



**MIT INSTITUTE FOR DATA,
SYSTEMS, AND SOCIETY**

Policies & Procedures
of the Doctoral Program in
Social and Engineering Systems

–Revised August 2024–

Welcome from the Directors

Dear program participants,

Welcome to the Social & Engineering Systems Doctoral Program. Our goal is to build a program with a distinct flavor and you, the students, are a key pillar of our success.

The criteria for selecting program participants involve a combination of academic excellence with a genuine interest to address important societal problems. Your having been selected indicates our belief that your profile matches the program objectives and signals our confidence that you will thrive at MIT.

On our end, we will do whatever it takes, in terms of advising, guidance, teaching, and support, to make sure this happens. Your advisors, the program administration, and all of MIT's resources are at your disposal.

Sincerely yours,

Fotini Christia, IDSS Director

Fotini Christia, SES Program Head

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III. Terminology & Abbreviations

IDSS is an incorrigible participant in MIT's alphabet-soup of abbreviations, initialisms, and acronyms. It is also made-up of members from diverse scientific communities. The following provides some clarification on our usage of certain terms in the present Policies & Procedures (P&P) document.

- CBA: Collective Bargaining Unit
- COUHES: Committee on the Use of Humans as Experimental Subjects
- "domain": refers to application domains, such as energy systems, finance, social networks, urban systems, etc. Also sometimes referred to as "problem domain".
- GSU: MIT Graduate Student Union UE Local 256
- IAP: Independent Activities Period. Occurs between the fall and spring terms, mostly during January.
- IDSS: Institute for Data Systems and Society
- IDSS-DGC: The IDSS Departmental Graduate Committee
- IG: Graduate Instructor (student employee), an appointment to the rank of instructor for a person who is also currently enrolled as an MIT graduate student
- ISO: International Students Office
- Listener: Elsewhere usually referred to as an "Auditor."
- MIT: Massachusetts Institute of Technology
- OGE: Office of Graduate Education
- OQE: Oral qualifying exam
- P&P: Policies & Procedures of the Doctoral Program in Social and Engineering Systems (this document)
- RA: Research Assistant (student employee)
- Regular term: Fall or spring terms, sometimes referred to as "semesters". Does not include the summer term or IAP.
- SES: Social and Engineering Systems Doctoral Program
- SES-AdComm: The SES Admissions Committee
- SES-GPC: The Graduate Program Committee for SES
- SES-SM: the embedded Social and Engineering Systems Master's Degree
- SM: elsewhere this is usually abbreviated as "MS," for "Master of Science"
- "social science(s)": refers to the sciences that deal with interactions of human actors or organizations, including, for example: anthropology, economics, political science, sociology, etc.
- TA: Teaching Assistant (student employee)
- TA+: a categorical term covering all graduate teaching roles, including teaching assistant, teaching trainee, teaching fellow, graduate instructor, camp instructor
- TSC: Transition Support Coordinator
- WQE: Written qualifying exam

1. Mission, Character, and Commitment to Integrity

1.1 Massachusetts Institute of Technology

“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.”¹

1.2 Institute for Data, Systems, and Society

“The mission of IDSS is to advance education and research in state-of-the-art, analytical methods in information and decision systems, statistics and data science, and the social sciences, and to apply these methods to address complex societal challenges in a diverse set of areas such as finance, energy systems, urbanization, social networks, and health.”²

1.3 Doctoral Program in Social and Engineering Systems

Student research in SES is characterized by the following traits:

1. **It is driven by problems of societal interest.** The focus of the program is the study of problems that correspond to significant societal challenges, with emphasis on areas such as sociotechnical systems, autonomous systems, energy systems, finance, social networks, and urban systems. This includes analytical research that can be used to inform policy making. An example of work that falls under this program would be studying systemic risk in the banking system and its impact on the overall financial system. In contrast, profit-maximizing portfolio management does not.
2. **It involves quantitative methods.** Societal problems or policy questions can be addressed from many different angles. However, this program focuses on problems that can be addressed through tools of computing and information sciences, including mathematical modeling and analysis, data science and statistics, and other quantitative methods.
3. **It relies on real-world data.** Research is expected to analyze data from the application domain of interest, and thus training in statistics is part of the program.
4. **It engages societal aspects of the problem.** The research is expected to examine the societal aspects of a problem (e.g., regulations, institutions, human behavior, or economic aspects), using theories and tools from the social sciences.

1.4 Academic Integrity

All MIT students are expected and required to “approach your work with honesty and integrity,” “no matter what level of stress you may find yourself under”.³ MIT’s academic integrity policies and guidelines are detailed in **Academic Integrity at MIT**.⁴

¹ <https://facts.mit.edu/mission/>

² <https://idss.mit.edu/about-us/>

³ <https://integrity.mit.edu/>

⁴ <https://integrity.mit.edu/>

2. Oversight & Administration

At MIT, responsibility for graduate students is distributed between MIT and the academic units.

Occupying a central position in graduate education at MIT, the “Office of Graduate Education (OGE) provides a number of services to current and prospective graduate students as well as departments, including student support and development; diversity- and community-building; advice on fellowships and financial wellbeing; oversight of policies and procedures; and support for graduate admissions and the Graduate Student Council.”⁵ Services include administering the set of academic petitions with cross-departmental implications as well as those that involve the Registrar, e.g., to make registration changes after the deadline, complete an incomplete class from a previous term, request special tuition rates, etc.

At the departmental level, several faculty committees administer IDSS’s academic programs within the parameters detailed on the OGE’s website⁶.

The committees related to the SES program include:

- The IDSS Departmental Graduate Committee (IDSS-DGC)
- The Social and Engineering Systems Graduate Program Committee (SES-GPC)
- The Social and Engineering Systems Admissions Committee (SES-AdComm)
- Individual doctoral thesis committees

The **IDSS Departmental Graduate Committee (IDSS-DGC)** oversees and reviews the various IDSS graduate programs, including:

- The Social and Engineering Systems Doctoral Program
- The Technology and Policy Program
- The Interdisciplinary Doctoral Program in Statistics

The IDSS-DGC may choose to review requests for exceptions to usual IDSS student procedures. The IDSS-DGC also oversees and reviews the graduate subjects offered by IDSS.

In addition to oversight and review, the IDSS-DGC administers IDSS-wide fellowships and awards for graduate students as well as the selection of IDSS nominees for external graduate awards and fellowships.

The IDSS-DGC reports IDSS graduate thesis grades to the Registrar, recommends action upon cases of failure to meet scholastic requirements by IDSS graduate students, and approves departmental degree lists for IDSS graduate programs.

The IDSS-DGC reports to the IDSS Director. Appointments to the IDSS-DGC are made by the IDSS Director in consultation with the IDSS-DGC Chair.

The **Social and Engineering Systems Graduate Program Committee (SES-GPC)** administers the SES doctoral program and embedded master’s degree, including: the program of subjects, research, and examinations (other than language examinations) leading to SES graduate degrees; accepting credits toward the SES academic program; applications for graduate study in SES (usually delegated to SES Admissions Committee during the regular admissions cycle); and determination of residency for SES students.

⁵ <https://oge.mit.edu/services-team/about-us/>

⁶ <https://oge.mit.edu/gpp/faculty-oversight/>

The SES-GPC (or its Chair, when authorized by the SES-GPC), in consultation with the IDSS Director, makes decisions regarding selection of SES students for SES-specific fellowships and scholarships, and regarding the students' programs of study, within the rules set forth in this document. In addition, it recommends action upon the following to the IDSS-DGC: selection of SES students for IDSS-wide fellowships and scholarships that are administered by the IDSS-DGC, requests for significant exceptions to usual procedures, and cases of failure to meet scholastic requirements by SES students.

The SES-GPC reports the results of SES qualifying examinations, as well as the set of subjects accepted toward the SES degree (paying special attention to waivers and precedent) to the MIT Registrar. The SES-GPC reports to the IDSS Director and the IDSS-DGC. Appointments to the SES-GPC are made by the IDSS Director in consultation with the IDSS-GPC Chair.

