# MIT-WHOI JOINT PROGRAM THESIS SPECIFICATIONS Table of Contents

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#### GENERAL INFORMATION

#### Introduction

The requirements in this guide apply to all theses submitted within the MIT-WHOI Joint Program and have been specified to facilitate the care, preservation, and dissemination of the thesis. Each MIT department may have its own requirements you also need to fulfill. Always consult with your MIT department for any specific regulations that may differ and proceed as necessary to meet the requirements of both your home MIT department and the MIT-WHOI Joint Program.

#### Points of Contact

Members of the JP administrative staff are referred to by their titles throughout this document. As of the latest updates to this document (Summer 2024) names and email addresses of the people within these positions are as follows:

WHOI Associate Dean:

Joint Program Administrator ("JP Administrator"):

Registrar and Graduate Administrator ("Registrar"):

Graduate Admissions & Student Affairs Officer ("GASAO"): Keqi Ren:

APO Administrator:

Jenny Hops:

atarrant@whoi.edu
tnesti@mit.edu
tgebbie@whoi.edu
keqi.ren@whoi.edu
jennifer.hops@whoi.edu

# What Gets Submitted?

MIT and WHOI both require an electronic version of your final thesis. Some MIT departments may require printed copies on archival paper with original signatures in **BLACK INK**. The Joint Program also requires a copy of your title page that is signed via DocuSign. The thesis is signed by your advisor(s) and JC Committee Chair. Check with your MIT department regarding any additional signature requirements (e.g., additional signatures needed, requirements for hard copies of the signature page). These submission guidelines apply to both Masters and Doctoral theses.

#### Submission Deadlines

Degree candidates must submit the original thesis to the GASAO and the appropriate MIT department by the date specified in the MIT Academic Calendar. Thesis due dates can be found on the MIT-WHOI JP website at <a href="https://mit.whoi.edu/research/thesis/">https://mit.whoi.edu/research/thesis/</a> and on the <a href="https://mit.whoi.edu/research/thesis/">MIT Academic Calendar</a>. You should use the thesis submission deadline on the MIT-WHOI JP website to work backwards and determine the latest date upon which you can schedule your defense.

Missing a thesis deadline could mean that you must register and pay tuition for the following term. This, along with the possible loss of financial assistance from WHOI, can get very expensive. The dates on the MIT calendar are the term deadlines for handing in your final, defended, and complete thesis. If you think you may be abutting the submission deadline for a given semester, reach out to your home MIT department as soon as possible, as some allow for a later final submission date than what is listed on the Registrar's website.

# What Happens to the Thesis?

Degree recipients receive one hardbound copy of their thesis courtesy of the JP. The original is hardbound and kept in APO. One softbound copy of your thesis is placed in the Student Center, one is distributed to the appropriate WHOI Department Chair, and one is stored in the WHOI Data Library and Archives. The electronic version of the thesis is stored in the MBL/WHOI Library system and can be accessed online. The mission of the Woods Hole Open Access Server, WHOAS is to capture, store, preserve, and redistribute the intellectual output of the Woods Hole scientific community in digital form. If funded by the Department of Defense, an electronic version of your thesis is sent to the Defense Technical Information Center (DTIC).

Revised: June 26, 2024

At MIT, your thesis is archived to  $\underline{\text{DSpace}}$ , MIT's online repository of theses. This process can take anywhere from 6-12 months.

## **PREPARATION**

# **Degree Application**

Students must apply online to be on a specific degree list (June, September, or February) at MIT. This is done through WebSIS under "Online Degree Application": <a href="http://student.mit.edu/cgi-docs/student.html">http://student.mit.edu/cgi-docs/student.html</a>. It must be completed by the Registration deadline of the term in which thesis submission is planned. Your intended degree, thesis field, thesis title, and your plans for commencement are to be included on the online form. A list of approved degrees and thesis fields for the JP are included in *Appendix A*.

