

Master of Science Degree Requirements

The Department follows the Institute requirement for a Master of Science (SM) degree. The student must have satisfactorily completed a program of study of at least 66 units of graduate level subjects, approved by the department in which s/he is enrolled. If 34 units of graduate level subjects and the thesis are in the Department of Civil and Environmental Engineering, the degree will be recommended with specification in this program.

In the following document you will find specific information pertaining to:

1/ Responsible Conduct of Research

2/ Summer Tuition Subsidy

3/ Thesis Supervision

4/ Research Requirement, 1.THG and Annual Review

5/ Content of Master's Thesis

6/ Thesis Submission

Responsible Conduct of Research

Each SM student is required to complete MIT's online course on the Responsible Conduct of Research within the first year, i.e. by the end of Spring term AY1. If you are paid on an NSF grant, you are required to complete the course within 60 days of being assigned to the grant. You can access the course from this web site and following the instructions below. You will need an MIT certificate.

<http://osp.mit.edu/compliance/responsible-conduct-of-research-rcr/register-for-rcr-training>

1. On the bottom of the page, click on "accessing the site for the first time"

Quickcards

Quickcards in PDF format for RCR training can be downloaded here.

[Accessing the CITI site for the first time](#)



[Accessing CITI for additional training](#)

[Affiliating CITI training with MIT](#)

2. From there CITI will ask you to create a password.

3. After you have created your new password, click on “Add a course or Update Learner Group”

My Learner Tools for Massachusetts Institute of Technology

! You are not enrolled in any courses for this institution. Click here to complete your enrollment.

- 🔍 Add a Course or Update Learner Groups ←
- 🔍 View Previously Completed Coursework
- 🔍 Update Institution Profile
- 🔍 View Instructions page
- 🔍 Remove Affiliation

4. Go to question 4 and select, RCR for Engineers

5. You should then see that the course has been added

▾ Massachusetts Institute of Technology Courses		
🔍 Course	🔍 Status	🔍 Completion Report
Responsible Conduct of Research for Engineers	Not Started	Not Earned

6. Complete The Integrity Assurance Statement before beginning the course

7. Once you have completed the course (12 modules with 80% or better on the individual quizzes) send a screen shot of your completion report to the graduate academic administrator, Kiley Clapper (kclapper@mit.edu).

Summer Tuition Subsidy

Graduate students who are enrolled in a research degree program and who are *not* taking subjects are eligible to have their summer tuition subsidized from Institute general funds.

The subsidy applies to new or continuing graduate students in normal resident status during the preceding spring term, and who are only registered for thesis or pre-thesis research credit during the summer.

Some key points to remember:

- Graduate students who register for other summer subjects will be charged tuition on a per unit basis up to the maximum tuition.

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- Students registering for summer internship subjects are not eligible for the tuition subsidy and will be charged the per unit rate, up to a maximum of four units.
- Be sure to confirm with your advisor before registering for any summer subjects.

Tuition rates can be found here: <https://registrar.mit.edu/registration-academics/tuition-fees/graduate>

Thesis Supervision

A student's thesis supervisor can be a 1/MIT CEE Faculty member(s), 2/CEE Senior Research Scientist/Engineer, or a student can be 3/ co-advised by a CEE and other MIT faculty member. A thesis supervisor is responsible for certifying and signing the thesis. In the case of co-supervisors, both must certify and sign thesis.

Research Requirement and 1.THG

1.THG is a subject associated with a program of research leading to the writing of a graduate thesis. Research plays an integral role in the graduate degree, and research effort is tracked through enrollment in 1.THG. This subject is associated with the laboratory, field, computational, or theoretical research undertaken by each student working with a faculty advisor in CEE at MIT.

Graduate students are required to register for 1.THG every semester, and as part of this, meet with their supervisors on a regular basis. First-year students are required to register for 24 units of 1.THG and should meet with their supervisors on a weekly basis. Beyond first year, the number of credit hours is determined in consultation with your advisor. If a student is registered only for 1.THG during a term, the department recommends a load of 48 units. Through enrollment in 1.THG, students are formally graded on research performance each semester, in accordance with MIT Faculty Rules and Regulations 2.62.3.

<http://facultygovernance.mit.edu/rules-and-regulations>

CEE Graduate Student Annual Review of 1.THG

The annual review is an opportunity for (1) advisors to provide formal feedback (both positive and negative) on student performance and progress toward graduation and (2) for students to discuss their professional development goals, and to provide positive and negative feedback on their mentoring needs, and/or group climate. In particular, the questions here are designed to promote self-reflection and to facilitate an annual conversation between a faculty advisor and a graduate advisee. The annual review meeting will occur in the spring term, and is associated with the 1.THG grade for that term. The student and advisor submit a signed form to attest that a meeting has occurred, but the review itself remains confidential between student and advisor to promote frank feedback and discussion.

Content of Master's Thesis

A Master of Science Thesis must provide a comprehensive description of a substantial research project. The thesis must include the following elements:

- 1) a clear description of and motivation for a specific research question or objective;
- 2) a description of the methods used to address the research question or objective;
- 3) a detailed presentation of results;

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- 4) a discussion of results with comparisons made to similar studies/data/models in the literature; and
- 5) a conclusion chapter describing implications, new questions raised, and future directions.

If appropriate, the SM thesis may be comprised of a collection of accepted and/or submitted journal and/or conference papers. The thesis author must be the first author on at least one of the submitted/accepted papers. In addition to the individual papers, the thesis **MUST ALSO** include:

- 1) an introductory chapter that covers the topic in more detail than the introduction of a paper;
- 2) a conclusion chapter discusses of how the work impacts the field
- 3) an appendix which includes (as appropriate) annotated tables with raw data collected during the experiments; more detailed description of experimental set up and methods; copy of numerical code

Checklist for Submission of Master of Science Thesis

MIT has three degree-granting cycles per year: February, June and September. Approaching the time when you will submit your thesis, you should register to be on the appropriate degree list. To register for the degree list go to student.mit.edu, select "online degree application" and follow the instructions. Once registered for the degree list you will receive a detailed email from the Graduate Administrator outlining the steps needed to complete your degree.

Submitting your Thesis to the Academic Programs Office

You are required to submit two signed copies of your thesis printed on acid-neutral or archival bond paper, by 5 pm the day of the department's deadline. Check with the Graduate Academic Administrator to find out the date for your degree list. Reminder, Graduate Academic Administrator will be responsible for retrieving the signature of the Chair of the Graduate Program Committee, please do not contact him/her directly. The copies must be unbound but secured between heavy cardboard covers with a binder clip. The front cardboard cover of each thesis copy should feature a photocopy of the top half of your thesis signature page (from the copyright up). You may simply tape or glue it on.

Congratulations! You have finished!

We look forward to seeing you at commencement. Please let us know where you are headed next by filling out the Graduate Student Exit Form: <http://cee.mit.edu/graduate/exitform>