The Social and Engineering Systems Admissions Committee (SES-AdComm) receives and reviews applications for graduate study in SES during the regular admissions cycle. The SES Admissions Committee reports to the SES-GPC. Appointments to the SES-AdComm are made by the SES-GPC Chair in consultation with the IDSS Director.

The Doctoral Thesis Committee's role is discussed in the *Advising* section of this document.

The IDSS Academic Office provides support to all of IDSS's academic programs, reporting directly to the IDSS Departmental Graduate Chair. IDSS Academic Office support is secondary in cases where academic programs have their own dedicated staff, e.g., the Technology and Policy Program (TPP).

The IDSS Academic Office maintains and provides access to student records, in coordination with the programs and the MIT Registrar, according to MIT's student records policy⁷.

In addition, the Academic Office provides support, resources, and referrals for students and advisors, generally related to academic needs and student support services at MIT. Some support is available to students throughout the student lifecycle, from prospective students to alumni. Because of its close connection to many student-service offices across MIT, the IDSS Academic Office also helps connect members of the IDSS academic community to other MIT faculty and staff.

Finally, the IDSS Academic Office performs various other administrative tasks common to all academic programs at MIT, including catalog maintenance and review, subject scheduling, subject evaluation, grading, etc.

⁷ <https://registrar.mit.edu/transcripts-records/records-privacy-access>

3. Orientation

Accepting the offer of admission is the first step in enrolling at MIT. Other preparations are also necessary to study at MIT. These start with obtaining an MIT electronic identity and progress through various legal requirements (immigration, work eligibility, medical reporting), practical requirements (housing), and academic requirements. The remaining requirements will be handled during Orientation Week and the first weeks of the fall term.

3.1 Math Camp

In the week prior to the start of the fall term, a quantitative “math camp” is offered. While not mandatory, Math Camp is strongly recommended for students returning to academia after an interval away, for students whose previous programs may not provide adequate preparation for some of the SES program classes, as well as for students who may wish to refresh their knowledge. Topics covered in Math Camp are tailored to the needs of the incoming class, and are focused on elements of analysis and linear algebra.

3.2 Doctoral Seminar

The doctoral seminar, IDS.900, continues the work of orienting each newly admitted cohort of doctoral students. Its primary function is to introduce students to IDSS research areas, but it also provides an opportunity to establish and strengthen the interconnectedness of each cohort. **All SES doctoral students are expected to complete IDS.900 during their first fall term.**

3.3 Econ Camp

Similar to Math Camp, Econ Camp is offered to students who have not yet satisfied the core social science requirement, typically first- and sometimes second-year students. Econ Camp also provides a refresher on economic principles necessary to succeed in entry level graduate economic subjects at MIT.

4. Coursework

The class requirements for SES follow. IDS.900 is required of all SES students. Core classes are to be selected from within a set of available options. In all other cases, classes will be subject to approval by the SES-GPC.

Undergraduate classes and some graduate classes whose content is deemed too basic may not be acceptable for inclusion in a student's SES program. The principle here is that coursework should be supporting advanced work at the doctoral level. This determination is made by the student's academic advisor and the SES-GPC, with input from the student's research advisor (if identified).

4.005 Orientation

To be completed during the first Fall term.

- IDS.900 Doctoral Seminar in Social and Engineering Systems

4.01 Core

Take 3 of the 4 following classes. For students who enrolled in the SES Doctoral Program prior to June 2021, substitutions may be possible for 6.436 and 6.251, as described in Appendix A.

Probability

- 6.7700/15.085 Fundamentals of Probability (formerly 6.436)

Statistics

- 18.6501 Fundamentals of Statistics OR
18.655 Mathematical Statistics OR
IDS.160/9.521/18.656 Mathematical Statistics: a Non-Asymptotic Approach⁸ OR
IDS.131/6.3732 Statistics, Computation and Applications

Microeconomics / Causal Inference

- 14.121 & 14.122 Microeconomic Theory I & II OR
14.320 Econometric Data Science OR
~~14.381 Applied Econometrics~~ OR – (former 12 unit version only)
14.386 New Econometric Methods OR
14.388 Inference on Casual and Structural parameters using ML and AI OR
17.802 Quantitative Research Methods II: Causal Inference

Social Science

- 21A.809 Designing Empirical Research in the Social Sciences OR
21A.819 Ethnographic Research Methods OR
15.838 Research Seminar in Marketing – only Prof. Dean Eckles' version OR
17.850 Political Science Scope and Methods OR
SOCIOLOG 2205 Sociological Research Design

⁸ IDS.160/9.521/18.656 is only appropriate for students with previous background in statistics

4.02 Information, Systems, and Decision Science

5 classes. These are rigorous classes in the areas of probabilistic modeling, statistics, optimization, and systems/control theory. Classes used to satisfy the core can be counted toward this requirement. However, the remaining classes should be at a more advanced level. One class must involve the statistical processing of data. One class must have substantial mathematical content (as determined by the SES-GPC). Two classes must belong to a sequence that provides increasing depth on a particular topic.

4.03 Social Science

4 classes. Students propose a coherent and rigorous program of study in the social sciences that provides the background necessary for the student's research. Classes used to satisfy the core can be counted toward this requirement. However, the remaining classes should be at a more advanced level. Three classes must form a coherent collection that builds depth in a particular social science focus area.

4.04 Application Domain

2 classes. Students take a total of two classes in the application domain of their research. One of these classes may also be counted toward the social science requirement. One class may be replaced by an internship or independent study in which the student satisfactorily performs hands-on work in a particular domain. Students should seek advisor and SES-GPC pre-approval that a particular internship or independent study can be used in this manner.

4.05 Substitutions & Waivers

Note: Students who enrolled in the SES Doctoral Program prior to June 2021 may choose to follow the old version of this policy documented in Appendix A.

Except for Statistics and Data Science MicroMasters learners (see P&P 4.06), there is no provision for the transfer of academic credit units from other universities or from previous study at MIT. However, the SES-GPC will occasionally approve the waiver of some of the program's requirements in cases where the knowledge reflected in a requirement has been acquired at the expected level. Students must submit a request over email, endorsed by their academic or research advisor.

Additionally:

1. No more than 4 classes can be waived per student.
2. For the core classes, a waiver can be granted for the class associated with a written qualifying exam that a student has passed. In essence, successful completion of the exam will be considered by the program to be equivalent to having taken the corresponding class.
3. Beyond the core, students may waive classes based on the content of previous coursework, i.e., based on classes that cover the knowledge requirements of this program, and which the SES-GPC considers to be at the doctoral level. This coursework may have taken place at MIT or at another institution.
4. All students must take at least 72 units, with a grade of B or better, as a part of their doctoral program, applied exclusively to this doctoral program, while enrolled in the program. Waived subjects cannot be counted towards this unit requirement. Graduate classes whose normal grading is A-F ("letter graded") cannot be counted toward a student's SES program if the student opts for Listener status⁹, "LIS," or the Graduate Pass/D/Fail option¹⁰.
5. Subject to SES-GPC approval, graduate classes whose native grading is Pass/D/Fail can be counted toward the student's SES program, but not towards the 72-unit requirement.

⁹ <https://registrar.mit.edu/classes-grades-evaluations/grades/grading-policies/listener-status-auditing>

¹⁰ <https://registrar.mit.edu/classes-grades-evaluations/grades/grading-policies/graduate-pdf-option>

6. Classes taken through cross-registration¹¹ at other institutions can be counted towards the requirements, subject to the same stipulations as MIT classes.

4.06 MicroMasters in Statistics and Data Science Pathway

Learners who have successfully completed the MITx MicroMasters Program in Statistics and Data Science credential (including the capstone exam) and who have been admitted to SES will have satisfied the 6.436J/15.085J Fundamentals of Probability and 18.6501 Mathematical Statistics core requirements after passing an Advanced Standing Exam¹². Current and admitted SES doctoral students pursuing this option should contact the IDSS Academic Office for additional information.