## **Doctoral Defense Chair**

A member of the faculty at MIT or WHOI who is NOT a member of your Thesis Committee must chair the thesis defense. You, in consultation with your thesis supervisor(s) and/or department chair, choose this person. The Chair should be familiar with your work and able to act on your behalf during your public and private defense. Check your discipline handbook because the Defense Chair should be approved by your Joint Committee (the amount of time necessary for approval varies among disciplines).

# **Doctoral Thesis Defense**

If you are a doctoral candidate, the APO, the MIT JP Office, your Thesis Committee, and the Defense Chair must know the time and place of your thesis defense at least two weeks in advance (check your handbook because some disciplines require longer, e.g., JPMGG requires 3 weeks). Please refer to your discipline's handbook regarding the specific timeframe applicable.

Submit (1) a signed Doctoral Thesis Notice Form, (2) your draft thesis, and (3) a separate file containing your abstract (Word document or text file) to the GASAO and the JP Administrator at least two weeks prior to the date of your defense. Be sure that your thesis committee has a copy of your defendable draft and has given approval to go forward with your defense.

A thesis defense consists of three parts:

- 1. A public presentation of the thesis (approximately forty-five minutes).
- 2. A brief public question and answer period following the presentation, to be presided over by the Defense Chair (approximately fifteen minutes).
- 3. A private defense of the thesis before the Thesis Committee, and faculty who have read the complete thesis (see your disciplinary handbook for specifics), also to be presided over by the Defense Chair. If certain sections of your thesis have been omitted from the public presentation, the Chair may ask you (by agreement with you beforehand) to present these sections briefly to the examiners before questioning begins.

The public seminar offers an opportunity to present your thesis research, and efforts are thus made to make sure that it will be well-attended by other students, employees, and any guests you wish to invite.

## **Doctoral Thesis Defense Timeline**

- When you have decided on a date: If you are defending at WHOI, email the GASAO if you need help booking a room for your defense. If you are defending at MIT, reach out to the JP Administrator for assistance with booking a room.
- Two to three weeks prior to your defense: Your defendable draft and JP Defense Notice Form are due to the GASAO, the JP Administrator, and MIT Department Administrator. The Defense Notice Form is found here: https://mit.whoi.edu/academics/thesis/. Consult your handbook to determine the due date.
  - Defenses are usually conducted in a hybrid form. You should create a Zoom link following the
     <u>Virtual Scheduling Instructions</u>. Fully virtual defenses are only allowed under extraordinary
     circumstances, and require the permission of the Joint Committee.
  - Students in the Biology Department submit the defendable draft and JP Defense Notice Form to the GASAO and JP Administrator (not to the Biology Department). They submit a Biology Department Defense Form to the Biology Department (see DEPARTMENTAL REQUIREMENTS, below).
- *Defense*: Your thesis is defended publicly and privately. Committee members identify necessary edits at the private defense, and these are summarized in a memo by the Defense Chair.
- Two weeks of revision time are typically given for you to revise your thesis. If major revisions are required, your Thesis Committee will recommend to the Joint Committee Chair an extended deadline for submission of the final revised thesis.
- Submit Final Thesis: Submit the final thesis to the Joint Program (GASAO and JP Administrator) and your MIT Departmental Administrator by the deadline decided upon by your Committee and Joint Committee Chair.
- Complete WHOI Checkout Form and Schedule Exit Interview: When submitting your final thesis, complete and return the WHOI Checkout form to the GASAO. At this time, you should also schedule an Exit Interview with the Dean via the APO Administrator.

## Master's or Engineer's Thesis Preparation

With some exceptions, Masters and Engineers candidates do not publicly defend their theses, however they are typically encouraged to present their research, the structure of which is less rigorous than the doctoral defense described above. Masters and Engineers theses must conform to the standards described in the MIT and JP thesis specifications. Please review the "What Gets Submitted" section, as submission guidelines for theses are the same at the Masters, Engineers, and Doctoral level.

### FORMATTING & PRINTING

All thesis formatting details, except where noted below, following the MIT Libraries guidelines here: https://libraries.mit.edu/distinctive-collections/thesis-specs/#format. This page details the formatting requirements for pagination, spacing, and font, as well as title page, abstract, and appendices, among others. An FAQ can be found here: https://libguides.mit.edu/c.php?g=176367&p=1159444.

