necessary for effective practice.Includes training in policy analysis & institutional intervention. ***4 specialisms: city design & development; environmental policy & planning; housing, community & economic development; international development.***

C 55-60 places per year (30% international students, 50% women)

Need strong academic record + some field experience 2 years

**PhD in City Design & Development** <http://dusp.mit.edu/cdd/program/overview>

CDD is a collaboration of the MIT [Departments of Urban Studies and Planning](https://dusp.mit.edu/) and [Architecture](http://architecture.mit.edu/), as well as the [Center for Real Estate](http://web.mit.edu/cre/index.html%22%20%5Ct%20%22_blank), the [Center for Advanced Urbanism](http://cau.mit.edu/), and the [Media Lab](http://www.media.mit.edu/). As such, it joins key actors and disciplines that are shaping cities. Together, we seek to better understand the changing urban environment and to invent new architectural forms, public policies, development products, and technologies that will improve the quality of urban life.

**PhD In Environmental Policy & Planning** <http://dusp.mit.edu/epp/program/overview>
The Environmental Policy and Planning Group (EPP) seeks to improve the way society conserves and manages natural resources and pursues sustainable development, particularly (though not exclusively) in urban and metropolitan settings around the world. Some specific areas of research and teaching include the adoption and diffusion of technologies that aim to mitigate or remediate environmental problems, particularly renewable energy, energy-efficiency, and water-conservation technologies; the efficacy of efforts to prevent and reduce air and water pollution and manage the disposal of toxic and hazardous wastes; the prospects for international, national, state-level, and local strategies for mitigating and adapting to climate change; the resolution of conflicts surrounding facility siting and the allocation of transboundary water resources; the pursuit of environmental justice; and the development of more flexible forms of urban infrastructure.

**PhD In Housing, Community & Economic Development** <http://dusp.mit.edu/hced/program/overview>

HCED focuses on the equitable development of American communities at the neighborhood, city and regional levels. For decades the group’s faculty and students have helped shape policy, practice and research in housing, economic, workforce and comprehensive community development. Teaching students to practice and research in these substantive areas has been driven by a deep faculty commitment to expanding opportunity and improving quality of life for historically disadvantaged groups.

**PhD International Development** <http://dusp.mit.edu/idg/program/overview>
The International Development Group (IDG) is the longest standing and largest program within a U.S. planning school devoted to graduate study and research in subjects specific to the developing world. Approximately one-quarter of the Master's students entering DUSP each year choose the IDG specialization, as do approximately one-third of the entering PhD students. This program area attracts internationally focused students with a wide range of backgrounds, work experiences, and interests. The diversity of our faculty (and strong links to other parts of the Institute) provide students with an integrated view of the institutional, economic, physical and socio-political factors necessary for effective planning in today's world.

 ***MEDIA LAB*** [***http://www.media.mit.edu/***](http://www.media.mit.edu/)

*The Media Lab is a community of inventors who work atelier style as members of research teams, doing the things that conventional wisdom says can’t or shouldn't be done. The approximately 400 projects under way at the Lab are as varied as the students who conduct them: from tools for learning and expression, to innovative devices for human adaptation and augmentation, to new modes of transportation for tomorrow's smart cities.*

Each year, the program accepts approximately 50 master’s and PhD candidates with backgrounds ranging from computer science to psychology, architecture to neuroscience, mechanical engineering to material science, and more. MAS applicants should be:

* committed and accomplished in their area of concentration prior to application, with an emphasis on creative extensions of that domain;
* able to work in an engineering environment; and
* proficient at computer programming and/or hardware design.

2-year ***SM Media Arts & Sciences*** & ***closely-related doctoral program***. Applicants for the SM should identify 3 research groups they wish to join. The Trust office can assist applicants who have done thorough research.

**PhD in Media Arts & Sciences** [**https://www.media.mit.edu/graduate-program/about-media-arts-sciences/**](https://www.media.mit.edu/graduate-program/about-media-arts-sciences/)
Each year, the program accepts approximately 50 master’s and PhD candidates with backgrounds ranging from computer science to psychology, architecture to neuroscience, mechanical engineering to material science, and more.