4.07 Independent Study

Students may receive credit for independent work completed while enrolled in the program, by signing-up for credits of Independent Study in Data, Systems, and Society (IDS.950)¹³. Independent study must be supervised by a member of MIT's teaching staff ("independent study advisor"), and be agreed to by the student, academic or research advisor, and the SES-GPC.

4.08 Subject Evaluations

Subject evaluations provide important feedback to students, instructors, TAs, departments, schools, and MIT administration. Subject evaluations for SES core classes are reviewed by the SES-GPC. Subject evaluations for IDSS graduate classes are reviewed by the IDSS-DGC and the IDSS director, and are used to inform a number of decisions about staffing, promotion, and resource allocation. All IDSS classes, including special subjects, with an enrollment of 2 or more students are evaluated.

IDSS students are encouraged to evaluate every class they take.

4.09 Unit Limits

The number of academic units that a student can register for is limited as follows:

- Fall & spring terms:
 - Regular classes, independent study, and practical experience:
 - Students on Fellowship: 0 units min, 36 units max
 - Students on RA/TA/IG: 0 units min, 24 units max
 - Academic Research (IDS.970 or IDS.THG): 6 units min, 36 units max
 - Academic Teaching (IDS.960): 0 units min, 20 units max
- Summer term:
 - Regular classes, independent study, practical experience:
 - Students on Fellowship: 0 units min, 24 units max
 - Students on RA/TA/IG: 0 units min, 12 units max
 - Academic Research (IDS.970 or IDS.THG): 6 units min, 24 units max
 - Academic Teaching (IDS.960): 0 units min, 20 units max

Cumulatively, [regular classes] + [academic research] + [academic teaching], students are advised to register for a minimum of **36 units in the fall and spring terms**, and for a minimum of **20 units in the summer term**.

4.10 Program Plans

By the end of their first year in the program, students must submit a preliminary plan of study, including a problem domain, an information-systems-and-decision-science focus, and a social science focus, and seek

¹¹ <https://registrar.mit.edu/registration-academics/registration-information/cross-registration>

¹² <https://registrar.mit.edu/classes-grades-evaluations/grades/grading-policies/advanced-standing-exam-grades>

¹³ <https://wikis.mit.edu/confluence/download/attachments/117710524/independent%20study.pdf>

approvals of waivers and exceptions as necessary. These plans can be changed, and students should check and revise (as necessary) their plan of study, at least annually. Students should schedule a meeting to audit their program plans with the IDSS Academic Office, either two terms before graduating or in advance of the final term of classes required on their program plan (whichever occurs first). This meeting should happen after preregistration is submitted and before the first Friday of the term.

5. Qualifying Exams

Qualification for the PhD takes place in two stages.

5.1 Written Qualifying Exams

Note: Students who enrolled in the SES Doctoral Program prior to June 2021, may choose to follow the old version of this policy documented in Appendix A.

In order to pass the Written Qualifying Exams in SES, students must qualify in three of the four following areas: Probability, Statistics, Microeconomics / Causal Inference, and Social Science.

Students pass the WQE by earning two subject grades within the 'pass' threshold and one subject grade within the 'marginal pass' threshold or better. Each of these subjects must be from a different area. **Subjects must be 9+ units** (e.g., 14.121 and 14.122 only count if taken together).

Students will normally qualify within their first three regular terms, but may take as long as four regular terms in unusual circumstances. Students who have failed to qualify by the end of their fourth regular term will be considered to have failed the SES WQEs and must leave the SES *doctoral* program (see P&P 7.0 for information on the SES master's program).

Students may make no more than two attempts to qualify in any particular area and no more than six attempts total. Students must declare by the Drop Date of the corresponding class whether they are making a qualification attempt.

Rather than repeating previous coursework, students are encouraged to consult with their academic advisor and research advisor (if identified) and consider together whether new classes will better advance their preparation.

Students who have taken a qualification subject (or subjects) below prior to enrolling in SES may count it toward their WQEs according to the policies outlined here (including grade thresholds). However this subject will not count toward the requirement that students must still take "at least 72 units... applied exclusively to this doctoral program, while enrolled in the program" (P&P 4.05.4).

Likewise, students who have taken a subject elsewhere may, with the permission of the instructor, sit for a cumulative final exam and qualify by receiving a grade on the final corresponding to the subject grade thresholds in the table below. Students doing this must register as 'Listeners' in the subject. This subject will not count toward the requirement that students must still take "at least 72 units... applied exclusively to this doctoral program, while enrolled in the program" (P&P 4.05.4). If the subject does not normally offer a cumulative final exam, students may not qualify via this method.

Core Requirements

Subject Grade Thresholds

Pass	Marginal Pass	Fail
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Probability

6.7700/15.805 Fundamentals of Probability	A+ to A-	B+	B or lower
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Core Requirements

Subject Grade Thresholds

Pass	Marginal Pass	Fail
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Statistics

18.6501 Fundamentals of Statistics <i>or</i>	A+ to A-	B+	B or lower
18.655 Mathematical Statistics <i>or</i>	A+ to A-	B+	B or lower
IDS.160 Mathematical Statistics: a Non-Asymptotic Approach <i>or</i>	A+ to A-	B+	B or lower
IDS.131 Statistics, Computation and Applications	A+ to A-	B+	B or lower

Microeconomics / Causal Inference

14.121 & 14.122 Microeconomic Theory I & II <i>or</i>	two B+ grades or better	one B and one B+	two B grades, or any grade of B- or lower
14.320 Econometric Data Science <i>or</i>	A+ to A-	B+	B or lower
14.381 Applied Econometrics (12 unit version only) <i>or</i>	A+ to A-	B+	B or lower
14.386 New Econometric Methods <i>or</i>	A+ to A-	B+	B or lower
14.388 Inference on Causal and Structural Parameters Using ML and AI <i>or</i>	A+ to A-	B+	B or lower
17.802 Quantitative Research Methods II: Causal Inference	A+ to A-	B+	B or lower

Social Science

21A.809 Designing Empirical Research in the Social Sciences <i>or</i>	A+ to A-	B+	B or lower
21A.819 Ethnographic Research Methods <i>or</i>	A+ to A-	B+	B or lower
15.838 Research Seminar in Marketing (only when offered by Prof. Dean Eckles) <i>or</i>	A+ to A-	B+	B or lower
17.850 Political Science Scope and Methods <i>or</i>	A+ to A-	B+	B or lower
SOCIOL 2205 Sociological Research Design	A+ to A-	B+	B or lower

5.2 Oral Qualifying Exam

Between the student's fourth and sixth regular term in the program, and after the student passes the written qualifying exams, they take the oral qualifying exam (OQE). Students must schedule the OQE by the end of the 6th regular term. Students should indicate their intention to take the OQE during a certain regular term by the end of the 1st week of that term, also indicating the subject of their research presentation.

A written report summarizing the student's research must be submitted to the OQE examiners (described later in this section) no later than two weeks before the date of the exam. The report should be concise, no more than 20 double-spaced pages in length, but should clearly describe the main contributions, placing them in the context of previous research in the subject.

The oral presentation should focus on the student's research. The amount and focus of material covered should be roughly equivalent to *one* first-author paper (i.e., do not present two or three topics). The presentation itself should take between 20 and 30 minutes, assuming no interruptions. In addition to presenting their research, the presentation should demonstrate the student's ability to carry out original, doctoral-level research. The student should also demonstrate an understanding of the broader context and adequate mastery of the relevant tools, and possibly discuss approaches and methods for extensions or related problems brought up by the committee.

During the actual exam, interruptions for related questions are expected and the 20-to-30 minute presentation may in practice take up to 60 minutes. Following the presentation is a question and answer period with a broader scope, which may run up to one additional hour. The student may be excused for faculty deliberations in the middle and/or the end of the exam.

