



# WHOI THESIS SPECIFICATIONS

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# WHOI THESIS SPECIFICATIONS

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## GENERAL INFORMATION

### Introduction

The Academic Programs Office (APO) at the Woods Hole Oceanographic Institution (WHOI) in consultation with MIT specifications, the Marine Biological Laboratory (MBL)/WHOI Library and the WHOI's Creative Studio have prepared this guide. WHOI is committed to the preservation of the student's thesis because it is a requirement for both the WHOI and MIT-WHOI Joint Program (JP) degree and is a record of original research that contains information of continuing value. The requirements in this guide apply to all theses and have been specified to facilitate the care, preservation, and dissemination of the thesis. Each MIT department may have their own requirements, so always consult with your MIT department for any specific regulations.

### What Gets Submitted?

- WHOI requires one original thesis on archival paper, the electronic version, and a separate 200 word abstract as a Word document.
- MIT requires either two or three original theses on archival paper depending upon the MIT department.

### Submission Deadlines

Degree candidates must submit the original thesis to the APO Graduate Admissions and Student Affairs Officer (GA&SAO), Lea Fraser 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 <https://mit.who.edu/research/thesis/>. The specific date will be determined by when you defend your thesis.

Missing a thesis deadline could mean that you have to 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. Check with your MIT department as some allow for a later final submission date.

### 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).

## PREPARATION

### Degree Application

Students must apply online to be on a specific degree list (May, September, or February) at MIT. This is done through WebSIS under "Online Degree Application": <http://student.mit.edu/cgi-docs/student.html>. It must be completed in the first week 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 Thesis Defense

If you are a doctoral candidate, the APO, the MIT JP Office, your committee, and defense chair must know the time and place of your thesis defense in advance. Please refer to your discipline's handbook regarding the timeframe applicable (some disciplines have a two-week deadline, others are three weeks). If you are defending at MIT, the JP Office will publish your notice. If you are defending at WHOI, the APO will publish your notice. See *Appendix B* for a blank notice form. Please complete all information including the signature of your advisor and give to the appropriate office for distribution. Email your draft thesis and separate abstract file to the MIT JP Office and the APO. Be sure that your thesis committee has a copy of your defendable draft and has given approval to go forward with your defense.

A member of the staff 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. This person 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.

Each thesis defense should consist 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 Chair of the defense (approximately fifteen minutes).
3. A private defense of the thesis before your committee, and faculty who have read your complete thesis (see your disciplinary handbook for specifics), also to be presided over by the Chair of the defense. If certain sections of your thesis have been slighted in 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

- *Two to three weeks prior to your defense:* Your defendable draft is due to the APO and your MIT Department (excluding Biology). You must consult your Joint Committee Handbook to determine the appropriate date for your draft to be submitted. The APO will accept your draft in electronic form. Check with your MIT department to find out in which form they would like to receive your thesis draft.
- *Defense:* Your thesis is defended publicly and privately. Committee members give correction suggestions at the private defense.
- *Two weeks of revision time* is given for you to finish your thesis. If major revisions are required, your Thesis Committee, through the Chair of the defense, will make a recommendation to the Joint Committee Chair for the deadline by which the final revised thesis must be submitted.
- *Submit Final Thesis:* Submit the final thesis to MIT (two or three originals) and WHOI (one original for APO) according to the deadline decided upon by your Committee and Joint Committee Chair, which is generally two weeks after your defense. This deadline should be on or before the final submission date found in the MIT Academic Calendar for the corresponding degree list, but check with your MIT department as some allow for a later date.

## Master's or Engineer's Thesis Preparation

With some exceptions, Masters and Engineers candidates do not publicly defend their theses. Masters and Engineers theses must conform to the standards described in the MIT and WHOI thesis specifications. One original thesis on archival paper, the electronic version of your thesis and a separate 200 word abstract as a Word document are submitted to WHOI. At least two original theses on archival paper must be submitted to MIT although you should confirm all MIT requirements with your home MIT department.

## **FORMATTING & PRINTING**

### 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

### Abstracts

Each thesis must include an abstract or summary, preferably comprising one to two single-spaced pages.

- MIT: The abstract for MIT must be 350 words or less. Doctoral abstracts are submitted to MIT with a University Microfilms Inc. (UMI) Form found in the MIT thesis specifications.
- WHOI: WHOI requires a 200 word abstract as a Word document. These are included in the MBL/WHOI library system and in a separate report to government agencies. The National Technical Information Service (NTIS) helps federal agencies make better decisions about data, with data.