*MIT’s [Center for Bits and Atoms](http://cba.mit.edu/), an interdisciplinary initiative investigating the interface between computer science and physical science, also admits students through the Program in Media Arts and Sciences. The Center is known for its global network of digital fabrication facilities.*

**SCHOOL OF ENGINEERING** [**http://engineering.mit.edu/education/graduate/**](http://engineering.mit.edu/education/graduate/)

*The School of Engineering educates 45 % of MIT’s graduate students. Just over a third of MIT’s faculty are in the School’s 10 departments. There is a vast range of specialisms on offer in the School plus an equally wide range of inter-disciplinary options. The following is a summary; please go to the relevant section of the MIT site to research further.*

***Please note that the majority of the webpages regarding the Master’s options now state they are for those who ‘intend eventually to seek doctoral study’.***

***Leaders for Global Operations*** [***https://lgo.mit.edu***](https://lgo.mit.edu)Offered jointly by MIT Sloan and MIT School of Engineering, LGO graduates earn an MBA and an SM in one of seven engineering departments. Currently, the following departments partner with LGO to offer an SM through the program:

* Aeronautics and Astronautics
* Biological Engineering
* Chemical Engineering
* Civil and Environmental Engineering
* Data Analytics
* Electrical Engineering and Computer Science
* Improving Healthcare
* Mechanical Engineering
* Operations Research & Statistics

The centerpiece of the program is a six-month internship project conducted at one of LGO’s world-class operations and manufacturing partner companies, where students do research and problem-solving that form the basis of their master’s thesis. All LGO students receive generous fellowships. LGO students are immersed in the full spectrum of operations related to the global production, new product development, high tech fields, and distribution of goods and services.

2 year program.

Average age of students: 28 Average work experience: 5 years

Number of students: 48

***Department of******Aeronautics and Astronautics***[*http://aeroastro.mit.edu/*](http://aeroastro.mit.edu/)

The two-year ***Master of Science in******Aeronautics and Astronautics*** degree program prepares students for an advanced position in the aerospace field and provides a solid foundation for doctoral study. Students are required to complete a thesis and related research or design experience.

**PhD in Aeronautics & Astronautics**
**Doctoral Program Objectives**

AeroAstro's doctoral program objectives are:

* to produce original research and technologies critical to the engineering of aerospace vehicles, information, and systems
* to educate future leaders in aerospace research and technology

**Doctoral Program Student Learning Outcomes**

Upon graduation, our doctoral students will have:

* a strong foundation in analytical skills and reasoning
* the ability to solve challenging, engineering problems
* an understanding of the importance and strategic value of their research
* the ability to communicate their research with context and clarity

**Doctor of Philosophy (Ph.D.) and Doctor of Science (Sc.D.)**

These degrees, for which the requirements are identical, are for students who wish to carry out original research in a focused field, and already hold a master’s degree. AeroAstro offers doctoral degrees in [12 fields](https://aeroastro.mit.edu/graduate-program/fields-study).

***Department of Biological Engineering***[*https://be.mit.edu/*](https://be.mit.edu/)

Our department’s mission is to educate leaders and generate new knowledge at the interface of engineering and biology. We are defining and leading the emerging discipline of biological engineering, fusing engineering with modern molecular-to-’omic biology to make, model, and manipulate biological systems.

The primary graduate degree offered by the department is a ***Biological Engineering Ph.D***.

Graduate level training in BE prepares students to do research that will:

* Increase understanding of how biological systems function in terms of physical/chemical mechanisms, and of how they respond when perturbed by external factors including medical therapeutics and environmental agents.
* Create novel technologies based on this understanding for a spectrum of applications emphasizing, but not limited to, human health from both medical and environmental perspectives.
* Generate new biology-based paradigms for solving problems in non-biological applications of science and engineering.