## Format

In general, a thesis consists of an abstract and four parts:

- 1. Historical review and setting of the problem
- 2. Chapters developing the original contribution toward solving the problem
- 3. Final summary of the work and its significance
- 4. Bibliography (this is sometimes presented at the end of each chapter, rather than as a single comprehensive bibliography).

#### **Abstracts**

Each thesis must include an abstract or summary, which must be 500 words or less. Formatting details can be found here: https://libraries.mit.edu/distinctive-collections/thesis-specs/#format under the "Abstract" tab.

# <u>Title Page and Acknowledgements Page</u>

The **Title Page** must include your name, your supervisor, or co-supervisors' name/title, and the Joint Committee Chair name/title. There may be specific MIT department names that are also necessary. Check with your MIT department for additional names. *Samples of thesis title pages are currently being updated and will be included in Appendices of the next version of this document.* Engineering students may have specific MIT department names to include – check with your MIT engineering department.

The title page also contains your name, previous degrees, the degree to be awarded, date to be conferred and the copyright (see section below).

The **Acknowledgements Page** should be single-spaced and must include all of your funding sources by full title of the foundation for your tuition, stipend, and thesis research. Work with your thesis supervisor and/or Department Administrator to get this information. Your funding sources may require you to include applicable grant or contract numbers. Check with your thesis supervisor and/or funding sources to confirm if contract numbers need to be listed. It is important to acknowledge your funding sources because it gives proper recognition to PIs, agencies, and departments that supported you financially during your time as a JP student.

**NOTE:** Some funding sources (e.g. ONR) may require a copy of your softbound thesis. This information must be noted on the thesis reproduction form. Your thesis supervisor's initials on the reproduction form confirm that all funding sources have been acknowledged.

## Copyrights (©)

You must include a copyright statement on the title page of your thesis. Instructions are available here: <a href="https://libraries.mit.edu/distinctive-collections/thesis-specs/#owner">https://libraries.mit.edu/distinctive-collections/thesis-specs/#owner</a>.

Students retain the copyright to student theses. As copyright ownership is held by the student, the student must, as condition of a degree award, grant royalty-free permission to MIT and WHOI to reproduce and publicly distribute copies of the thesis, and must place the following legend on the thesis title page:

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"The author hereby grants to MIT and WHOI a nonexclusive, worldwide, irrevocable, royalty-free license to exercise any and all rights under copyright, including to reproduce, preserve, distribute and publicly display copies of the thesis, or release the thesis under an open-access license."

# Previously Published Work

Manuscripts must be formatted, (i.e., margins, spacing, pagination, etc) to be consistent throughout the thesis and to follow MIT and Joint Program thesis specifications. Please read and follow the instructions below.

You are encouraged to incorporate your published manuscripts or manuscripts that you have either prepared or submitted for publication. Students are responsible for obtaining permission to use previously published third-party materials in the thesis. For more information on obtaining permissions, refer to the MIT libraries website: <a href="http://libraries.mit.edu/scholarly/publishing/copyright-publishing-guide-for-students/reuse-of-figures-images-and-other-content-in-theses/">http://libraries.mit.edu/scholarly/publishing/copyright-publishing-guide-for-students/reuse-of-figures-images-and-other-content-in-theses/</a>.

If the published paper has been copyrighted, an approval from the journal must be presented to WHOI and MIT with the draft thesis. MIT's Office of Intellectual Property Counsel has a sample permission letter on their website at <a href="http://web.mit.edu/ogc/faq/sample-letter.doc">http://web.mit.edu/ogc/faq/sample-letter.doc</a>. Once you obtain permission from the publisher to include the reprint in your thesis, type on the first page, "Reprinted with permission of ... etc." and reformat following thesis format specifications, i.e., reformatted with the same margins, spacing, pagination, etc. as the rest of the thesis.