### Title Page and Acknowledgements Page

The **Title Page** must have original signatures in BLACK INK for both WHOI and MIT. This includes your signature, your supervisor or co-supervisors' signatures, and the signature of the Chair of your Joint Committee. There may be specific MIT department signatures that are also necessary such. Check with your MIT department for additional signatures. You are responsible for obtaining all signatures for your title page. Sample thesis title pages are included in *Appendices C-E*. Engineering students may have specific MIT department signatures that are also necessary – check with your MIT engineering department. These signatures should be included on the title page submitted to both institutions.

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 (©)

Because you are a student at both MIT and WHOI, it is assumed that you have utilized the equipment or facilities and/or have been funded by both institutions during your time as a Joint Program student. Therefore, you own the thesis copyright and grant both institutions rights to reproduce and distribute copies.

Copyright notice consists of four elements:

- 1) the symbol ‘c’ with a circle around it and/or the word ‘copyright’
- 2) the year of publication (the year in which the degree is awarded)
- 3) the name of the copyright owner
- 4) the words ‘all rights reserved’.

These four elements should appear together on the title page. See *Appendices C-E*.

If supported solely by MIT-administered funds, the copyright belongs to MIT. According to MIT Specifications, when copyright ownership is held by the student, the student must, as condition of a degree award, grant royalty-free permission to the Institute to reproduce and publicly distribute copies of the thesis, and must place the following legend on the thesis title page:

‘The author hereby grants to MIT permission to reproduce and to distribute publicly paper and electronic copies of this thesis in whole or in part’.

## Previously Published Work

**As of January 2014, this section has been updated. Specifically, manuscripts must be reformatted, i.e., same margins, spacing, pagination, etc. as the rest of the thesis following MIT and WHOI thesis specifications. Please read and follow the instructions below.**

You are encouraged to incorporate published manuscripts of yours or manuscripts of yours that are 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: <http://libraries.mit.edu/scholarly/publishing/copyright-publishing-guide-for-students/reuse-of-figures-images-and-other-content-in-theses/>.

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 <http://web.mit.edu/ogc/faq/sample-letter.doc>. 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.

## Paper

At least one WHOI original and two MIT originals must be printed on archival paper that meets the requirements of the MIT Institute Archives. Paper must be (a) acid-neutral or acid-free, (b) watermarked, (c) at least 20-lb. weight, and (d) contain at least 25% cotton. It may contain some post-consumer waste recycled material. This paper is available at APO or MIT Copytech. Double-sided printing is strongly encouraged.

## Spacing

The main body of the text should be single, double, or one-and-a-half-spaced. The abstract, acknowledgements, footnotes, and bibliography sections should be single-spaced.

## Margins

Margins must be at least 1” all around to allow for binding. Everything, including figures and tables, must be within this margin. Only the page numbers may be outside this margin.

## Typeface

The font size should be at least 11 point and should not be script or italic. Notes and the text in tables should not be smaller than 10 point font.

## Pagination

Page numbers must be centered and every page must be numbered. Page “1”, which is the signed title page, is the only *unnumbered* page. It will be a right-hand page, followed by a blank page numbered “2”. All succeeding odd-numbered pages should fall on the right side. If you wish to use a blank page to push a chapter beginning to the right side, the blank page should be numbered and included in the original manuscript for reproduction. Therefore, blank pages should not be odd-numbered. If you have to change your page numbers, do not use stickers; do so by reprinting the pages with their new page numbers. Use of stickers is not acceptable, as they add to the width of the thesis on one end only, and make it impossible to hard cover the thesis.

## Page Orientation for WHOI Binding Reproduction

**Hard binding** – The bindery requires 11x17 pages to be flagged/identified for hard binding.

## Illustrations, Captions and Color

When using graphs or tables, include the caption on the same page as the illustration. If this is not possible, the caption should be on an even-numbered left page and the illustration on the odd-numbered right page.

## **REPRODUCTION OF FINAL THESIS**

Doctoral graduates will receive one hardbound copy of their thesis courtesy of the JP. Traditionally, JP Ph.D. theses are bound in royal blue, JP Sc.D. theses are bound in dark blue and effective September 2019, master’s and engineers degrees are bound in grey.

The Reproduction Form is located on the JP website. 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 Lea Fraser 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.

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. You may provide additional paper copies to be hardbound for \$45 each (price as of September 2019). It is not cost effective to provide paper copies to be softbound. Preferred payment options include an active WHOI project number or credit card but we are able to accept cash or checks.

## **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: <http://libraries.mit.edu/archives/thesis-specs/images/umi-proquest-form.pdf>.

### 7W Thesis Defense Form

The Biology Department at MIT 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: <http://mit.who.edu/files/doi?id=54046&pt=10&p=37282>

Please confirm with your MIT department on these additional requirements.

The Biology Department at MIT also requires a copy of the UMI form, and two extra copies of the title page and the abstract in addition to what is enclosed in the thesis. Requirements can be found at [https://biology.mit.edu/current\\_students/turning\\_your\\_thesis](https://biology.mit.edu/current_students/turning_your_thesis).

