

# THESIS AND DISSERTATION HANDBOOK

Requirements and Guidelines for the Preparation of Master's  
Theses and Doctoral Dissertations



**Office of Theses and Dissertations**  
115 Kern Graduate Building  
University Park, PA 16802



**PennState**  
J. Jeffrey and Ann Marie Fox  
Graduate School

phone: 814-865-1795  
e-mail: [gradthesis@psu.edu](mailto:gradthesis@psu.edu)



## THESIS AND DISSERTATION HANDBOOK

Requirements and Guidelines for the Preparation of  
Master's Theses and Doctoral Dissertations

Office of Theses and Dissertations

J. Jeffrey and Ann Marie Fox Graduate School  
115 Kern Graduate Building  
University Park, PA 16802  
phone: 814-865-1795  
e-mail: [gradthesis@psu.edu](mailto:gradthesis@psu.edu)

## TABLE OF CONTENTS

Sections are hyperlinked for your convenience

|                                                                  |          |
|------------------------------------------------------------------|----------|
| <b>INTRODUCTION.....</b>                                         | <b>1</b> |
| The Role of the Office of Theses and Dissertations.....          | 1        |
| Responsibility of the Author for the Thesis or Dissertation..... | 2        |
| <b>SUBMISSION AND REQUIREMENTS .....</b>                         | <b>2</b> |
| Deadlines and Format Review.....                                 | 2        |
| <b>SUBMISSION PROCESS FLOWCHART .....</b>                        | <b>3</b> |
| <b>SUBMISSION PROCESS IN WORDS .....</b>                         | <b>4</b> |
| Step 1: Format Review .....                                      | 4        |
| Step 2. Defense.....                                             | 4        |
| Step 3. Upload Final Submission.....                             | 4        |
| Step 4. Committee Approval .....                                 | 4        |
| Step 5. Final Graduate School Approval .....                     | 5        |
| The End! .....                                                   | 5        |
| Embargo Statuses .....                                           | 6        |
| Patents .....                                                    | 7        |
| Applying to Graduate .....                                       | 7        |
| Fees .....                                                       | 7        |
| Electronic Approval.....                                         | 7        |
| Final Submission and Approval.....                               | 8        |
| Letter of Certification.....                                     | 8        |
| <b>FORMATTING REQUIREMENTS.....</b>                              | <b>8</b> |
| Type Specifications.....                                         | 8        |
| Margins.....                                                     | 9        |
| Page Numbers.....                                                | 9        |
| Documentation of Sources in the Text .....                       | 10       |

|                                                   |           |
|---------------------------------------------------|-----------|
| <b>FRONT MATTER.....</b>                          | <b>10</b> |
| Title Page.....                                   | 10        |
| Committee Page .....                              | 11        |
| Abstract .....                                    | 12        |
| Table of Contents.....                            | 12        |
| List of Figures, List of Tables, etc.....         | 12        |
| Acknowledgments and Funding .....                 | 13        |
| Preface.....                                      | 15        |
| Epigraph or Frontispiece.....                     | 15        |
| <b>BACK MATTER.....</b>                           | <b>15</b> |
| Bibliography or References .....                  | 15        |
| Appendices .....                                  | 15        |
| Vita.....                                         | 16        |
| <b>TABLES AND FIGURES.....</b>                    | <b>16</b> |
| Captions and Numbering.....                       | 16        |
| Placement of Tables and Figures.....              | 16        |
| Landscape Pages.....                              | 16        |
| Sources .....                                     | 17        |
| <b>SUPPLEMENTARY FILES AND CONTENT .....</b>      | <b>17</b> |
| Separate Caption Page.....                        | 17        |
| Reduced Type Size.....                            | 17        |
| <b>COPYRIGHT AND RELATED ISSUES.....</b>          | <b>17</b> |
| Copyright.....                                    | 17        |
| Attribution and Citation.....                     | 18        |
| Copyright Notice and Copyright Registration ..... | 18        |
| ProQuest and Copyright .....                      | 18        |
| Archiving and ProQuest .....                      | 18        |
| Dissertation Publishing.....                      | 18        |
| Information Regarding Embargo Statuses.....       | 19        |
| Master's Theses in the University Libraries ..... | 19        |
| Letters of Permission .....                       | 19        |

|                                                                                       |           |
|---------------------------------------------------------------------------------------|-----------|
|                                                                                       | v         |
| First Author Requirement .....                                                        | 19        |
| Preprints and Reprints .....                                                          | 20        |
| Classified Material.....                                                              | 20        |
| <b>OTHER REQUIREMENTS AND SPECIAL CASES.....</b>                                      | <b>20</b> |
| Use of Human or Animal Subjects, Biohazardous Materials, or Radioisotopes in Research | 20        |
| Thesis/Dissertation in a Foreign Language .....                                       | 21        |
| Journal or Alternative Format.....                                                    | 21        |
| <b>FREQUENTLY ASKED QUESTIONS.....</b>                                                | <b>22</b> |
| <b>APPENDIX A SAMPLE PAGES.....</b>                                                   | <b>24</b> |
| Doctoral Title Page Example .....                                                     | 1         |
| Master's Title Page Example .....                                                     | 1         |
| Doctoral Committee Page Example.....                                                  | ii        |
| Master's Committee Page Example .....                                                 | ii        |
| Example Table of Contents.....                                                        | iii       |
| Example List of Figures .....                                                         | iv        |
| Example List of Tables .....                                                          | v         |
| <b>SURVEY OF EARNED DOCTORATES.....</b>                                               | <b>32</b> |
| <b>ALTERNATIVE MEDIA REQUEST .....</b>                                                | <b>32</b> |

## INTRODUCTION

The primary purpose of a thesis or dissertation is to train the student in the processes of scholarly research and writing under the direction of members of the Graduate Faculty. After the student has graduated and the work is published, it serves as a contribution to human knowledge, useful to other scholars and perhaps even to a more general audience.