## Signatures:

The Joint Program requires a copy of the title page that is signed electronically using DocuSign. Instructions can be found here: <a href="https://mit.whoi.edu/wp-content/uploads/sites/24/2024/01/DocuSign-Process-for-Students-and-Faculty-2.pdf">https://mit.whoi.edu/wp-content/uploads/sites/24/2024/01/DocuSign-Process-for-Students-and-Faculty-2.pdf</a>. Your home MIT department may have different requirements for signatures:

- If they do not require signatures, you must still meet JP signature requirements. Submit an unsigned copy of the final, approved thesis to the MIT department with a CC to the GASAO and the JP Administrator, and a signed copy of the title page to the GASAO and JP Administrator.
- If they require signatures they will obtain for you: connect your MIT Department Administrator with the JP Administrator to confirm this process and that your MIT Department Administrator will send a fully signed copy to the JP Administrator when available.
- If they require signatures but don't specify Docusign: Docusign should suffice for your home MIT Department. If it doesn't, connect your MIT Department Administrator with the JP Administrator.

# Submission and Checking Out

Thesis submission to the Joint Program is done electronically. Students should submit an unsigned version of the complete thesis, along with a signed version of the title page.

Refer to the JP Thesis Submission Checklist and JP Checkout list, both available here: https://mit.whoi.edu/academics/thesis/

#### REPRODUCTION OF FINAL THESIS

While MIT does not bind and reproduce theses as a rule, the MIT-WHOI Joint Program does. Doctoral graduates will receive one hardbound copy of their thesis courtesy of the JP. Traditionally, JP PhD theses are bound in dark blue. Master's and Engineer's degree theses are bound in a different color (gray or lighter blue).

The Reproduction Form is located on the JP website under <a href="https://mit.whoi.edu/research/thesis/">https://mit.whoi.edu/research/thesis/</a>. The Reproduction Form provides an opportunity for you or your advisor to order more copies for yourselves or your funding agencies. The reproduction form must be completed and returned to the GASAO with the final version of the thesis. You must obtain your supervisor's signature and initials on the form indicating that you listed all funding sources on the Acknowledgments Page. Please check with your Thesis Supervisor and/or Department Administrator for all the numbers of the grants and/or contracts that funded you and/or your research during your time as a JP student.

The bindery requires 11x17 pages to be flagged/identified for hard binding. When submitting your reproduction form, please discuss inclusion of any 11x17 pages with the GASAO.

Reproduction costs cannot be charged to APO. The cost for additional copies of your thesis depends on the document size and number of pages that contain color. Effective September 2023, hardbound theses cost \$50 each. If charging to a project number, be sure to provide the number on your form.

# ADDITIONAL MIT REPRODUCTION REQUIREMENTS

Here is the link to the MIT thesis specifications: http://libraries.mit.edu/ archives/thesis-specs/.

The University Microfilms Inc. (UMI) Form (included in the MIT Specifications for Thesis Preparation), title page and separate abstract are to be submitted to your MIT department with your final doctoral thesis. Here is the link to the UMI Form:

https://web.mit.edu/cheme/resources/gradstudents/Unverisity%20Microfilms%20Form.pdf

# MIT DEPARTMENTAL REQUIREMENTS

As with title page signature requirements, your home MIT department may have additional requirements you must meet for thesis submission. Please confirm with your MIT department these additional requirements.

The MIT Biology Department requirements can be found here: <a href="https://biology.mit.edu/graduate/current-students/graduate-manual/guidelines-for-graduating/">https://biology.mit.edu/graduate/current-students/graduate-manual/guidelines-for-graduating/</a>. You will need your MIT credentials to access this page. The Biology Department at MIT also requires any Course 7 doctoral student to complete a Thesis Defense Form and return it to their Education Office (Room 68-120). It must be signed by your Defense Chairperson and turned in with your thesis. The form is available on the JP website: <a href="https://mit.whoi.edu/wp-content/uploads/sites/24/2019/07/FOR">https://mit.whoi.edu/wp-content/uploads/sites/24/2019/07/FOR</a> 7W STUDENTS ONLY 54046.pdf

The MIT CEE Department requirements can be found here: <a href="https://cee.mit.edu/resources/">https://cee.mit.edu/resources/</a>. You will need your MIT credentials to access this page. Once you log in, navigate to the "Master of Science/PhD Students" tab, and then either the "Doctoral Degree in Civil and Environmental Engineering Guide" or the "Master of Science in Civil and Environmental Engineering Guide".