The OQE is administered by 2 or 3 examiners, appointed by the SES-GPC or the SES-GPC Chair, also taking into account the student's suggestions. A student's research advisor, co-advisor, or research supervisor may *not* be examiners. One of the committee members serves as the exam chair, and solicits input from the student's research advisor. Typically this is an IDSS faculty member familiar with SES. The second examiner is usually another member of the MIT faculty. The OQE committee chair submits a report to the SES-GPC, which includes its recommendations. The final decision is made by the SES-GPC. Subsequently, the student and their research advisor may meet to discuss the outcome of the exam. The oral exam report becomes a part of the student's program record.

Students who fail their first OQE attempt may be allowed to retake the OQE by the end of their 7th regular term in the program. Depending on the outcome of the first attempt, the SES-GPC may require either a complete retake of the exam or a retake that focuses on specific aspects. No student is allowed more than two attempts.

After successfully completing the OQE, doctoral candidates are expected to be almost entirely immersed in their research, with only occasional coursework.

6. Teaching

Students who teach at or for MIT, while enrolled in SES, may do so in a variety of ways. This document uses ‘TA+’ as a categorical term covering all graduate teaching roles, but there are important distinctions. The distinguishing features of the main graduate teaching roles include:

- teaching trainees - earn academic credit for teaching
- teaching assistants - are student employees
- graduate instructor (Instructor-G) – are also student employees. However, the Instructor-G appointment is only rarely offered and, when it is, only to “mature students of proven teaching ability who, in the opinion of the department head, are competent to accept teaching responsibilities warranting the grade of instructor”¹⁴.

Students enrolling in the SES Doctoral Program in June 2021 or later are required to serve as teaching trainees for one term (fall, spring, or summer) for a full-term subject (minimum of 9 units) or equivalent. Teaching trainees must register for at least 20 units of IDS.960 Teaching in Data, Systems, and Society, with units corresponding to typical hours of teaching effort required per week during a regular term. The SES teaching requirement must be satisfied while the student is a regularly enrolled student in the doctoral program; prior teaching experience will not satisfy the requirement.

Before accepting a teaching traineeship, students should verify that it can be fully funded by a teaching fellowship, covering tuition, stipend, and health insurance (SHIP) for the term. Typically, most programs are willing to use teaching trainees interchangeably with TAs for roles advertised as a TA role.

NOTE: There is one common exception to this assumption. During the summer term, teaching fellowships are expected to be slightly more expensive to funders than teaching assistantships. Teaching trainees are likely to be responsible for tuition at a level corresponding to the summer off-campus internship rate¹⁵. However, teaching assistants and graduate instructors would normally continue to be covered by the Summer Tuition Subsidy¹⁶. Therefore, all students planning a summer teaching traineeship should consult with the IDSS Academic Office in advance.

Normally students should fulfill the teaching requirement following their Written Qualifying Exam, although they have the discretion to postpone until after the Oral Qualifying Exam. Students must complete the SES teaching requirement before working as a teaching assistant or graduate instructor, and by the end of their 4th year in the program. Students who have yet to identify an acceptable teaching traineeship by the end of their 7th regular term (fall & spring) may receive an assignment from the IDSS Academic Office. Students who need help identifying a teaching traineeship are encouraged to work with the IDSS Academic Office.

All new IDSS TA+s are expected to attend Teaching Days¹⁷, organized by the MIT Teaching + Learning Lab (TLL). TA+s must attend the Responsible Employee Training and at least two other sessions relevant to their assignment, decided in consultation with the lead instructor for the subject. Students are encouraged to take advantage of other TLL training opportunities, including the Teaching Certificate.

TA+s must have taken the Responsible Employee Training within a year or repeat the training. TAs who are US citizens and permanent residents must submit a Free Application for Federal Student Aid (FAFSA)¹⁸.

¹⁴ <https://policies.mit.edu/policies-procedures/80-graduate-student-appointments/82-appointment-categories>

¹⁵ <https://registrar.mit.edu/registration-academics/tuition-fees/graduate>

¹⁶ <https://registrar.mit.edu/registration-academics/tuition-fees/graduate/summer-tuition-subsidy>

¹⁷ <https://tll.mit.edu/programming/ta-days/>

¹⁸ <https://studentaid.gov/h/apply-for-aid/fafsa>

7. The Master's Degree in Social and Engineering Systems

Students who are admitted to the PhD program directly after their bachelor's degree are not required to obtain a master's degree. Upon passing the doctoral qualification process, they can proceed directly towards the PhD degree.

However, a student enrolled in the SES doctoral program *may* elect to earn the embedded Master's Degree in Social and Engineering Systems (SES-SM) if they:

1. complete the requirements for the master's degree, including a thesis, and then leave the program. This includes students who fail the doctoral qualification process.
2. satisfy the specified requirements for the master's degree, along the way towards their PhD, including a separate master's thesis. Students should consult with their academic advisors and research advisors if this is their intention. Note that original contributions presented in the master's thesis cannot be reused as original contributions in the doctoral dissertation (i.e., research contributions cannot be double-counted).

Students who have earned a master's degree that includes a research-based thesis in a closely related field may not be eligible for the SES-SM. The SES-GPC is responsible for making such determinations.

In order to obtain a Master's degree, a student will have to satisfy general MIT requirements¹⁹, as well as departmental requirements:

1. Complete a satisfactory program-of-study of at least 66 graduate units. Note that teaching, research, or thesis credits cannot be counted towards the 66-unit requirement.
2. Satisfy the 3-course core requirement of the doctoral program.
3. Submit a 24-unit research thesis (IDS.ThG).
4. The thesis must be focused on an area of specialization accepted by the SES-GPC, on the basis of a short thesis proposal, endorsed by the student's research advisor.

Classes used to satisfy the SES-SM requirements can also be used to satisfy the SES doctoral program requirements (this is what is meant by "an embedded master's program").

¹⁹ <https://oge.mit.edu/gpp/advanced-degrees/masters-degree/master-of-science/>

8. Interdisciplinary Doctoral Program in Statistics

“The Interdisciplinary PhD in Statistics (IDPS) is designed for students currently enrolled in a participating MIT doctoral program who wish to develop their understanding of 21st century statistics, using concepts of computation and data analysis as well as elements of classical statistics and probability within their chosen field of study.”²⁰

SES doctoral students may choose to be considered for the Interdisciplinary Doctoral Program in Statistics (IDPS) by submitting a selection form between the end of their second regular term and their penultimate term in the program. Selection forms are due on Add Date in the Fall or Spring Term and can be obtained by writing to idss_academic_office@mit.edu.

“Selection criteria include an endorsement from the student’s primary program advisor, a 4.5 MIT graduate GPA, and a statement of interest in Statistics and Data Science. Students who have already submitted a thesis proposal may skip the statement, but must instead attach their thesis proposal to their selection form, covering their usage of statistical methods. The participating program subcommittee will make the selection decision with a secondary review from the SDSC Program Committee.”²¹

Current coursework and other requirements are available on the webpage for the Interdisciplinary PhD in Social & Engineering Systems and Statistics.²² Of note: “Students must complete their primary program’s degree requirements along with the IDPS requirements. Statistics requirements are in-addition to the primary program’s requirements, and must not unreasonably impact performance or progress in a student’s primary degree program.”²³

Likewise, IDPS is a specification of a student’s existing doctoral program, not a second PhD. Upon graduation SES students who have also completed IDPS will receive their doctoral degree with “and Statistics” added to the thesis field. That is **in SES they will have earned their PhD in “Social and Engineering Systems and Statistics.”** Students should take care to select this thesis field this in their degree application²⁴ and thereafter consistently refer to their thesis field as such in resumes, CVs, professional websites, etc.. For example:

MIT, PhD Social and Engineering Systems and Statistics 2022

or

Massachusetts Institute of Technology Cambridge, MA
PhD in Social and Engineering Systems and Statistics May 2022

- Dissertation: *Title*

or

Massachusetts Institute of Technology Cambridge, MA
Institute for Data, Systems, and Society (IDSS)
PhD in Social and Engineering Systems and Statistics May 2022

- Dissertation: *Title*
- Programs of study: Social and Engineering Systems Doctoral Program (SES) and Interdisciplinary Doctoral Program in Statistics (IDPS)

²⁰ <https://stat.mit.edu/academics/idps/> accessed 2 August 2022

²¹ Policies & Procedures of the Interdisciplinary Doctoral Program in Statistics, revised 24 January 2020

²² <https://stat.mit.edu/academics/idps/idps-social-engineering-systems/>

²³ Policies & Procedures of the Interdisciplinary Doctoral Program in Statistics, revised 24 January 2020

²⁴ <https://degreeapp.mit.edu/>

9. Research

Doctoral-level research must make original contributions of a depth consistent with general expectations for MIT doctoral theses. In addition, student research under this program is expected to possess the traits listed in the *Mission & Character* section of this document. Accordingly, evaluations of a student's research progress should address each of these traits.