Therefore, the Graduate School, the University Libraries, and the Graduate Faculty of Penn State have established format standards that theses and dissertations must meet before receiving final approval as fulfillment of graduate requirements. This publication sets forth those standards.

The requirements in this publication apply to all Penn State theses and dissertations. They are, however, designed to allow for maximum flexibility in minor matters, which vary among academic disciplines. Thus, while you will need to comply with the specifications given here, you will probably also need to consult a specialized manual of scholarly style in your field or the style sheet of a leading journal.

Be careful if using another thesis/dissertation as a model for your own; remember that this guide is revised from time to time, and you must meet current requirements. You have a fair amount of discretion regarding style, but you must be consistent in format throughout. The work should be written in clear, grammatically correct English, with words spelled correctly and punctuation that is standard and appropriate.

Please note that **master's scholarly papers and capstone projects are not reviewed by the Office of Theses and Dissertations**. If you are unsure of the requirements for your degree, please check with your department. If you would like to publish such work, please refer to the [University Library's ScholarSphere page](#).

### **The Role of the Office of Theses and Dissertations**

The Office of Theses and Dissertations (OTD), a division of Graduate Enrollment Services, is the branch of the Graduate School responsible for certifying that theses and dissertations have been prepared in accordance with the regulations in this guide. When a thesis/dissertation is submitted to the Office of Theses and Dissertations, it must meet the requirements set forth here. **However, the Office of Theses and Dissertations reviews the document for format and compliance to Graduate School requirements only.**

### **Responsibility of the Author for the Thesis or Dissertation**

The author is ultimately responsible for meeting all of the Graduate School requirements. The author must pay the thesis/dissertation fee, apply to graduate on LionPATH, defend their dissertation, meet deadlines for format review and final submission, and receive electronic approval from all committee members and the head or chair of the graduate program. The best advice is to start early and make certain that the requirements outlined in this guide are fully met. **After final approval by the Office of Theses and Dissertations, changes are not permitted.**

## **SUBMISSION AND REQUIREMENTS**

### **Deadlines and Format Review**

Every thesis and dissertation at Penn State **must be reviewed and approved by the Office of Theses and Dissertations** (a division of Graduate Enrollment Services) in order to be considered for graduation. Therefore, ensure that you give yourself enough time to submit your work by the necessary deadlines. **There are no exceptions.** Thesis/dissertation deadlines (calendar) for each semester can be found on the [Thesis, Dissertation, Performance and Oral Presentation Deadlines Calendar](#).

Please note that master's papers and projects are **not reviewed** by the Office of Theses and Dissertations. If you are unsure of the requirements for your degree, please check with your department.

It is the responsibility of the thesis/dissertation author to be aware of and to meet deadlines for submission. Failure to meet the specified deadlines will result in the removal of your name from the graduation list. It is not necessary to submit for format review a second time if graduation is postponed to a later semester.

The length of time required for review of the thesis or dissertation varies according to the number of documents awaiting review at any given time. If you submit early in the semester, you will most likely get it back in less than a week. If you wait until the final deadline, it may take longer. In either case, you will be notified by email when the review is completed.

Please refer to the following flowcharts for a concise summary of the steps it takes to get the author's work approved by the Office of Theses and Dissertations

## SUBMISSION PROCESS FLOWCHART

### Dissertation and Thesis Submission Process Flowchart

Use this flowchart to stay on track with thesis and dissertation requirements that all Penn State graduate students must meet to graduate on time.

#### Tip: Know Your Deadlines!

Familiarize yourself with the four major and mandatory deadlines:

1. Apply to graduate
2. Submit initial format review
3. Defend your thesis
4. Submit final thesis/dissertation

Find upcoming deadlines:



#### 1. Format Review

Upload your thesis or dissertation to the Electronic Theses and Dissertations (ETD) website. Make sure your file has the following:

- Title page
- Table of contents
- Committee page
- At least three chapters

Within 2-3 weeks, the Office of Theses and Dissertations (OTD) will email you a PDF with comments for you to address. Students only need to do a format review once. **Please remember to "Apply to graduate" in LionPATH by the specified deadline.** If you have not applied, your final thesis or dissertation cannot be approved.

#### 2. Defense

**Doctoral students:** If you have not done so already, schedule your doctoral defense.

**Master's students:** Please direct all questions concerning master's theses defenses to your program.

#### 3. Upload Final Submission

To upload your final submission:

1. Pay the fee through the payment portal.
2. Use comments from OTD and your committee to make all necessary corrections.
3. Submit your final submission to ETD.

**No changes can be made after the final is submitted.**

#### 4. Committee Approval

**This is a separate process from committee approval of your defense.**

After uploading your final submission, the ETD website will indicate that it is in "Pending Status." When this happens, a series of approvals will need to take place in the order below. **Each approver will receive an email when it is their turn to review and approve.** The student also gets notified.

1. Advisor
2. Committee members
3. Graduate program head or professor in charge

**Committee approval is not final approval for your thesis or dissertation.**

#### 5. Final Graduate School Approval

After the committee approves, OTD will review one final time. If further corrections are needed, your dissertation will be rejected and sent back. Once it is free of errors, OTD will mark your dissertation as approved, and you will receive an email confirming this.