***Department of Chemical Engineering***[*https://cheme.mit.edu/*](https://cheme.mit.edu/)6 sub-disciplines for doctoral research
MIT’s Department of Chemical Engineering offers three graduate degree programs — two of which are available only at MIT.
**Ph.D./Sc.D.**

The Doctor of Philosophy and Doctor of Science degrees in Chemical Engineering are identical; students may choose for themselves the appellation they prefer. This traditional, research-based doctoral degree program provides a thorough grounding in the fundamental principles of chemical engineering, as well as an intensive research experience.
[Degree Program](https://cheme.mit.edu/academics/graduate-students/graduate-programs/phdscd-program/)

**Ph.D.CEP**

An MIT innovation offered nowhere else, the Doctor of Philosophy in Chemical Engineering Practice degree program enhances and extends doctoral research with the unique resources of MIT’s David H. Koch School of Chemical Engineering Practice (“Practice School”), and the world-class leadership instruction of MIT’s Sloan School of Management. The Ph.D.CEP program builds a solid foundation of industrial experience, research, and business, preparing you for a fast launch into leadership.
[Degree Program](https://cheme.mit.edu/academics/graduate-students/graduate-programs/phdscd-program/)

**M.S.CEP**

Also unique to MIT, the Master of Science in Chemical Engineering Practice degree program provides hands-on, real-world experience in industrial settings, and can be completed within a single calendar year after the bachelor’s degree. It ***may be pursued as a terminal degree***. You will complete two semesters of graduate-level courses at MIT (core plus electives), followed by one semester at industrial sites of the Practice School under the direction of resident MIT staff. Credit for the Practice School semester is accepted in lieu of a Master’s thesis.
[Degree Program](https://cheme.mit.edu/academics/graduate-students/graduate-programs/phdscd-program/)

***Department of Civil and Environmental Engineering*** <https://cee.mit.edu/>
We offer advanced Master’s and Doctoral degrees within the areas of environmental chemistry; environmental fluid mechanics; environmental microbiology; hydrology and hydroclimatology; networks, systems and computation; materials, structures and geomechanics; and supply chain and logistics. <https://cee.mit.edu/graduate/graduate-degree/>

The **Master of Engineering (MEng)** degree program is our professional-oriented graduate program that consists of high level, fast paced coursework and significant engagement with a real world engineering project, preparing our graduates for a professional career path, or further graduate studies at MIT or elsewhere. This ***9 month program***, with opportunities for individualized tracks in CEE prepares our graduates for addressing significant challenges in the domains of Civil and Environmental Engineering. Within the *Environmental Engineering Science*track of the MEng degree program, students pursue classes and research in their areas of interest, including hydrology, environmental chemistry, ecology, and environmental fluid mechanics.

Within the *Structural Mechanics and Design*track of the MEng degree program, students pursue curriculum and research in areas including structural engineering mechanics, computational design and optimization, and collaborative workflows at the interface of engineering and architecture.

The **Master of Science (SM**) **in Civil and Environmental Engineering** and **Doctor of Philosophy (PhD)** **in Civil and Environmental Engineering** are the research focused graduate degrees in the department. Each SM and PhD graduate student in our department is matched with one of our top tier faculty members to work together on the research component of the graduate degree. The areas of study include **:**

* Environmental Chemistry
* Environmental Fluid Mechanics
* Ecology and Evolution
* Hydrology and Hydroclimatology
* Networks, Systems and Computation
* Materials, Structures and Geomechanics
* Supply Chain and Logistics

 (AT: implication from the website is that the SM can be a terminal, research degree but please check this out with admissions.)

**Interdepartmental Program in Transportation (SM and PhD)**

**Master of Science in Transportation**
The interdepartmental Master of Science in Transportation (MST) degree program emphasizes the complexity of transportation and its dependence on the interaction of technology, operations, planning, management and policy-making. For this reason, the Master of Science in Transportation program is interdepartmental. Faculty members and research staff from several centers, departments and divisions within MIT are affiliated with the program and serve as research advisors and mentors to MST students.

**Interdepartmental Doctoral Program in Transportation**
The interdepartmental Doctoral Program in Transportation provides a structured and direct follow-on doctoral program for students enrolled in the MST program or other transportation-related master degree programs at MIT or elsewhere. The interdepartmental structure of the program allows students greater flexibility in developing individual programs of study that cross both disciplinary and departmental lines.

***Department of Electrical Engineering & Computer Science*** <https://www.eecs.mit.edu/>
The EECS Department is the largest in the School of Engineering with about 700 graduate students in the doctoral program. ***Application is for the doctoral program only — there is no terminal Master’s degree.***

**PhD In Electrical Engineering & Computer Science** <https://www.eecs.mit.edu/academics-admissions/graduate-program>
As a convenience for administering the department doctoral program, research activities in EECS are divided into two Graduate Research Areas.