In order to provide timely and consistent evaluation of a student's research progress throughout their program, students must register for a minimum of six units of research (IDS.970 or IDS.THG), each fall, spring, and, in most cases, summer term. Students should register for IDS.970 Pre-Thesis Research in Data, Systems, and Society until submitting their thesis proposal. Once they receive a final grade for IDS.970 they should register for IDS.THG Graduate Thesis.

Objective research progress can be difficult to measure, especially because setbacks are often a part of the process. However, research advisors and students will be expected to develop criteria that define adequate progress for the term in terms of student effort and input. The overall research progress evaluation is reported as a research progress grade at the end of each term, as well as in a short Research Progress Report. The Research Progress Report is a part of the student's program record, and focuses on research progress, publications, presentations, and plans.

9.1 Thesis Committee and Proposal

After passing the OQE, a student should form a doctoral thesis committee, consisting of a chair and additional members (see the *Advising* section), with the approval of the SES-GPC. In addition, a written thesis proposal must be prepared in consultation with the doctoral thesis committee and submitted to the SES-GPC. All the above must take place within a year of passing the OQE.

The thesis proposal is normally between 10 and 20 pages, and should include the following elements:

- working thesis title
- thesis proposal cover page, listing the doctoral thesis committee
- problem summary
- significance
- literature review
- approach
- timeline
- references

9.2 Research Changes

It is expected that some students' research interests will change over the course of their programs. This is acceptable as long as:

- students are able to retain a research advisor
- their research remains "in-scope" for IDSS, as determined by the SES-GPC
- the new research direction is appropriately documented (e.g., if a thesis proposal had been submitted, a new one would have to be submitted after a major change of direction)

Students should discuss such changes with their academic advisor.

9.3 COUHES

Students and their advisors must follow MIT policy regarding the use of human experimental subjects.²⁵

9.4 Travel

SES students may apply for up to \$5,000 USD of travel funding²⁶ over their lifetime, which can be applied towards transportation, accommodations, meals, and registration fees for travel related to research or professional development. The annual max is \$1,500 USD. This funding should be used in conjunction with other support such as lab funding or the GSC travel grant. Students will be responsible for complying with all of MIT's travel policies and supplying the required documentation to the IDSS Academic Office within 10 days of the trip.

Additional notes:

1. Meals and incidental expenses (MI&E) and lodging should not exceed the rates set by the US General Services Administration (US travel)²⁷ or 75% of US Department of State rates (international travel)²⁸.
2. Travelers must comply with MIT travel policies, including:
 - travel registry, for trips >100 miles from MIT²⁹
 - international risk policy³⁰
 - travel planning and expensing³¹
3. Receipts must be itemized. Alcohol will not be reimbursed.
4. We encourage using MIT's preferred travel agency³². Fees from a preferred travel agency can be covered.
5. SES travel funding balances are tracked online³³. Students can ask the IDSS Academic Office for their assigned travel pseudonym.

²⁵ <https://couhes.mit.edu/>

²⁶ <https://bit.ly/4fOZjVz>

²⁷ <https://www.gsa.gov/travel/plan-book/per-diem-rates>

²⁸ https://aoprals.state.gov/web920/per_diem.asp

²⁹ <https://travel.mit.edu/>

³⁰ <https://globalsupport.mit.edu/travel-safety-abroad/safety-abroad/international-travel-risk-policy/>

³¹ <https://vpf.mit.edu/100-introduction-to-mit-travel-policies>

³² <https://vpf.mit.edu/meet-travel-collaborative-mits-preferred-travel-agency>

³³ https://bit.ly/mitSES_travel_funding

10. Dissertation Defense, Dissertation Submission, & Graduation

MIT expects that students will graduate from their doctoral program within at most 14 regular terms (fall and spring) of graduate school at MIT. Students who were enrolled in a substantially different graduate program at MIT prior to joining SES may be an exception to this rule. In any case, IDSS aims at students' timely completion of the program, preferably within 5 academic years or less.

10.1 The Defense

On behalf of the doctoral thesis committee, the committee chair must explicitly authorize the defense, prior to its announcement, by informing the IDSS Academic Office.

The defense must be announced to the IDSS community two weeks in advance and be open to all members of the MIT community, as well as external guests invited by the candidate or the doctoral committee. If the IDSS Academic Office has not received the requisite materials and approvals required to announce the defense 7 days prior to the defense date, the defense will be rescheduled to a later time.

The defense consists of a 40 to 50 minute research presentation, a question and answer session, private faculty deliberations, and a short committee or advising meeting to communicate the results of the defense to the candidate.

The dissertation defense report becomes a part of the student's program record.

10.2 Dissertation Submission

The final dissertation must be submitted to the IDSS Academic Office, according to the dates specified in the MIT Academic Calendar³⁴. The IDSS Academic Office may grant extensions, but only to the extent that these are administratively practicable.

Students are responsible for submitting to the IDSS Academic Office the final electronic version of the dissertation and associated documentation according to MIT Library policies.³⁵

³⁴ <http://web.mit.edu/registrar/calendar/index.html>

³⁵ <http://libraries.mit.edu/archives/thesis-specs/>

11. Academic Performance & Progress

The following are expected of students in the SES doctoral program:

- Cumulative graduate GPA in the SES doctoral program should be no lower than a 4.5 on MIT's 5.0 scale, by the end of the student's first academic year. That is, loosely speaking, students should not earn more B grades than A grades.
- Term GPA while enrolled in SES should be no lower than a 4.0.
- J- grades signify that, while some research progress was made, there were serious issues that must be addressed in following term(s). J- grades can be viewed as part of a pattern of insufficient performance or progress.
- C, D, F, O "[Unexcused] Absence", and U "Unsatisfactory Progress" grades are unacceptable. Furthermore, they cannot be counted for credit in a student's SES program.
- Students should inform the IDSS Academic Office and their advisor any term they expect to earn an Incomplete "I" or Excused Absence "OX" grade, as soon as possible, and no later than the grading deadline for the term. In some circumstances, including unexplained cases, I and O grades may be interpreted as evidence of unacceptable performance. In addition, students must resolve these grades by the deadlines specified in MIT policy³⁶.
- Cross registration, according to MIT policy³⁷, is acceptable, and in some cases encouraged.

11.1 Progress Oversight

Student progress is monitored in part through the Research Progress Report. The Research Progress Report is prepared by the student at the end of each regular term, and is shared with the student's research advisor and/or academic advisor.

At the end of each term, the SES-GPC reviews each student's progress, based on the Research Progress Report, advisor input, grades, coursework progress, and any other available input, and provides feedback to the student, as necessary.

³⁶ <https://registrar.mit.edu/classes-grades-evaluations/grades/grading-policies/incomplete-work> and <https://oge.mit.edu/gpp/admissions-and-registration/academic-performance/excused-absences/>

³⁷ <https://registrar.mit.edu/registration-academics/registration-information/cross-registration>

12. Advising

Clear communication on all sides is essential to ensuring the productivity and stability of student-advisor relationships.