**When you receive email confirmation, you will know your thesis or dissertation is complete.**

### The End!

Now that you have finished your submission, you have completed your thesis/dissertation requirements. If not, contact your program immediately. Theses and dissertations are released to the University Libraries approximately one week after your degree is awarded depending on your embargo status. If you chose a restricted embargo your work will be on hold for two years.

## SUBMISSION PROCESS IN WORDS

Use this flowchart to stay on track with thesis and dissertation requirements that all Penn State graduate students must meet to graduate on time!

Tip: Know your deadlines! Familiarize yourself with the four major and mandatory guidelines below.

- Apply to graduate.
- Submit initial format review.
- Defend your thesis or dissertation.
- Submit final thesis or dissertation.

Find upcoming deadlines on the [Thesis, Dissertation, Performance and Oral Presentation Deadlines Calendar](#). Below are the steps necessary to submit a dissertation or thesis.

### Step 1: Format Review

Upload your thesis or dissertation to the Electronic Theses and Dissertations (ETD) website. Make sure your file has a title page, table of contents, committee page, and at least three chapters. Within three weeks, the Office of Theses and Dissertations (OTD) will email you a PDF with comments for you to address. Students only need to do a format review once. **Please remember to “Apply to graduate” in LionPATH by the specified deadline.** If you have not applied, your final thesis or dissertation cannot be approved.

### Step 2. Defense

If you are a doctoral student, schedule your doctoral defense as soon as possible. If you are a master’s student, please direct all questions concerning master’s theses defenses to your program.

### Step 3. Upload Final Submission

To upload your final submission, first pay the fee through the payment portal if you have not already done so. Next, use comments from OTD and your committee to make all necessary corrections. Lastly, submit your final submission to ETD. Remember that **no changes can be made after the final is submitted.**

### Step 4. Committee Approval

Please note this is a separate process from committee approval of your defense. After uploading your final submission, the ETD website will indicate that it is in “Pending Status.” When this happens, a series of approvals will need to take place in the following order:

1. Advisor
2. Committee Members

3. Graduate Program Head or Professor in Charge. **Each approver will receive an email when it is their turn to review and approve.** The student also gets notified.

**Please note that committee approval is not final approval for your thesis or dissertation.**

#### **Step 5. Final Graduate School Approval**

After the committee approves, OTD will review one final time. If further corrections are needed, your dissertation will be rejected and sent back. Once it is free of errors, OTD will mark your dissertation as approved, and you will receive an email confirming this. **When you receive email confirmation, you will know your thesis or dissertation is complete.**

#### **The End!**

Now that you have finished your submission, you have completed your thesis/dissertation requirements. If not, contact your program immediately. Theses and dissertations are released to the University Libraries after your degree is awarded depending on your embargo status. If you choose a restricted embargo your work will be on hold for two years.

## Embargo Statuses

Both the format review and final copy must be submitted through the [eTD site](#).

The author, when submitting an eTD, must choose one of three options for release of the document:

- Open access: Allows free worldwide access to the entire work beginning immediately after degree conferral. Appropriate for most dissertation submissions in immediately fulfilling the requirement for making the work available to the public.
- Restricted (Penn State Only): Immediately after the conferral of the degree, the **abstract becomes accessible worldwide**. Access to all other parts of the document are restricted to individuals having a valid Penn State Account, for a period of two years. Allows restricted access beginning immediately after degree conferral. At the end of the two-year period, the status will automatically change to Open Access. Intended for use by authors in cases where prior public release of the work may compromise its acceptance for publication.
- Restricted: Immediately after the conferral of the degree, the **abstract becomes accessible worldwide**. All other parts of the document are restricted for the purpose of filing a patent. At the end of the two-year period, the status will automatically change to Open Access. Selection of this option requires that an invention disclosure (ID) be filed with the Office of Technology Management (OTM) prior to submission of the final thesis/dissertation and confirmed by OTM.

With Options 2 and 3, the work will be released automatically for access worldwide at the end of the two-year period, unless a written request is made for a one-year extension. This request must be submitted to the Office of Theses and Dissertations by the author at least 30 days prior to the end of the restriction. For additional information on these options, visit the eTD website.

**Please keep in mind that all doctoral dissertations and master's theses have an abstract available for immediate worldwide access, but the student can decide when the body of the work will be available.** This should be considered carefully, taking into consideration publishing, proprietary issues, and issues associated with public disclosure. Public access to abstracts and dissertations is a form of public disclosure, so think carefully about your embargo status.

The “official” copy of an eTD is the electronic file, and this is the copy that will be on file with University Libraries. Keep in mind that electronic submission does not prevent the author from producing hard copies for the committee, department, or for personal use. If you would like a hardcopy bound version of your thesis/dissertation, please reach out to the [multimedia and print center](#). All copies are the author's responsibility. The Graduate School does not provide copies.

The eTD is available to anyone who wishes to access it on the internet (unless the author chooses one of the options that will restrict availability for two years). This open access distribution makes the work more widely available through the [library](#). For more information on eTD preparation and submission, please visit the [Thesis and Dissertation Information page](#) on the Graduate School site.

### **Patents**

Any enabling public disclosure of patentable inventions has an immediate and irreversible effect on both U.S. and foreign patent protection including the possible loss of certain patent rights. For more information, contact Penn State's [Office of Technology Management](#).