**Graduate Area I** comprises the following research communities:

1. Information, System, and Network Science;
2. Integrated Electronic and Photonic Systems;
3. Physical Science, Devices, and Nanotechnology;
4. Bioelectrical and Biomedical Engineering.

**Graduate Area II** comprises the following research communities:

1. Artificial Intelligence;
2. Computer Systems, Networks, and Architecture;
3. Theory of Computer Science.

​Bioinformatics and Computational Biology research is also included in Graduate Area II.

***Institute for Data, Systems and Society*** <https://idss.mit.edu/>
Institute for Data, Systems, and Society (IDSS) is committed to addressing complex societal challenges by advancing education and research at the intersection of statistics, data science, information and decision systems, and social sciences. Research at IDSS is rooted in three [core disciplines](http://idss.mit.edu/research/analytical-disciplines/): statistics and data science, information and decision theory, and human and institutional behavior.

**Doctoral Program in Social and Engineering Systems** [**https://idss.mit.edu/academics/ses\_doc/**](https://idss.mit.edu/academics/ses_doc/)

This is a unique research program focused on addressing concrete and societally significant problems by combining the analytical tools and methods of statistics and information sciences with engineering and social science tools and methods. SES students study problems that correspond to significant societal challenges, with an emphasis on areas such as social networks, autonomous systems, energy systems, financial networks, and urban systems. This includes analytical research that can be used to inform policy making.

**Technology and Policy Program** [**http://tpp.mit.edu/**](http://tpp.mit.edu/)

IDSS hosts the [Technology and Policy Program (TPP),](http://tppserver.mit.edu/) which has offered the **Master of Science in Technology and Policy** at MIT since 1976. TPP’s ongoing mission is to develop *leaders* who can create, refine, and implement responsible policies that are informed not only by an understanding of technology and its instruments, but also by their broad social contexts. Combining a core in science and engineering with studies in applied social sciences, TPP’s curriculum imparts strength in both a technical field and in the policy process. The Master of Science in Technology and Policy is an engineering research degree with a focus on the increasingly central role of technology in the framing, formulation, and resolution of policy problems. Many students combine TPP's curriculum with complementary subjects to obtain dual degrees in TPP and either a specialized branch of engineering or an applied social science, such as political science or urban studies and planning. <http://catalog.mit.edu/schools/engineering/data-systems-society/#master-technology-policy>

***Institute for Medical Science & Engineering*** <http://imes.mit.edu/>

The Harvard-MIT Program in Health Sciences and Technology (HST) brings together the Massachusetts Institute of Technology (MIT), Harvard Medical School (HMS), Harvard University, and Boston area teaching hospitals in a unique collaboration that integrates science, medicine, and engineering to solve problems in human health. At MIT, IMES provides a robust home for HST. <http://hst.mit.edu/>

As an HST student, you'll become an expert in your field--be it [medicine](http://hst.mit.edu/academics/md) or one of eleven [science/engineering discplines](http://hst.mit.edu/academics/memp).

**Department of Materials Science and Engineering** <https://dmse.mit.edu/>

The Department offers the graduate degrees of Master of Science (S.M.), Doctor of Philosophy (Ph.D.) and Doctor of Science in Materials Science and Engineering (Sc.D.).

The Department offers a single **Master’s degree in Materials Science and Engineering**, which may also be taken simultaneously with other Departmental or interdepartmental programs.
<https://dmse.mit.edu/academics/graduate/programs/master-science>

**PhD in Materials Science and Engineering** <https://dmse.mit.edu/graduate/programs/doctoral> Our researchers are leading the way in areas as diverse as energy storage, cancer treatment, and biologically-inspired design.

***Department of Mechanical Engineering*** [***http://meche.mit.edu/***](http://meche.mit.edu/)

[***http://meche.mit.edu/education/graduate***](http://meche.mit.edu/education/graduate)9 graduate degrees offered, including the PhD and LGO joint-degree options.

A typical Master’ s degree in Mech Eng should take not longer than one and a half years – 3 full-time terms plus the intervening summer.