12.1 Advising Roles

12.1.1 Academic advisor

Students must have an academic advisor at all times. An initial academic advisor assignment is made shortly after a student accepts admission to the program. The academic advisor serves as the student's primary advisor during their initial term(s), assisting and approving student subject selection, and guiding the student in identifying potential research matches and committee chairs. Throughout the course of a student's academic career in the program, the academic advisor monitors student progress and milestones. The academic advisor also acts as a resource for students navigating committee, research, and funding relationships, and raises advising, course selection, etc., issues with the SES-GPC, as appropriate. The academic advisor does *not* fund, serve on the student's committee, or directly supervise research.

12.1.2 Doctoral Thesis Committee Chair – “chair”

The chair must be a member of the IDSS Faculty (refer to *Table 1* for more specifics), reporting to IDSS for the timely and orderly progression of the student through the program. The chair coordinates and manages the functions of the doctoral thesis committee and is the primary contact for grading, reporting, and other progress updates.

12.1.3 Research Advisor – “advisor”

Often but not always combined with the chair role, the advisor is a member of the doctoral thesis committee who provides intellectual supervision. MIT faculty and persons with academic appointments at MIT in relevant academic units may be eligible to fill the advisor role (refer to *Table 1*). When a committee has a research advisor distinct from the committee chair, chairs are responsible for coordinating with the advisor on progress grades and reports. The research advisor does *not* serve as an examiner for the student's oral qualifying exam.

12.1.3.1 “co-advisor”

Committees should normally include a co-advisor, an eligible faculty member with an expertise complementary to that of the advisor. Typically this implies supervision by faculty from different schools. MIT faculty and persons with academic appointments at MIT in relevant academic units may be eligible to fill the co-advisor role (refer to *Table 1*). Exceptions to the co-advising policy may be granted by petitioning the SES-GPC. The research co-advisor does *not* serve as an examiner for the student's oral qualifying exam.

12.1.4 Doctoral Thesis Committee Member – “committee”

Subject to IDSS policy about committee composition, discussed later in this section, doctoral thesis committees should be composed of the experts who can best guide and support the original research the student is undertaking. Given the intellectual footprint of IDSS, it is expected that each doctoral thesis committee will have advising expertise in both the social sciences and engineering, as well as in the application domain.

12.1.5 Students and Candidates

Students are the agents driving the research. Prior to passing both portions of the qualifying exams, they are referred to as “doctoral students.” After passing the qualifying exams they may use the title “doctoral candidate.” Students may request committee meetings, ask for reviews and advice, and reassess the utility of any advising relationship at will.

A student is expected to identify and work with an advisor. A student's inability to identify and/or retain a research advisor may be considered evidence of insufficient progress.

12.1.6 RA / TA Supervisor

Research assistant and teaching assistant supervisors perform an employer supervisory role, the terms of which are handled in MIT Policies: Employment Policy Manual³⁸ and the Collective Bargaining Agreement Between Massachusetts Institute of Technology and MIT Graduate Student Union UE Local 256³⁹. Students are welcome to discuss any tensions with their student employment and their academic obligations, like balancing work-for-pay and dissertation research, with their academic advisor, with the IDSS Academic Office, with the OGE, and/or with their union steward. Current or planned RA supervisors do *not* serve as an examiner for the student’s oral qualifying exam.

Table 1: Eligibility for IDSS Advising Roles

The following table provides the general eligibility rules for the various advising roles. Exceptions can be granted on occasion by the SES-GPC, as long as they are consistent with general MIT rules, e.g., for cases of research staff with thesis supervision privileges, or for external thesis committee members outside academia.

Title	IDSS (core & affiliated)	MIT (non-IDSS)	External (non-MIT)
Assistant Professor & Associate Professor Without Tenure	academic advisor chair (co-)research advisor committee	(co-)research advisor committee	committee
Associate Professor with Tenure & Professor	academic advisor chair (co-)research advisor committee	(co-)research advisor committee	committee
<i>active retired faculty:</i> Professor Emeritus & Professor Post-Tenure	academic advisor chair (co-)research advisor committee	(co-)research advisor committee	committee
Adjunct Professor, Professor of the Practice	committee	committee	committee
Adjunct Associate Professor, Associate Professor of the Practice	committee	committee	committee
Visiting Professor, Visiting Assistant Professor, Visiting Associate Professor	committee	committee	N/A
Affiliated Faculty	committee	committee	N/A

12.2 Selection

12.2.1 Consent

An advising relationship only exists with the consent of both the student and the advisor. Therefore, forming an advising relationship is a mutual selection process. Formal advising relationships must also be sanctioned by the SES-GPC.

³⁸ <https://policies.mit.edu/>

³⁹ <https://hr.mit.edu/gsu>

12.2.2 Composition of doctoral thesis committees

As stated previously, doctoral thesis committees should be composed of the experts who can best guide and support the original research the student is undertaking.

Given the intellectual footprint of IDSS, it is expected that each doctoral thesis committee will have advising expertise in both the social sciences and engineering, normally with the participation of faculty from different Schools.

Other policies on committee composition follow (see also *Table 1*):

- Committees must have between 3 and 5 members, including the chair and research advisor.
- Each committee must have a chair who is a member of the IDSS Faculty.
- In addition to the chair, another member of the committee must be an MIT faculty member. Thus, a minimum of 2 MIT faculty members will serve on each student's doctoral thesis committee.
- A third member of the committee must also hold a research-based doctoral-level degree in a relevant field. Therefore, a minimum of 3 committee members will hold research-based doctoral degrees (or equivalent).

12.2.3 Special advising policies for advisors with changes in eligibility

The following applies to faculty departures from IDSS and/or from MIT, junior faculty members who do not receive tenure, etc.

Chairs and (co-)research advisors

- Advisors in this category may generally continue serving as chairs and advisors for **doctoral candidates** with whom there is an established advising relationship. In this case, previous MIT and IDSS status will continue to be counted toward committee composition requirements.
 - Note: Depending on the student's progress and situation, it may be advisable for an additional member of the IDSS Faculty to serve on this committee. It is recommended that committees so impacted consult with the SES-GPC Chair and the IDSS Director.
- Advisors in this category may generally *temporarily* continue chairing and advising **doctoral students** who are advanced in their preparation for the oral qualifying exams. This determination will usually be left to the mutual discretion of students and committees, but the SES-GPC Chair and IDSS Director are available to advise. Once a student completes the qualifying process, the committee must be reconfigured as necessary to comply with IDSS policy. Students whose preparation for the oral qualifying exams is not advanced should reconfigure their advising as soon as possible.

Committee members

- Committee members in this category may generally continue serving on a committee. However, depending on the committee composition, an additional MIT faculty member may need to be added. Doctoral students will be expected to reconfigure their committees as necessary. Senior doctoral candidates should consult with their chair/advisor and the SES-GPC Chair.

Academic Advisors

- An academic advisor works best as a participating faculty member within IDSS and MIT. Therefore students and candidates alike must identify a new academic advisor as soon as possible. Note that retired faculty, emeritus and professor post-tenure, *are* still eligible to serve as advisors if they remain active at MIT and wish to continue doing so.

12.2.4 Reporting

Students are responsible for ensuring their current advisors are recorded with the Academic Office at all times. This includes academic advisors, research advisors, and committee members.

Students and advisors are responsible for informing each other when a change of advising takes place.

12.2.5 Changes

Apart from evolving research interests and funding considerations, there are many legitimate reasons to consider changing an advising relationship, especially early on in the student's program, such as personality incompatibilities or mismatched work styles. Absent established patterns or clear evidence of dysfunction, IDSS views advising changes as a normal part of some students' and advisors' careers. All parties are expected to communicate necessary changes to each other in a timely, respectful, and sensitive manner.