### **Applying to Graduate**

You must apply to graduate on LionPATH during the semester in which you plan to graduate. Your thesis/dissertation cannot be approved until you have [applied to graduate](#). If you fail to meet the thesis/dissertation deadlines, you will be removed from the graduation list. You must reapply to graduate if you intend to graduate in a future semester.

### **Fees**

A processing fee is assessed by the Graduate School for every thesis and dissertation. [Pay your fees online](#).

### **Electronic Approval**

After the author uploads their final submission, each committee member will receive an email directing them to the ETD link (Electronic Thesis and Dissertation application). This email is sent out sequentially; the advisor(s) **must approve** first, and once approved, the email will be sent out to the rest of the committee members, except the program head or professor in charge/director of graduate studies who will approve last.

A master's thesis must be approved by the thesis advisor, Head or Chair of the program, and at least one other committee member. For a doctoral dissertation, at least two-thirds of the committee, as well as the program head or director of graduate studies must approve. The approval of the program head or director of graduate studies is required, even if he/she is not a member of the committee.

[Email the Office of Theses and Dissertations](#) staff if you have any concerns about the electronic approval process or if you need clarification of the regulations stated above.

### **Final Submission and Approval**

When the final thesis/dissertation is uploaded, it is examined once more to make certain that the required revisions have been made and all the pages are present. If everything is in order, the document will be approved, and the author will be notified of the approval. If there are further corrections, the Office of Theses and Dissertations will reject the work and send it back for revision until it is free of error. Each time the student will have to upload a new file to the eTD. The corrections will be emailed to you in PDF form.

The eTD will be available online shortly after the degree conferral date (unless restriction is requested). Without exception, no changes can be made by the student or committee after approval by the Office of Theses and Dissertations, so it is important to proofread carefully before the final submission.

### **Letter of Certification**

If you require documentation stating that you have met the requirements for the degree before graduation, please refer to [the letter of certification desktop guide](#). You should apply for this letter at least two weeks before you need it. The deadline to request a letter of certification is the last day of classes. The letter will be provided only after all departmental requirements are completed and the Office of Theses and Dissertations has approved the final thesis/dissertation.

After degrees have been conferred, a letter of certification is no longer issued by the Graduate School because an official transcript can be requested from the University Registrar, which provides evidence of degree completion.

## **FORMATTING REQUIREMENTS**

### **Type Specifications**

Most important in typing a thesis or dissertation is consistency of format and adherence to the specific instructions given in this guide. The text of an eTD may be single-, double- or one-and-a-half-spaced.

Use a standard typeface of 10-, 11-, or 12-point size. Limit the use of italic (script) print to foreign words, book and journal titles, and special emphasis. If you wish, you may use larger size type for the title of the thesis and for chapter headings, as long as it is not larger than 18- point. Boldface type may also be used on the title page and for headings, as well as in the text, for special symbols or for emphasis.

Reduced type may be used within tables, figures, and appendices. It should be at least 9 -point in size and must be completely legible. It is permissible to use color in the document.

**Begin each chapter on a new page.** Do the same with each element of the front matter (list of tables, acknowledgments, etc.), the reference section, and each appendix. **Try to avoid typing a heading near the bottom of a page unless there is room for at least two lines of text following the heading.** Instead, you should simply leave a little extra space on that page and begin the heading on the next page. If you wish to use a “display” page (a page that shows only the chapter title) at the beginning of chapters or appendices, be sure to do so consistently and to count the display page when numbering the pages.

### **Margins**

A  $\frac{3}{4}$ -inch or 1-inch margin on all sides is acceptable, but keep in mind that a wider left margin (e.g., 1  $\frac{1}{2}$ -inch) may be more appropriate for binding purposes.

### **Page Numbers**

The title page does not show a page number, although it is actually page i. The committee page is page ii, and the Abstract begins page iii.

#### **DO:**

- Number every page in the document, including those with tables and figures (except for the title page and vita)
- Allow a reasonable distance between the page number and any text (in no instance may the page number overlap the text)
- Use lowercase Roman numerals for the front matter and Arabic numbers for the text
- Begin the thesis/dissertation on page 1
- Add a vita as your final page (this is mandatory for doctoral dissertations and optional for master's theses)
- Place page numbers in the upper right-hand corner, lower right-hand corner, or centered at the top or bottom of the page

#### **DO NOT:**

- Number a page with “a” or “b” or skip numbers
- Place page numbers on the left side of the page
- Embellish page numbers with punctuation (dashes, periods, etc.)
- Type the word “page” before the page number
- Use running headers
- Add a page number to the vita

## Documentation of Sources in the Text

Source citations are required in the text whenever you use a direct quotation, paraphrase another author's words, or include specific information that is not common knowledge (and is not the result of your own research reported in the thesis/dissertation). Systems of source citation fall generally into one of three categories:

- parenthetical author-date-page documentation
- citation by number, keyed to a numbered reference list
- footnotes or endnotes. Select one of these systems and use it throughout the thesis/dissertation. A thesis/dissertation using one of the first two systems could also include footnotes presenting non-source information or comments

References in the text must correspond exactly to the listing of sources at the end of the thesis/dissertation. Be certain that all items are included in the bibliography or reference list, authors' names are spelled consistently and correctly, and dates are the same in both the text and the reference list.

## FRONT MATTER

The term "front matter" refers to all the pages in front of the main text of the thesis/dissertation.

