

Overview

Students majoring in Course 3 Materials Science and Engineering are required to complete either the internship program (3.930 and 3.931) or the thesis program (3.THU). The thesis is a 9-12 unit individual research project conducted under the supervision of a DMSE faculty member. If the thesis advisor is not appointed in DMSE, students identify a faculty thesis reader from DMSE who is familiar with the field of research. The project culminates in a public presentation of findings and a written thesis submitted to the department and deposited in the MIT Libraries.

Choosing a Thesis Advisor

Students are encouraged to contact a number of potential faculty advisors to set up individual meetings. Prior to contacting a faculty member, students are encouraged to read up on the faculty's research area (e.g. their website and recent publications). When contacting a faculty member, a student should include a short curriculum vitae (about two pages), a brief description of relevant expertise, and a description of the student's research interests that is specific to the particular faculty member being contacted.

Thesis Advisors who are not DMSE Faculty

If the thesis advisor is not a regular faculty member in DMSE, a departmental thesis reader must be identified at the time the thesis proposal is submitted. The thesis reader must be a regular faculty member in DMSE. The thesis reader is charged with the responsibility to assure that satisfactory progress is being made and that the thesis is ultimately appropriate as a materials science and engineering thesis.

Questions to ask a potential Thesis Advisor

Apart from discussing possible research topics, additional questions to consider when meeting with a potential thesis advisor include:

- Will you be expected to formulate the thesis topic?
- What would you be expected to do on a daily/weekly basis (e.g. experiments, chemistry, computational analysis, animal experiments, etc.)?
- How much direction will the advisor give? How often does the advisor think you should meet?
- Does the thesis advisor impose deadlines or expect written progress reports?
- Will a graduate student or postdoc be supervising you?

Credit and Semesters

Students preparing a thesis should enroll in 3.THU Undergraduate Thesis in the semester(s) they are working on their thesis. This is commonly the fall, IAP, and/or spring of the senior year. 3.THU carries 9-12 credits, depending upon the arrangement with the student's advisor and expectations of the size and time commitment of the project. The thesis is usually distributed over multiple semesters, but may be completed over one semester.

UROP and Thesis

If a student has already carried out a UROP with an advisor, the thesis can be in the same area of research, but should represent a distinct individual research effort and not the rewriting of a UROP report. Students cannot simultaneously register for 3.THU and a UROP project on the same topic.

Content and Style of the Thesis

The thesis is a written report of your research project. Your thesis advisor will provide you with guidance concerning the specific style and organization appropriate for your thesis. In general, the style should follow that which is appropriate for a full journal article in your particular area of research. The thesis should be double spaced and contain 30-50 pages of main text (including figures and tables), with total pages (including appendices and bibliography) not exceeding 100 pages. It should begin with a title page, followed by a one page abstract, and a table of contents.

The thesis must conform to the <u>MIT Specifications for Thesis Preparation</u> and students should refer to the MIT Thesis Frequently Asked Questions.

Resources

It's important to set up regular meetings with your thesis advisor, who will be your primary source of guidance throughout the entire thesis process. Additionally, the DMSE Academic Administrator will set up meetings with thesis students in their final semester to help make sure things are on track. Examples of DMSE undergraduate theses from prior years can be found at the MIT Library's DSpace page. Support with all aspects of thesis writing can be found at MIT's Writing and Communication Center.

Submission of the Thesis

Refer to the Academic Year 2025-2026 timeline below for specific submission deadlines for different graduation timeframes. After defined dates for submission and review by advisors, the thesis is submitted to the DMSE Academic Office. The DMSE Academic Office coordinates approval of the thesis by the Chair of the Undergraduate Committee. The thesis is then submitted by the DMSE Academic Office to the MIT Libraries.

Extensions

Deadlines for thesis submission are already quite close to graduation, so there is very little wiggle room when it comes to extensions. If you anticipate that you will have difficulty meeting the final deadlines, please consult with the DMSE Academic Administrator as to your options.

Symposium and Awards

A Senior Thesis Symposium will be held in the winter (February degree candidates) and in late spring (May degree candidates). Students will present a 10 minute summary of their work, with 5 minutes for audience questions. An Outstanding Senior Thesis award is presented to a senior during the departmental commencement reception, as nominated by the thesis advisor and awarded by the Undergraduate Committee.

Course 3 Thesis Program Timeline Academic Year 2024-2025



Date	Day of Week	Deadline / Event		
October 9, 2025	Thursday	Thesis Proposal Due (for students beginning Thesis in Fall 2025)		
November 13, 2025	Thursday	Thesis Proposal Due (for students beginning Thesis over IAP 2026 or in Spring 2026)		
December 17, 2025	Wednesday	Thesis due to Thesis Advisor (February 2026 Degree Candidates)		
January 7, 2026	Wednesday	Final Thesis due to DMSE Academic Office (February 2026 Degree Candidates)		
January 9, 2026	Friday	Thesis Symposium (February 2026 Degree Candidates)		
January 16, 2026	Friday	Last day to go off the February 2026 degree list		
April 24, 2026	Friday	Thesis due to Thesis Advisor (Spring 2026 Degree Candidates)		
May 8, 2026	Friday	Final Thesis due to DMSE Academic Office (Spring 2026 Degree Candidates)		
May 8, 2026	Friday	Thesis Symposium (Spring 2026 degree candidates)		
May 15, 2026	Friday	Last day to go off the Spring 2026 degree list		

Course 3 Thesis Proposal Academic Year 2025-2026

Thesis Reader (if applicable)



Student Information			
Name			
Email			
Planned Graduation Date			
Proposed Thesis Title Please provide a proposed title	or topic for your thesis proje	oct	
Description of Thesis Attach a 2-3 page description o approach you will take (include and the analysis methods you v	experimental or computation		
Distribution of Work Please indicate below the distril over the following terms. Please estimated unit breakdown. You/ over the academic year. In the proposal must be submitted. A required; students may register maximum.	e note that this is an /your advisor may change thi event of change, a new sum of 9 units minimum is	is	
Thesis Supervision			
Thesis Advisor			
Thesis Advisor's Department	DMSE	Other (Please Specify)	

Student Signature
Thesis Advisor Signature
Thesis Reader Signature (if applicable)
Undergraduate Officer Signature

Decision

Approved

Not-Approved

Reason for Non-Approval