Academic advisors can play an important role in helping students navigate these transitions in a deliberative and constructive fashion that considers all relevant factors, including availability of suitable research matches and funding. Other resources are IDSS's Academic Office and GradSupport within the OGE.

An additional resource is IDSS Transitional Support Coordinator (TSC). Students considering a change in supervision, whether due to a change in interest or an unhealthy advising relationship, are encouraged to speak with the IDSS TSC. TSCs 'are advocates for the student, helping them navigate the transitional support structure.'⁴⁰ For more information about transitional support, see P&P 13.1.

⁴⁰ <https://oge.mit.edu/student-finances/financial-assistance-and-grants/guaranteed-transitional-support/>

13. Financial Support

SES students are typically supported through Research Assistantships, Teaching Assistantships, and Fellowships. The IDSS administration will be proactive in securing financial support for all students, especially for a student's first year. In the long run, however, students are ultimately responsible for identifying opportunities for financial support, aligned with their research and research advising arrangements.

Please note: when students have been admitted to SES with a guarantee of funding for the duration of their doctoral program, it is always contingent upon satisfactory performance and progress (see P&P 11-11.1, P&P 15).

Students who have been offered an IDSS fellowship to support their first Fall and Spring terms of registration occasionally ask to 'bank' their fellowship for a later term. *If* this request is granted, it is done with the caveat that in the future the funding is likely to be converted to a research assistantship. That is, a term of funding will be guaranteed, and the source will be IDSS-administered funds. However, the funding will be structured as a research assistantship, with all the attendant employment responsibilities, obligations, and rights. The principle behind this policy is that IDSS first-year fellowships are intended to support the exploration of different research projects, groups, and research advisors. Following the first year, students are expected to be engaged in research, embedded in research groups, and working with a research advisor. Therefore, funding is structured to support these activities (rather than exploration).

13.1 Guaranteed Transitional Support

Students considering a change in advising, whether due to a change in interest or an unhealthy advising relationship, are encouraged to speak with IDSS's Transition Support Coordinator (TSC). TSCs 'are advocates for the student, helping them navigate the transitional support structure.'⁴¹

Students wishing to learn more about the program are encouraged to read about the program on the MIT Office of Graduate Education's website⁴² and contact IDSS's TSC. Among other places, contact information for the TSC appears on the final-page/back-cover of the P&P under 'Key Contacts.'

⁴¹ <https://oge.mit.edu/student-finances/financial-assistance-and-grants/guaranteed-transitional-support/>

⁴² <https://oge.mit.edu/student-finances/financial-assistance-and-grants/guaranteed-transitional-support/>

14. Residency, Leaves, & Withdrawal

14.1 Residency & Acceptable Leaves

SES is a full-time, residential program. Students are normally expected to complete their programs without significant interruption. During MIT's fall, spring, and summer terms students must be full-time residential students. Remote work outside of Massachusetts is not allowed for periods of 30 days or more. The only exceptions are when students are covered by one of the following acceptable statuses.

- Medical Withdrawal⁴³
- Childbirth Accommodation⁴⁴
- Leave for US National Service⁴⁵
- Nonresident Doctoral Thesis Research Status⁴⁶
 - Nonresident petitions must be approved by the SES-GPC.
- Thesis Research in Absentia⁴⁷
 - Thesis research in absentia must be approved by the SES-GPC.
- Personal Leave⁴⁸
 - Personal leaves of greater than 14 days during the fall and spring terms must be approved by the SES-GPC.

Leaves not covered by the above categories are discouraged and require IDSS-DGC Chair approval.

In cases where an absolute bar prevents students from being present on-campus, refer to the MIT Remote Appointment Guidance⁴⁹.

14.2 Withdrawal from SES

Students who switch their registration to another program at MIT will be considered to have withdrawn from SES. Students who wish to return after being withdrawn from SES must reapply via the regular admissions cycle.

14.3 Withdrawal from MIT

Students who depart MIT, not on an approved leave, or who fail to enroll by Add Date during the fall and spring terms will be considered to have withdrawn from MIT. Withdrawal may also be arranged in consultation with the SES-GPC.

Students who wish to return after being withdrawn from MIT must apply for readmission:

- Students who have been absent for one year or less may reapply by submitting a Readmission Form⁵⁰.
- Students who have been absent for a period between one and two years must submit a Readmission Form²⁵ and pay an application fee. In addition, the following is required:
 - for doctoral and masters students: an updated Statement of Objectives
 - for doctoral candidates: an updated Thesis Proposal

⁴³ <https://oge.mit.edu/gpp/admissions-and-registration/registration-changes/medical-leave-and-return-policy/>

⁴⁴ <https://oge.mit.edu/gpp/admissions-and-registration/registration-changes/childbirth-accommodation-and-parental-leave/>

⁴⁵ <https://oge.mit.edu/gpp/admissions-and-registration/registration-changes/leave-for-u-s-national-service/>

⁴⁶ <https://oge.mit.edu/gpp/advanced-degrees/thesis/nonresident-doctoral-thesis-research-status/>

⁴⁷ <https://oge.mit.edu/gpp/advanced-degrees/thesis/thesis-research-in-absentia/>

⁴⁸ <https://oge.mit.edu/gpp/admissions-and-registration/registration-changes/personal-leave/>

⁴⁹ <https://ovc.mit.edu/wp-content/uploads/2023/05/MIT-Remote-Appointment-Guidance-Updated-May-2023.pdf>

⁵⁰ <https://oge.mit.edu/gpp/admissions-and-registration/registration-changes/withdrawal-readmission/>

- Students who have been absent for more than two years must reapply via the regular admission cycle and may be required to submit new standardized exam scores. Their request for readmission must also be approved by the Office of Graduate Education.

Readmission is not automatic. Students who plan on withdrawing are urged to do so in consultation with the SES-GPC and their academic advisor, as well as with their research advisor (as applicable). The SES-GPC may, at its discretion, agree upon conditions for readmission for withdrawals planned in consultation with the SES-GPC for a period of two years or less. Such agreements must happen around the time of departure. For withdrawals greater than two years, or when conditions of readmission were not agreed upon in advance, then the SES-GPC or SES-AdComm will consider all factors at its disposal.

Students should also consult the OGE withdrawal and readmission policy. In particular, the OGE specifies: *“Degrees are not backdated; therefore, a student’s total program must meet the requirements and standards existing at the time the degree is granted. Requests for reactivation of graduate degree programs, including previously acquired academic credits, will be evaluated in terms of the length of the interruption.”*

⁵¹

When readmission is granted, the following should be understood:

- The relevance of completed coursework will depreciate over time. As an outside boundary, MIT expects that classes will be counted toward a degree within a period of ten years. The SES-GPC may determine that, in some cases, changes in the field will require new coursework sooner than that.
- Degrees are not back-dated, so readmitted students may be required to take additional classes to satisfy the program requirements in effect on the date of readmission.
- If terms of readmission were not agreed upon in advance, students should not assume that a ‘place is being held.’ It is unlikely students will be able to resume their former research project or even necessarily continue working with their former advisor. It is reasonable to expect that students will need to identify a new topic and a new advisor, which in turn can imply the necessity for additional coursework.

14.4 Denial of Registration

Students who have been denied registration are not eligible for readmission. Consult the *Milestones & Expectations (P&P 15)* section of this document for more information about denials of registration.

⁵¹ <https://oge.mit.edu/gpp/admissions-and-registration/registration-changes/withdrawal-readmission/>

15. Sick Policy

Do not go to class or work if you are sick.