**Front matter pages are numbered with lowercase roman numerals.** These pages are:

- title page (unnumbered)
- committee page (page ii)
- abstract (begins on page iii)
- table of contents
- lists of figures, abbreviations, maps, tables, or multimedia items (each a separate list)
- acknowledgments (optional)
- preface (optional)
- epigraph, frontispiece, or dedication (optional; do not include in Table of Contents)

The abstract is required in all theses and dissertations and should begin on page iii. The table of contents is also required. Acknowledgments are optional and should be at the end of the front matter unless an epigraph, frontispiece, or dedication is added. An introduction may be chapter 1 or it may precede chapter 1, but it must be numbered as part of the text, not as part of the front matter.

## Title Page

The title page must appear [exactly as the example title page](#) of this guide. Type the title of the thesis/dissertation using capital letters throughout. If it occupies more than one-line, double space

between lines. Use word substitutes for formulas, symbols, superscripts, Greek letters, and other non-alphabetical symbols in the title of the thesis/dissertation.

Master's candidates should use "Thesis," and doctoral candidates should use "Dissertation" on the title page. Use your chosen name as it appears on LionPATH. Your name must appear in exactly the same form each time it is used in the thesis/dissertation. On the copyright line, use the word "Copyright" or the symbol © (not both), followed by the year and your name. (Note: You own the copyright on your work whether you choose to include this notice or not.)

On the date line, indicate the month and year of degree conferral, not the date of the defense or the date you submit your thesis/dissertation. Degrees are conferred only in May (Spring semester), August (Summer semester), and December (Fall semester).

### Committee Page

The committee page must appear exactly as [example committee page](#) of this guide. The final copy of the thesis or dissertation must include a committee page that lists the names and titles of those faculty members who have approved the work. **The names on this page must match exactly those entered on the eTD submission by the student.** The committee page is page ii and appears immediately before the Abstract.

Do not list the same person more than once on the committee page. If one of the signatories has a dual role, list both roles under the professorial title.

The Advisor must be designated on the committee page. If two individuals served as Advisors, list each as "Dissertation Co-Advisor." The committee chair must also be designated on the committee page. If there is more than one committee chair, list each as "Co-Chair of Committee." There should be no chair indicated on a master's thesis. If master's have two Advisors, list as "Thesis Co-Advisor."

All electronic signatories on a doctoral dissertation must be members of Penn State's Graduate Faculty, except in special cases approved by the Office of Graduate Enrollment Services. A person who receives special approval but does not attend the oral defense is designated as a Special Signatory. If the person does attend the defense, the term used is Special Member. On a master's thesis, the designation would always be Special Signatory.

Be sure that all committee members are identified by their correct professorial titles. Check with the program for current information. **Do not use such designations as "Ph.D." or "Dr." on the committee page.** Administrative titles should not be included, except for the head or chair of the major program. Only one administrative title should be used, as only one person is signing on behalf of the major program.

## Abstract

Every thesis/dissertation must contain an abstract. An abstract is a concise summary of the thesis/dissertation, intended to inform prospective readers about its content. It usually includes a brief description of the research, the procedures or methods, and the results or conclusions. An abstract should not include internal headings, parenthetical citations of items listed in the reference section, diagrams, or other illustrations.

The abstract follows the committee page and has the heading ABSTRACT at the top. It always begins on page iii.

After the conferral of the degree, **abstracts** for all doctoral dissertations and master's theses, whether Open Access, Restricted (Penn State) or Restricted, become accessible worldwide.

## Table of Contents

To see an example please refer to the [table of contents in Appendix A](#) of this guide. The table of contents is essentially a topic outline of the thesis/dissertation. It is compiled by listing the headings in the thesis/dissertation. You may choose to include first-level headings, first- and second-levels, or all levels. Keep in mind that there usually is no index in a thesis/dissertation, and thus a fairly detailed table of contents can serve as a useful guide for the reader. **The table of contents must appear immediately after the abstract and should not list the abstract, the table of contents itself, the frontispiece, the epigraph, or the vita. It should include everything else that appears after the table of contents, including the list of figures, list of tables, etc.** (See example in Appendix A of this guide.)

Be sure that the headings listed in the table of contents match word-for-word the headings in the text. **Double check to be sure that correct page numbers are shown.** In listing appendices, indicate the title of each appendix. If using display pages, the number of the display page should appear in the table of contents.

## List of Figures, List of Tables, etc.

Include a list of figures (illustrations) and a list of tables if you have one or more items in these categories. **Use a separate page for each list. Show the caption and page number of every figure and table in the thesis/dissertation.** Also include lists for abbreviations, nomenclature, maps, etc. The List of Figures and List of Tables should only show the figures and tables featured in the body of the work (supplementary figures and tables are permitted). Appendix figures and

tables should be referenced in the Appendix section of the Table of Contents as ‘figures’ and ‘tables’ and not listed individually.

### **Acknowledgments and Funding**

An acknowledgments page is required **only if the author has received permission to use copyrighted material or must acknowledge grant sources**. As described in the Research Terms Clarification to 2 CFR § 200.328 (see pp. 20-21), **all federal funds used for a thesis or dissertation project must be explicitly acknowledged in the thesis or dissertation, along with a disclaimer indicating that the findings and conclusions do not necessarily reflect the view of the funding agency**. As part of the submission process, you will be asked to affirm that if federal funds were used to support the work described in your thesis or dissertation, you have included the appropriate acknowledgments and disclaimers. **If you are unsure if your dissertation was supported by federal funds, check with your thesis or dissertation adviser, or the faculty member/principal investigator providing your funding. Your submission cannot be processed without this required acknowledgment.**

Refer to the following section for acknowledgment requirements for specific funding sources.