**Master of Science in Mechanical Engineering SMME**

The SM in mechanical engineering is awarded based on the completion of advanced study and a major thesis. The thesis, considered the centerpiece of a students’ graduate experience, must be an original work of research, development, or design, performed under the supervision of a faculty or research staff member. Students usually spend as much time on thesis work as on coursework. This degree typically takes about one and one-half to two years to complete.

**Master of Science in Ocean Engineering SMOE**

The curriculum leading to an SM in ocean engineering assumes that students have broad working knowledge in engineering. Graduates of this program are interested in developing the ocean for the good of humanity and are prepared to use whatever engineering disciplines are necessary to address problems.

**Master of Science in Naval Architecture and Marine Engineering SMNAME**

Naval architecture and marine engineering are concerned with all aspects of waterborne vehicles operating on, below, or just above the sea surface. This program is intended for individuals planning to specialize the design of waterborne vehicles and/or their subsystems.

**Master of Science in Oceanographic Engineering SMOGE**

To complete this joint program with the Woods Hole Oceanographic Institution (WHOI), students study and conduct research on the campuses of MIT and WHOI. Students are advised by an MIT faculty member, but may conduct their thesis research under the supervision of MIT or WHOI faculty. While in residence at MIT, students follow a program similar to that of other master’s students in the department.

**Master of Engineering in Manufacturing MEng**

This twelve-month professional degree program prepares students to assume technical leadership in an existing or emerging manufacturing company. To earn this degree, students must complete a highly integrated set of projects that cover the process, product, system, and business aspects of manufacturing, as well as a group-based thesis project.

**Mechanical Engineer’s degree ME**

This program provides an opportunity for further study beyond the Master’s level for those who wish to enter engineering practice rather than conduct further research. This degree emphasizes breadth of knowledge in mechanical engineering and its economic and social implications. It is quite distinct from the PhD program. The engineer’s degree requires a broad program of advanced coursework and an applications-oriented thesis, and typically requires at least one year of study beyond the master’s degree.

**Naval Engineer’s degree NE**

This program provides an opportunity for further study beyond the Master’s level and is intended for those who wish to enter practice, or who plan a career in the design, acquisition, repair, and modernization of ships and ship systems. This degree emphasizes breadth of knowledge in naval engineering and is quite distinct from the PhD.

**Doctor of Philosophy (PhD) or Doctor of Science (ScD)**, which differs in name only (this includes the joint MIT/WHOI degrees)

***Department of Nuclear Science and Engineering*** [***http://web.mit.edu/nse/***](http://web.mit.edu/nse/)*As one of the world's leading academic departments in nuclear science and engineering, our mission is to help develop the next generation of technical leaders of the global nuclear enterprise and to provide technical leadership in energy and non-energy applications of nuclear technology.*

**SM Nuclear Science and Engineering** The object of the Master’s degree program is to give the student as thorough a knowledge of some phase of nuclear engineering as can be obtained in *a minimum of one academic year of full-time study*. The Master’s program may serve either as the first part of the student’s work for a more advanced degree or as training for professional employment in nuclear engineering. <http://web.mit.edu/nse/education/grad/degrees.html>

The object of the **Nuclear Engineer's degree program** is to provide a broader knowledge of nuclear engineering than required for the Master's degree and to develop competence in engineering application or design but with less emphasis on research than that characterizing a doctoral program. The program includes completion of both an extensive and individually arranged academic course program and a special project of significant engineering value. <http://web.mit.edu/nse/education/grad/degrees.html> *A student with full undergraduate preparation normally needs two years to obtain the Nuclear Engineer's degree.*Each Nuclear Engineer's degree program is individually arranged. The principal fields of study are fission nuclear technology, applied plasma physics, or nuclear science and technology. Suitable thesis topics may be either analytical or experimental but should be "application oriented" with respect to the particular area in which the research is conducted. Students should plan a program of study with their Registration Officers. Since a Nuclear Engineer's program is to be more comprehensive than a Master's program, the curriculum recommendations and requirements given in "Requirements for the Degree of Master of Science in Nuclear Science and Engineering" should be consulted.