The CEE Department at MIT requires a copy of the UMI form, one extra copy of the title page, and one extra copy of the abstract. M. Eng. and Parsons Lab students should submit three copies of the thesis—one for the Academic Programs Office and two for the Libraries.

The EAPS Department at MIT requires a copy of the UMI form, one extra copy of the title page, and one extra copy of the abstract.

The EECS Department at MIT requires one extra copy of the abstract for the EECS Graduate Office, a copy of the UMI form with an extra copy of the title page and abstract stapled to it.

### MIT Library Processing Fee

When submitting your signed and final thesis to MIT, you must pay the Library Processing Fee. These charges are added to a student's bill during the semester preceding graduation. It is due when your thesis is submitted. As of March 2019, the fee is \$115 for a doctoral thesis and \$50 for all other advanced degrees. This fee must be paid in order to participate in commencement and receive your diploma. Course 7 and Course 12 will refund this fee to both doctoral and master students. You need to bring the receipt (print out showing you paid the fee) with you when you turn in your final thesis at MIT. You will not receive a refund until your department receives your final thesis.

## **BEFORE YOU GO**

### Turning in Your Final Thesis

The final version of your thesis is to be submitted to both MIT and WHOI within two weeks after your defense date.

- WHOI: You must submit one original thesis on archival paper with an original signed title page, the electronic thesis, and 200 word abstract as a Word document to Lea Fraser.
- MIT: You must submit at least two original theses on archival paper with signed title pages to your MIT department headquarters. Check with your MIT department if additional copies are required.



## Checking Out of the Joint Program

It is mandatory to check out with WHOI's GA&SAO by the thesis due date, whether you have resided at WHOI or MIT. At the time out check out, return WHOI keys, corporate credit card, and pay outstanding computer loan, if applicable.

## Exit Interview

Please schedule an exit interview with the WHOI Dean and Associate Dean before you depart to discuss your experiences as a JP student. Contact Martha Bridgers in APO at 508-289-2200 or [mbridgers@whoi.edu](mailto:mbridgers@whoi.edu) to arrange for an appointment.

## Information for the Alumni Directory

The Joint Program Alumni Association has a website ([alumni.whoi.edu](http://alumni.whoi.edu)) that includes a directory with information about our graduates. The directory on this website was created for a number of purposes: to help graduates stay in touch with each other, to let current and prospective students know what Joint Program students do after graduation, and for APO to track for internal and external reporting.

At the end of the term in which you complete your thesis, your information will be added to the directory. You will have the ability to make changes and updates to the information. You can keep in touch with other graduates and let them know how to keep in touch with you. This information is only as accurate as the updates we receive from you. Be sure to keep in touch with us – we're always interested to know what our graduates are doing!

**\*Note:** For students receiving a stipend from WHOI (and most MIT departments), your stipend will end on the day you turn in your final thesis, as that is also when your status as a student ends. For February degree recipients on MIT health insurance, coverage will continue to January 31. For May and September degree recipients on MIT health insurance, coverage will continue to August 31.

## Appendix A

### Joint Program Degrees and Thesis Fields (revised 09/04/2019)

When completing the degree application on WebSIS, the appropriate degree and field specification should be noted. Approved Joint Program fields are listed below. If the appropriate thesis field for your research is not on the approved list, you must get approval from your advisor(s) and respective Joint Committee (JC). Copy Lea Fraser, Kris Kipp and Julia Westwater in your correspondence with your advisor(s) and JC.

Once you have your advisor(s) and JC approval, then you may complete the MIT's Office of Graduate Education Graduate Student Petition at <https://oge.mit.edu/wp-content/uploads/2018/10/Petition-Form-General-Draft-Sept2018.pdf> for degree fields that are not on the approved list. Completed petitions may be submitted to either Kris Kipp or Julia Westwater for approval and processing.

Petitions for thesis fields that are not on the approved list must be submitted within one month of filing the degree application.

#### **Masters Degrees**

##### Master of Science

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

##### Master of Engineering

- Oceanographic Engineering (Course 2)

#### **Engineers Degrees**

Mechanical and Oceanographic Engineering (Course 2)

Civil and Environmental and Oceanographic Engineering (Course 1)

Electrical and Oceanographic Engineering (Course 6)

#### **Doctoral Degrees**

Doctor of Philosophy or Doctor of Science

Aeronautics and Astronautics (Course 16)

Autonomy (Course 16)

Communications and Networks (Course 16)

Controls (Course 16)

Geophysics

Biological Oceanography

Marine Biology

Chemical Oceanography

Marine Geochemistry

Geochemistry

Marine Geology

Marine Geophysics

Paleoceanography

Civil and Environmental and Oceanographic Engineering

Physical Oceanography

Applied Ocean Sciences

Mechanical and Oceanographic Engineering

Oceanographic Engineering

Electrical and Oceanographic Engineering

*Appendix B*

This form must be submitted to the WHOI Academic Programs Office or the MIT Joint Program Office at least two weeks prior to defense.  
(Refer to your discipline handbook for specific timeline.)