### **Federal Funding Acknowledgement in Theses and Dissertations**

The [Research Terms and Conditions](#) derived from [Title 2 CFR § 200.329](#) applies to grants and cooperative agreements issued by: the National Science Foundation (NSF), the National Institutes of Health (NIH), the National Aeronautics and Space Administration (NASA), the US Department of Energy (DOE), the National Institute of Food and Agriculture (NIFA/USDA), the US Department of Commerce (USDC), and certain awards issued by the US Department of Homeland Security. They include the following provisions:

The recipient is expected to publish or otherwise make publicly available the results of the work conducted under the award. An acknowledgment of awarding agency support must appear in any publication, including World Wide Web pages, of any material, whether copyrighted or not, based on or developed under this project, and, is orally acknowledged during all news media interviews, including popular media, such as radio, television, and news magazines as follows:

1. The acknowledgment will be: “This material is based upon work supported by the [name of awarding agency(ies) under Award No. [recipient should enter the awarding agency(ies) award number(s)].”

2. For all materials, except scientific articles or papers published in scientific journals, the disclaimer will be: “Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the [name(s) of awarding agency(ies)].”

The Stevens Amendment ([Public Law 101-166, Section 511](#)), which applies to the US Department of Health and Human Services, the US Department of Labor, and the US Department of Education, requires the following:

When issuing statements, press releases, requests for proposals, bid solicitations, and other documents describing projects or programs funded in whole or in part with Federal money, all grantees receiving Federal funds, including but not limited to State and local governments, shall clearly state

1. the percentage of the total costs of the program or project which will be financed with Federal money,
2. the dollar amount of Federal funds for the project or program, and
3. percentage and dollar amount of the total costs of the project or program that will be financed by nongovernmental sources.

Many other Federal awards and some non-Federal awards also require public acknowledgment of funding. As a general principle, it is *always* a good idea to acknowledge your source(s) of funds in any publication. If uncertain about the specific contractual obligations associated with your source(s) of funding, please consult with your Adviser and/or the faculty member providing your funding.

If an acknowledgment is not required to acknowledge copyrighted material or grant sources, it may be included at the student's discretion. If included, it is used to express the author's professional and personal indebtedness.

## Preface

A preface usually is not necessary and is called for only when the genesis of the work needs to be explained or the author's contribution to a multiple-authored work needs to be noted. If there are separate sections for preface and acknowledgments, the preface must precede chapter 1.

## Epigraph or Frontispiece

Some authors include a quotation (epigraph) or illustration (frontispiece) as the last page of the front matter. These should not be listed in the table of contents. The source of an epigraph is indicated below the quotation but need not be listed in the bibliography.

## BACK MATTER

The back matter (or end matter) of the thesis/dissertation may include some or all of the following items:

- bibliography or references (may be in back matter or at the end of each chapter)
- appendices (may come either before or after references)
- endnotes or notes (if any, they may be in back matter or at the end of each chapter)
- vita (required in doctoral dissertation, always as the last page and **unnumbered**)

## Bibliography or References

A thesis/dissertation must include a bibliography or reference section listing all works which are referred to in the text, and in some cases other works also consulted in the course of research and writing. This section may either precede or follow the appendices (if any) or may appear at the end of each chapter. Usually, a single section is more convenient and useful for both author and reader.

The forms used for citing sources in the bibliography/reference section are detailed and complicated, and they vary considerably among academic disciplines. For this reason, you will need to follow a scholarly style manual in your field or perhaps a recent issue of a leading journal as a guide in compiling this section of the thesis/dissertation.

## Appendices

Material that is pertinent but is somewhat tangential or very detailed (raw data, procedural explanations, etc.) may be placed in an appendix. **Appendices should be designated A, B, C (not 1, 2, 3 or I, II, III). If there is only one appendix, call it simply Appendix, not Appendix A.**

Titles of appendices must be listed in the table of contents. Appendix pages must be numbered consecutively with the text of the thesis/dissertation (do not number the pages A-1, A-2, etc.).

### **Vita**

Required only in doctoral dissertations, the vita must be the last page of the document. **It must not have a page number and must not be listed in the Table of Contents.** The word Vita and the author's name should appear at the top. A standard outline style or a prose form may be used. **In no case may the vita be more than one page in length.** Examples of vitas can be seen on the [library eTD page](#).

## **TABLES AND FIGURES**

A **table** is a columnar arrangement of information, often numbers, organized to save space and convey relationships at a glance. A rule of thumb to use in deciding whether given materials are tables or figures is that tables can be typed, but figures must be drawn.

A **figure** is a graphic illustration such as a chart, graph, diagram, map, or photograph.

### **Captions and Numbering**

Each table and each figure in the text must have a number and caption. Number them consecutively throughout, beginning with 1, or by chapter using a decimal system.

### **Placement of Tables and Figures**

It is best to place a table or figure immediately after the first mention of it in the text—on the same page if there is room, or on the following page. Alternatively, tables and/or figures may be grouped together at the end of each chapter. Tables or figures of peripheral importance to the text may be placed in an appendix. Tables and figures must be referred to in the text by number, not by a phrase such as “the following table.”

### **Landscape Pages**

Place a table or figure sideways (landscape style) on the page by rotating it **90 degrees counterclockwise** from its normal position. Rotate the caption or heading also, so that all parts can be conveniently read together. The page number may be rotated with the figure if the author chooses.

## **Sources**

If a figure or table is taken from another source, indicate the source at the bottom, either at the end of the caption or in a note beginning “Source: ...”. Source notes are not numbered, even if there are other numbered notes. If a figure or table is copied from its source, be sure it is large enough to be readable.