**PhD in Nuclear Science & Engineering** [**http://web.mit.edu/nse/research/index.html**](http://web.mit.edu/nse/research/index.html) **Science: Systems: Society** We prepare our students to make contributions to the scientific fundamentals of our field; to the development and engineering of nuclear systems for energy generation, security, health care, and other applications; and to the integration of nuclear systems into society and the natural environment. ***6 research streams:*** Fission; Fusion; Nuclear Security; Radiation Sources, Detection & Measurement; Modelling & Simulation; Materials in Extreme Environments

***Interdisciplinary Degrees:***

[***http://catalog.mit.edu/interdisciplinary/graduate-programs/***](http://catalog.mit.edu/interdisciplinary/graduate-programs/)*for full list*

 ***Supply Chain Management - Master of Engineering in Logistics (MLOG)***

Supply Chain Management (SCM) is a nine-month, intensive degree program designed to supply the global logistics industry with a new breed of supply chain professional, one who is highly trained in both analytical problem solving and change management leadership. This highly individualized program prepares graduates for logistics and supply chain management careers in manufacturing, distribution, retail, transportation, logistics, consulting, and software development organizations. Graduates from the SCM program receive the Master of Engineering in Logistics (MLOG) degree that was created in 1998.
<http://catalog.mit.edu/interdisciplinary/graduate-programs/supply-chain-management/>

***Woods Hole Oceanographic Institution
Applied ocean science and engineering*** involves the application of physics and the engineering sciences to the study of oceanic processes and the design of instruments, systems, and structures required to observe, measure, and work in the ocean. The Departments of Civil and Environmental Engineering, Electrical Engineering and Computer Science, and Mechanical Engineering offer joint programs with WHOI in oceanographic engineering. The programs lead to the master's degree, engineer's degree, Doctor of Science, or Doctor of Philosophy.
<http://catalog.mit.edu/interdisciplinary/graduate-programs/joint-program-woods-hole-oceanographic-institution/>

**SCHOOL OF HUMANITIES, ARTS & SOCIAL SCIENCES** [**http://shass.mit.edu/fields**](http://shass.mit.edu/fields)

5 schools: Economics; History, Anthropology, Science Technology & Society (HASTS); Philosophy; Linguistics; Political Science

Language Lab options for sophisticated Japanese & Chinese technical-language programmes.

***Master of Science (SM) in Science Writing***[***http://cmsw.mit.edu/education/writing/science-writing/***](http://cmsw.mit.edu/education/writing/science-writing/)

This programme is an opportunity to contribute to public understanding of science, medicine, engineering, and technology. It’s a chance to work closely with a distinguished core faculty of award-winning journalists, authors, and scholars within one of the most exciting scientific communities in the world. And it’s a place to produce news articles, features, essays, and radio/video broadcasts about lasers and genes, capillaries and quarks.

***Master of Science (SM) in Political Science*** [***http://web.mit.edu/polisci/graduate/masters.html***](http://web.mit.edu/polisci/graduate/masters.html)

This one-year Master’s (a summer semester is typically needed to complete the required thesis) is designed for students who want to build proficiency in applied research so that they can pursue successful careers in government, business, and public policy. The program runs alongside the doctoral study in the department and emphasizes intensive preparation in one of the following fields of study. Applicants are required to have identified one or two faculty with whom they could work and also be sure that person will be in the department for the year in question. Fields are: American Politics; Comparative Politics; International Relations; Models and Methods; Political Economy; Security Studies.

Advice is available once preliminary research into options/faculty interests has been conducted.

**SLOAN SCHOOL OF MANAGEMENT** [**http://mitsloan.mit.edu/**](http://mitsloan.mit.edu/)

***MBA Program***

MIT Sloan’s two-year MBA Program is designed to educate principled, innovative leaders who improve the world. At MIT Sloan, we focus on the big problems that the world faces, and we place a premium on real-world engagement and blending theory with practice. The MBA Program is designed for maximum flexibility, allowing students to create a program best suited to their academic and professional interests.

***Master of Finance MFin*** *1 year*

Designed to prepare students for careers in the financial industry, this one year program consists of required and elective courses, a proseminar, and an optional Master's thesis.

Average age of students: 23.5 Average work experience: 13 months

Number of students: 58

***Leaders for Global Operations***

Offered jointly by MIT Sloan and MIT School of Engineering, LGO graduates earn an MBA and an SM in one of seven engineering departments. 2 year program.

Average age of students: 28 Average work experience: 5 years

Number of students: 48