Students majoring in Materials Science and Engineering (Course III) are required to complete either an internship report (3.930 plus 3.931) or a thesis (3.ThU). The thesis is a 9-12 unit individual research project carried out on campus under the supervision of a Course III faculty member. If your advisor is not from Course III, you should select a department thesis reader from the Department who is familiar with the work and who can provide input to the advisor for the purpose of grading.

Students preparing a thesis should enroll in 3.ThU in the semester(s) they intend to work on their thesis. This is commonly the fall or spring of the senior year. You may complete the thesis in one semester or split the units between two or more semesters. If you have already carried out a UROP with your 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.

All thesis students should submit a **Thesis Proposal** no later than the last day of classes of the fall semester of their senior year (for students graduating the following June). The proposal form is given at the end of this document.

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 appropriate for a full journal article in your particular area of research. In most cases the thesis will include sections entitled "Introduction", "Experimental Methods", "Results", "Discussion" and "Conclusions". Results should be presented in graphical or tabular form, as appropriate. Your findings should be placed in the context of the existing literature, and their significance should be explained. Literature citations should follow the format required by typical journal articles. One copy of the thesis should be submitted to the thesis advisor and thesis reader (if applicable) and two copies to the DMSE academic office in 6-107 by the MIT undergraduate thesis submission deadline (usually the Friday before the last day of classes). The thesis advisor and thesis reader (if applicable) will award a grade.


A **Senior Thesis Symposium** is held each spring. Students will present a 10 minute summary of their work, with 5 minutes for questions. Feedback on the presentation is provided by faculty moderators.

A **Best Thesis Award** is given each year at the reception following Commencement.
Students are encouraged to contact a number of potential faculty advisors to set up individual meetings. Prior to contacting a faculty member, the student is encouraged to read up on the faculty’s research area (e.g. their website and recent publications) and to identify specific research areas of interest. When contacting a faculty member, the student should include a short curriculum vitae (~2 pages), a brief description of any relevant expertise, and a description of his/her research interests that is specific to the particular faculty member being contacted.

Apart from discussing possible research topics, additional questions to consider when meeting with a potential faculty 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 thesis advisor meet with his/her current student(s)?
- Will you be expected to attend/participate in research group meetings? How often do they meet?
- How many students are currently in the group and what are their thesis projects? Obtain the names and email addresses of current students whom you can contact.
- Does the thesis advisor impose deadlines / expect written progress reports? Will you also have a graduate student/postdoc supervising you?

**Thesis Advisors who are not Course 3 Faculty**

If the primary thesis advisor (or co-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 specific responsibility of assuring that satisfactory progress is being made toward timely completion of a thesis appropriate for our department.

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**Timeline for the Thesis – Class of 2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Thursday Dec. 10, 2015*</td>
<td>Thesis proposal due in Academic Office (email <a href="mailto:tluong@mit.edu">tluong@mit.edu</a>, or deliver to 6-107)</td>
</tr>
<tr>
<td>Friday April 22, 2016</td>
<td>Draft copy of thesis to advisor for final revision comments/edits.</td>
</tr>
<tr>
<td>Friday April 29, 2016</td>
<td>Thesis due to thesis advisor and to Academic Office, 6-107</td>
</tr>
<tr>
<td>Mid-May 2016</td>
<td>Senior Thesis Symposium**</td>
</tr>
<tr>
<td>Friday May 13, 2016</td>
<td>Grade for thesis must be provided to DMSE Academic Office by the thesis advisor. Advisors are also encouraged to nominate students for the Best Thesis Award.</td>
</tr>
</tbody>
</table>

* Please inform Tiffany Luongo if you need an extension. An extension will only be approved up to Friday, December 18, 2015.

** A detailed schedule will be provided separately. Exact dates will be determined in the early Spring semester.
3. ThU Thesis Proposal

Student Name: ___________________________________________________________

Term Address: ___________________________________________________________

Phone Number: __________________________________________________________

Tentative Thesis Title: ___________________________________________________

Brief Description of Thesis:

Attach a 2-3 page description of the problem you will be addressing, the approach you will take (include experimental or computational methods) and the analysis methods you will use.

Thesis Advisor:

If primary advisor is not a Course 3 Faculty member, provide Thesis Advisor’s Home Department:
(A signature must be obtained from your Thesis Advisor before you can turn in this Thesis Proposal.)

Thesis Advisor’s Home Department: ____________________________________________

Thesis Advisor’s Signature

Thesis Advisor’s Office Information: ________________________________

Thesis Advisor’s Phone Number: (_____)(_____) _____-________

Name of a Course 3 Thesis Reader: (If applicable) ______________________________

Course 3 Thesis Reader’s Signature

Please indicate below the distribution of your thesis work over the following terms.

Note: This is an estimated unit breakdown. You/your advisor may change this over the academic year. 9 units minimum are required.

<table>
<thead>
<tr>
<th>Term</th>
<th>Amount of Units</th>
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<tbody>
<tr>
<td>Summer</td>
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<td>IAP</td>
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<tr>
<td>Spring</td>
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</tbody>
</table>

Note: All Thesis students are required to obtain a signature from their Thesis Advisor and Thesis Reader (if Applicable).