## **SUPPLEMENTARY FILES AND CONTENT**

Supplementary files are separate attachments that enhance or support your thesis/dissertation. This may include supplementary tables or figures, computer code, research data, audio or video files, and images or maps that are not part of the primary pdf.

### **Separate Caption Page**

Use the entire page for the table or figure and place the caption on a separate page preceding it. Type the caption in the same direction (landscape or portrait).

### **Reduced Type Size**

Reduce the font size of the table or figure. The size should be no smaller than 9-point.

## **COPYRIGHT AND RELATED ISSUES**

### **Copyright**

Copyright law governs the use of creative works, including theses and dissertations. Thesis and dissertation authors encounter copyright when reusing their own or other’s work, controlling others' use of their work, and publishing other works related to the research in their thesis or dissertation.

It is your responsibility as the author to ensure that your thesis or dissertation does not infringe copyright. U.S. copyright law provides users significant rights to use material without permission from the copyright holder, especially for scholarly purposes. However, some uses of others' materials, or even your own previously published materials, require permission. If you need permission for use of content in your thesis or dissertation, you must secure it in writing and submit a copy with your thesis or dissertation.

The Penn State University Libraries provide a [guide on Copyright and Your Thesis or Dissertation](#) that addresses many of these issues. You can also [contact the Libraries' Office of Scholarly Communications and Copyright](#) for individual assistance.

### **Attribution and Citation**

U.S. copyright law generally does not require attribution, but it is nonetheless vital to follow attribution and citation norms within your discipline. Your committee, advisors, and other mentors in your field can help you understand your field's publishing norms, such as how to select and assess third party material and how to attribute and cite that material properly.

### **Copyright Notice and Copyright Registration**

Under current U.S. law, copyrightable works are protected automatically, regardless of whether the author registers the work with the U.S. Copyright Office or includes a copyright notice. There are benefits to notice and registration, and in the case of registration, there are costs. You can learn more in the Libraries' guide, [Copyright and Your Thesis or Dissertation](#).

### **ProQuest and Copyright**

As explained elsewhere in this guide, the Graduate School requires that doctoral dissertations be submitted to ProQuest. As part of this process, you must grant ProQuest the right to distribute copies of the dissertation in electronic and print format. ProQuest will register copyright on behalf of authors, for a fee. You can also register copyright more cheaply on your own. For more information about copyright registration, please see the [Libraries' guide, Copyright and Your Thesis or Dissertation](#).

Please note that Penn State has the right to make single copies of the work for nonprofit purposes.

### **Archiving and ProQuest**

All dissertations and theses at Penn State are archived and made available for sale by ProQuest.

### **Dissertation Publishing**

Penn State maintains this arrangement because it believes that knowledge should be disseminated to the public rather than restricted. Further, dissemination through ProQuest increases the visibility of Penn State's student's ETDs via inclusion in the ProQuest Dissertations & Theses (PQDT) Global database, Clarivate's Web of Science database and many other subject and disciplinary databases. Further information about ProQuest's dissemination services can be found on their [ETD Dissemination page](#).

As a public research university, Penn State has an obligation to ensure that information arising from the research and scholarship of its faculty and students is made available to the public. The doctoral dissertation, as an examination document, is a primary source for such information and has historically been made available in hard copy format through placement in the University Libraries and through mechanisms such as Interlibrary Loan. With the advent of documents created digitally, dissertations can now be placed in the public domain and made available for worldwide access through the University Libraries digital collections.

### **Information Regarding Embargo Statuses**

All dissertations must be submitted electronically in order to facilitate and support their availability to the public. If it is necessary or advisable to temporarily restrict access to the eTD (allowable for a period of two years), generally based upon a request from the Office of Technology Management in consultation with the student and Advisor, the student may do so by choosing one of two restricted release options indicated on the eTD under Access level: **Penn State Only** (the eTD is available only to those with active Penn State Access Accounts for a period of two years) or **Restricted** (the eTD is available to no one for a period of two years). The Restricted option is used exclusively for dissertations with patent issues. After two years, the eTD is released (**Open Access**) unless the author requests an extension through the Office of Theses and Dissertations.

### **Master's Theses in the University Libraries**

Penn State master's theses are available online at the eTD site but are not published by ProQuest. If you wish to publish your master's thesis abstract with ProQuest's Master's Abstract program, you may contact the Manuscripts Department of ProQuest on the [ProQuest site](#).

### **Letters of Permission**

If your borrowing exceeds fair use, you must secure written permission and submit a copy with your dissertation. When requesting letters of permission, be sure the grantor is aware that the work will be published through ProQuest's dissertation program. You are solely responsible if you violate the copyright law; neither Penn State nor ProQuest will be held liable.

### **First Author Requirement**

Your department may permit you to submit multiple-authored work as thesis/dissertation material **if you are first author of the work**. Your contributions must be clearly and fully indicated in a preface to the thesis/dissertation.

The student's contribution to the multi-authored work in question must be substantial, and integral to the thesis or dissertation. The student must clearly and fully indicate their contributions to the

multi-authored work in a preface to the thesis or dissertation. The Program head, after consultation with the thesis or dissertation advisor and committee chair (if they are not the same person), must make the request to the Office of Theses and Dissertations, verifying the substantial and integral contributions of the student to the multi-authored work, and include (when appropriate) an explanation of how the publication practices in the field impact the author order, along with any other relevant information.

### **Preprints and Reprints**

Electronic preprints and reprints are acceptable for inclusion in the thesis/dissertation if they meet type size, margin, and legibility requirements. Material that does not quite meet the usual type size and margin requirements may sometimes be placed in an appendix.