The MIT EAPS Department requirements can be found here: <a href="https://eaps.mit.edu/internal-resources/student-resources/">https://eaps.mit.edu/internal-resources/student-resources/</a>. You will need your MIT credentials to access this page.

The MIT EECS Department requirements can be found here: <a href="https://www.eecs.mit.edu/academics/graduate-programs/materials-and-forms-for-graduate-students/">https://www.eecs.mit.edu/academics/graduate-programs/materials-and-forms-for-graduate-students/</a>, under the "Final SM and Doctoral Thesis" section.

The MIT MechE Department requirements can be found here: https://mechegrad.mit.edu/thesis-submission-2/

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ne "Doctoral Program Guide" link at t ubmission guidelines.	the bottom of that secti	on. Section 7.8 of the	mit.edu/education/gradurements" section, navig linked document outline	es thes

### Appendix A

# Joint Program Degrees and Thesis Fields (revised 06/2024)

When completing the degree application on WebSIS, the appropriate degree and field specification should be noted. Approved Joint Program fields are listed below. Any other field that **is not** listed below that you wish to select/is the most appropriate thesis field for your research, even if they are visible in the Online Degree Application, you must:

- Get approval from your advisor(s) and respective Joint Committee (JC). Copy the GASAO, JP Administrator, and Registrar in your correspondence with your advisor(s) and JC.
- Once you have written approval from your advisor(s) and JC, then you must complete MIT's Office of Graduate Education Graduate Student Petition at <a href="https://oge.mit.edu/wp-content/uploads/2021/09/PetitionForm-General-08-2021.pdf">https://oge.mit.edu/wp-content/uploads/2021/09/PetitionForm-General-08-2021.pdf</a>.
  - o The form requires a signature from two Graduate Administrators: either the WHOI Registrar and your home MIT departmental administrator, or the JP Program Administrator at MIT and your home MIT departmental administrator.

Petitions for thesis fields that are not on the approved list must be submitted within one month of filing the degree application. Petitions can take several weeks to approve and must be completed before you can graduate, and your degree can be awarded.

## **Masters Degrees**

Master of Science

- Biological Oceanography (Course 1 or Course 7)
- Chemical Oceanography (Course 1 or Course 12)
- Civil and Environmental Engineering (Course 1)
- Mechanical Engineering (Course 2)
- Oceanographic Engineering (Course 2)
- Electrical Engineering and Computer Science (Course 6)
- Marine Geology and Geophysics (Course 12)
- Physical Oceanography (Course 12)
- Aeronautics and Astronautics (Course 16)

#### **Master of Engineering**

• Oceanographic Engineering (Course 2)

#### **Engineers Degrees**

- Civil and Environmental and Oceanographic Engineering (Course 1)
- Mechanical and Oceanographic Engineering (Course 2)
- Electrical and Oceanographic Engineering (Course 6)

#### **Doctoral Degrees**

Doctor of Philosophy or Doctor of Science

- Civil and Environmental and Oceanographic Engineering (Course 1)
- Oceanographic Engineering (Course 1 & 2)
- Chemical Oceanography (Course 1 & 12)
- Biological Oceanography (Course 1, 7 & 12)
- Mechanical and Oceanographic Engineering (Course 2)
- Electrical and Oceanographic Engineering (Course 6)
- Marine Biology (Course 7)
- Geophysics (Course 12)
- Geochemistry (Course 12)
- Marine Geology (Course 12)

- Marine Geochemistry (Course 12, being verified)
- Marine Geophysics (Course 12)
- Paleoceanography (Course 12)
- Physical Oceanography (Course 12)
- Aeronautics and Astronautics (Course 16)
- Applied Ocean Sciences and Engineering (Course 16, being verified)
- Autonomous Systems (Course 16)
- Communications and Networks (Course 16)
- Controls (Course 16)