1. See a healthcare provider. For most MIT students this will be MIT Health Urgent Care⁵².
 - Note: Excused absences (see below) will require you to demonstrate that you have seen a healthcare provider.
2. Consult your healthcare provider for how long to stay home. The CDC also offers guidelines:
 - For respiratory viruses⁵³, like COVID-19, influenza ('respiratory flu', 'flu'), respiratory syncytial virus (RSV), rhinoviruses ('common cold'), etc..
 - Similarly, there is advice for gastroenteritis ('stomach flu', e.g. Norovirus⁵⁴), conjunctivitis ('pink eye')⁵⁵, and other infectious diseases.
3. As applicable, tell your:
 - Instructor(s). If you are comfortable doing so, cc your TA+. It may be more efficient.
 - Research advisor and supervisor
 - If you are comfortable doing so, let the IDSS Academic Office know. We are happy to help with communicating to instructors and faculty, and may be able to help with accommodations.
4. Check the Office of Graduate Education's excused absence policy⁵⁶, and take advantage of it if you need it.
5. If you need more assistance while you are sick (e.g. help getting meals), you can check what resources are available with the CARE Team⁵⁷ and/or your head of house⁵⁸ / residential advisor / graduate resident tutor (if you live in the dorms).

The vending machines by the Atlas Service Center (E17-106) and other places on campus⁵⁹ have high-quality masks you can get for free, every 3 days (twice per week max).

Precautions include vaccinations, hand washing (or hand sanitizer if washing is not an option), avoiding touching your eyes / nose / mouth with unwashed hands, appropriately covering coughs and sneezes, masking, and maintaining 2 meters of distance from people who are visibly sick if you will be in the same space for 15 minutes or more.

⁵² <https://health.mit.edu/services/urgent-care>

⁵³ <https://www.cdc.gov/respiratory-viruses/prevention/precautions-when-sick.html>

⁵⁴ <https://www.cdc.gov/norovirus/prevention/index.html>

⁵⁵ <https://www.cdc.gov/conjunctivitis/prevention/index.html>

⁵⁶ <https://oge.mit.edu/gpp/admissions-and-registration/academic-performance/excused-absences/>

⁵⁷ <https://studentlife.mit.edu/careteam>

⁵⁸ <https://officesdirectory.mit.edu/heads-house>

⁵⁹ <https://ist.mit.edu/ssa>

16. Milestones & Progress Expectations

The SES-GPC relies on the following criteria to track student progress. Students will be warned and counseled if their progress or performance is insufficient. In the case of a documented and prolonged (at least two terms) pattern of insufficient progress or performance, a student may be denied further registration. “Denial of registration” is MIT terminology for a permanent academic expulsion from MIT. These decisions are made in coordination with the IDSS-DGC, MIT’s Graduate Academic Performance Group, and the Office of Graduate Education.

The following is a list of expected actions and milestones, which also serves as a summary of various rules described elsewhere in the document.

- a. Every term
 - Students must register for a minimum of 6 unit of pre-thesis or thesis research, IDS.970 or IDS.THG, each fall, spring, and, in most cases, summer term. Research progress grades should be satisfactory (“J” grade) throughout the duration of the student’s program. (Not “J-” or “U”.)
 - At the end of the term, the student’s academic advisor, committee chair, and/or research advisor will evaluate their progress.
 - Students and their academic advisors should be meeting at least once each term (Fall, Spring, and usually Summer).
 - Students must document their progress at the Academic Office’s prompting, once per term (Fall & Spring) via a Research Progress Report.
- b. Year one
 - Students must complete IDS.900 during their first fall term.
 - By the end of their first year in the program, students must submit a preliminary plan of study as described in the *Coursework* section of this document.
- c. Year two - WQE
 - Students must take the WQE, as described in the *Qualifying Exams* section of this document.
- d. Year two or three - OQE
 - Students must take the OQE, as described in the *Qualifying Exams* section of this document.
- e. Year two to four – Teaching
 - Students must serve as a teaching trainee for a minimum of one term, as described in the *Teaching* section of this document.
- f. Thesis Committee and Proposal
 - A thesis committee must be formed and a thesis proposal submitted within a year from the time that a student passes the OQE.
- g. Defense
 - MIT expects students to graduate from their doctoral program within at most 14 regular terms of graduate school at MIT.

Appendix A – Previous Versions of Policies & Procedures

Previous versions of policies and procedures that have been substantially revised but remain relevant to current SES students are recorded here.

Pre-July 2021

Students who enrolled in the SES Doctoral Program prior to June 2021 may choose to satisfy policies in place at the time of their enrollment. They are also welcome to opt into new policies, but may not do so inconsistently. E.g., A student who is using the **new** WQE process may not apply the **old** substitutions and waivers policy for the same subject.

4.05 Substitutions & Waivers (Pre-July 2021)

In very special cases, students may make one (but not both) of the following substitutions, when justified on the basis of the student's prior preparation and/or the subject of their research. These substitutions are approved on a case-by-case basis by the SES-GPC, with input from the student's academic advisor.

- 6.431A & 6.431B in place of 6.436J/15.085J
- 6.255J/15.093J/IDS.200J in place of 6.251J/15.081J

There is no provision for the transfer of academic credit units from other universities or from previous study at MIT. However, the SES-GPC will occasionally approve the waiver of some of the program's requirements in cases where the knowledge reflected in a requirement has been acquired at the expected level. Students must submit a petition endorsed by their advisor.

Additionally:

1. *No more than 4 classes can be waived per student.*
2. *For the core classes, a waiver can be granted for the class associated with a written qualifying exam that a student has passed. In essence, successful completion of the exam will be considered by the program to be equivalent to having taken the corresponding class.*
3. *Beyond the core, students may waive classes based on the content of previous coursework, i.e., based on classes that cover the knowledge requirements of this program, and which the SES-GPC considers to be at the doctoral level. This coursework may have taken place at MIT or at another institution.*
4. *All students must take at least 72 units, with a grade of B or better, as a part of their doctoral program, applied exclusively to this doctoral program, while enrolled in the program. Waived subjects cannot be counted towards this unit requirement. Graduate classes whose normal grading is A-F ("letter graded") cannot be counted toward a student's SES program if the student opts for Listener status, "LIS," or the Graduate Pass/D/Fail option⁶⁰.*
5. *Subject to SES-GPC approval, graduate classes whose native grading is Pass/D/Fail can be counted toward the student's SES program, but not towards the 72-unit requirement.*
6. *Courses taken through cross-registration⁶¹ at other institutions can be counted towards the requirements, subject to the same stipulations as MIT courses.*

5.1 Written Qualifying Exams (Pre-July 2021)

A student takes the written qualifying exams (WQE) in January of their second year (the end of their third regular term in the program). The student is examined on three of the core classes, and passes the written qualifying exams by passing each of these three core exams. Students may retake core area exams in May of their second year (the end of their fourth regular term in the program), for a total of two attempts.

⁶⁰ <http://web.mit.edu/registrar/reg/grades/policies.html>

⁶¹ <http://web.mit.edu/registrar/reg/xreg/>

Students must specify which written qualifying exams (3 of 4) they are taking by the Drop Date prior to their exam (approximately mid-November or mid-April).

The format of an exam (length, open or closed book, take-home or not) will be announced by September for a January exam and by February for a May exam. Independent of the format, collaboration is not permitted. Written exam results will be communicated to the student and their academic advisor and become a part of the student's program record.

In some cases, a separate written exam will not be administered, and a student will be determined to have passed the exam, or not, on the basis of their performance in the corresponding course. Students will be informed by the beginning of an academic year which classes this rule will apply to. Students must state their intention to be thus evaluated by the Drop Date of the corresponding class.

The decision as to which level of performance constitutes passing performance is made by the SES-GPC on the basis of the raw results, together with input from the faculty who have been involved in the design and grading of the exam.

After successfully completing the written qualifying exams, students will generally continue taking classes; however, the students' primary focus should now be on research. Preoccupation with coursework, to the extent that it distracts from research progress, can be problematic.

Key Contacts

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Office of Graduate Education

- 3-138
- gradsupport@mit.edu (GradSupport)
- grad-fellowships@mit.edu (fellowship)
- graddiversity@mit.edu (DEI programming)
- OGE-petitions@mit.edu (graduate petitions)
- grad-ed@mit.edu (general questions)
- 617-253-4860
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