***NOTICE***

**Doctoral Dissertation Defense  
of Thesis Entitled:**

---

**thesis title**

by:

---

**author**

A public presentation of the thesis will be given by the candidate.

**DATE:** \_\_\_\_\_

**TIME:** \_\_\_\_\_

**PLACE:** \_\_\_\_\_

**CHAIR OF THE DEFENSE:** \_\_\_\_\_

**THESIS COMMITTEE:** \_\_\_\_\_ \*

\_\_\_\_\_ \*

\_\_\_\_\_ \*

\_\_\_\_\_ \*

\_\_\_\_\_ \*

\* Please supply member's institution and title and email for outside committee members.

Copies of the thesis may be obtained from the WHOI Academic Programs Office (Clark 223),  
and Department Headquarters at MIT.

---

*We certify that each thesis committee member has received a draft of the complete thesis,  
and has approved the scheduling of a formal defense.*

\_\_\_\_\_  
*Candidate Signature*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Advisor(s) Signature*

\_\_\_\_\_  
*Date*

*Appendix C*

**THESIS TITLE**

By

*Student's Name*

B.S., University of Colorado, 2010  
*(Undergrad degree, undergrad institution, date of undergrad degree)*

Submitted to the [MIT department] in partial fulfillment of the requirements for the degree of

Master of Science

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

and the

WOODS HOLE OCEANOGRAPHIC INSTITUTION

September 2019  
*(February/May/September & year of degree)*

© 2019 *(degree list year) Student's Name*. All rights reserved.

The author hereby grants to MIT and WHOI permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part in any medium now known or hereafter created.

Signature of Author

\_\_\_\_\_  
Joint Program in Oceanography/Applied Ocean Science and Engineering  
Massachusetts Institute of Technology  
and Woods Hole Oceanographic Institution  
*(final thesis due date ) July 31, 2019*

Certified by

\_\_\_\_\_  
*Supervisor's Name*  
Thesis Supervisor  
*Supervisor's Institution*

Accepted by

\_\_\_\_\_  
*Joint Committee Chair's Name*  
Chair, Joint Committee for *Student's Discipline*  
Massachusetts Institute of Technology/  
Woods Hole Oceanographic Institution

*Appendix D*

**THESIS TITLE**

By

*Student's Name*

B.S., University of Colorado, 2010  
*(Undergrad degree, undergrad institution, date of undergrad degree)*

Submitted to the [MIT department] in partial fulfillment of the requirements for the degree of

Ocean Engineer

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

and the

WOODS HOLE OCEANOGRAPHIC INSTITUTION

and

Master of Science in Ocean Engineering

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

May 2020

*(February/May/September & year of degree)*

© 2020 *(degree list year) Student's Name*. All rights reserved.

The author hereby grants to MIT and WHOI permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part in any medium now known or hereafter created.

Signature of Author

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Joint Program in Oceanography/Applied Ocean Science and Engineering  
Massachusetts Institute of Technology  
and Woods Hole Oceanographic Institution  
*(final thesis due date) April, 1,2020*

Certified by

---

*Supervisor's Name*  
Thesis Supervisor  
*Supervisor's Institution*

Accepted by

---

*Joint Committee Chair's Name*  
Chair, Joint Committee for *Student's Discipline*  
Massachusetts Institute of Technology/  
Woods Hole Oceanographic Institution

*Appendix E*

**THESIS TITLE**

By

*Student's Name*

B.S., University of Colorado, 2010  
(*Undergrad degree, undergrad institution, date of undergrad degree*)

Submitted to the [MIT department] in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

and the

WOODS HOLE OCEANOGRAPHIC INSTITUTION

February 2019  
(February/May/September & year of degree)

© 2019 (*degree list year*) *Student's Name*. All rights reserved.

The author hereby grants to MIT and WHOI permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part in any medium now known or hereafter created.

Signature of Author

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Joint Program in Oceanography/Applied Ocean Science and Engineering  
Massachusetts Institute of Technology  
and Woods Hole Oceanographic Institution  
(*final thesis due date*) December 1, 2018

Certified by

---

*Supervisor's Name*  
Thesis Supervisor  
*Supervisor's Institution*

Accepted by

---

*Joint Committee Chair's Name*  
Chair, Joint Committee for *Student's Discipline*  
Massachusetts Institute of Technology/  
Woods Hole Oceanographic Institution