### **Classified Material**

You may not use any information that is restricted or cannot be disseminated to the public in your thesis or dissertation, because one of the primary intents of the thesis/dissertation effort is to communicate the results of research to the scholarly community. In cases involving innovative or patentable material, access to the electronic document may be restricted for two years.

## **OTHER REQUIREMENTS AND SPECIAL CASES**

### **Use of Human or Animal Subjects, Biohazardous Materials, or Radioisotopes in Research**

Any use of human subjects, animals, biohazardous materials, or radioisotopes for research purposes must be reviewed and approved by the Office for Research Protections before the research is conducted. This approval cannot be obtained retroactively and cannot be granted by Advisors or doctoral committees. This requirement is part of the University's policy on ethics in research. It provides legal assurance for the commitment that the University has made to the federal government regarding protection of human and animal subjects. Violation of these policies is a breach of the trust placed in researchers by the scholarly community and society. In the event that the research is performed without prior approval: (1) it will not be possible to have the work published; (2) it is possible that the thesis or dissertation will not be approved by the Graduate School; and (3) under certain circumstances, conferral of the graduate degree may be compromised. If you have questions regarding this requirement or how to obtain the necessary approvals, please contact the Office for Research Protections, The 330 Building, Suite 205, University Park, PA 16802 (phone: 814-865-1775; e-mail: [ORP@psu.edu](mailto:ORP@psu.edu)).

**Thesis/Dissertation in a Foreign Language**

**With the approval of the student's department and committee**, a thesis or dissertation may be written in a foreign language. English translations of the title page and abstract are required and must be placed before corresponding pages in the foreign language. These are not numbered or counted in the pagination of the thesis/dissertation.

**Journal or Alternative Format**

In academic areas where research is published in the form of journal articles, the author may wish to have the format of the thesis or dissertation approximately that of a manuscript to be submitted for journal publication. With minor exceptions, this purpose can generally be accomplished within the bounds of the requirements set forth in this guide. The main body of the thesis/dissertation, for example, may be relatively brief, with such sections as the review of literature placed in an appendix. Tables and figures whose importance to the text is tangential may also be handled as appendix material, or the thesis/dissertation may consist of chapters that are essentially separate journal articles.

## FREQUENTLY ASKED QUESTIONS

### **How do I go about purchasing a hard copy of my thesis or dissertation?**

For questions regarding binding information of your thesis or dissertation, please contact the [Multimedia and Print Center](#).

### **Where do I go if I need technical assistance with my thesis or dissertation?**

Depending on the nature of your issue, please refer to Tech Tutors based in Penn State's Information Technology center. For questions regarding the ETD, reach out to [gradthesis@psu.edu](mailto:gradthesis@psu.edu).

### **How do I find information regarding LaTeX?**

The Office of Theses and Dissertations does not oversee LaTeX templates. The University Library has a [detailed guide](#) on obtaining and using LaTeX on their site.

### **Who is the final approver for my thesis/dissertation: the graduate program head or the professor-in-charge?**

If you are unsure if your Professor in Charge or Graduate Program Head should approve, please reach out to your program staff.

### **How do master's theses defenses work?**

Please refer all questions concerning defending your master's thesis to your program.

### **Do I have to submit my format review again if it was rejected?**

Yes, you do. If your format review was rejected, please make all requested corrections, and then submit it for format review again.

### **Do I have to reapply to graduate if I change the semester I intend to graduate?**

Yes, and you can do so on LionPATH.

### **Does my committee need to approve again if I need to resubmit my final submission?**

No, your committee does not have to approve again if OTD requests that you make final submissions. Simply make the requested corrections and upload your final submission again.

**Why haven't my other committee members been sent an approval request?**

Approval requests are sent in order of: advisor, rest of committee, and lastly, program head. Until your advisor approves your work, the email is NOT sent to the rest of the committee. The process is essentially paused.

**Why do I have to add the Program Head/Director of Graduate Studies to my committee?**

All dissertations and theses must be approved by either the Program Head or Director of Graduate Studies, even if they did not sit on your committee.

## **APPENDIX A SAMPLE PAGES**

Doctoral Title Page Example

The Pennsylvania State University  
The J. Jeffrey and Ann Marie Fox Graduate School

**A DESIGN METHODOLOGY OF MULTI-FLOW CONDENSER WITH FLAT  
EXTRUDED TUBES**

A Thesis in  
Mechanical Engineering

by

John J. Doe

© 2023 John J. Doe

Submitted in Partial Fulfillment  
of the Requirements  
for the Degree of

Master of Science

May 2023

Master's Title Page Example

The Pennsylvania State University  
The J. Jeffrey and Ann Marie Fox Graduate School

**A DESIGN METHODOLOGY OF MULTI-FLOW CONDENSER WITH FLAT  
EXTRUDED TUBES**

A Thesis in  
Mechanical Engineering

by

John J. Doe

© 2023 John J. Doe

Submitted in Partial Fulfillment  
of the Requirements  
for the Degree of

Master of Science

May 2023

### Doctoral Committee Page Example

The dissertation of John J. Doe was reviewed and approved by the following:

Charles L. Merkle  
Professor of Mechanical Engineering Dissertation Advisor  
Chair of Committee

Stefan T. Thynell  
Associate Professor of Mechanical Engineering

Kenneth K. Kuo  
Distinguished Professor of Mechanical Engineering

Jeffrey L. Kohler  
Associate Professor of Mining Engineering

Richard C. Benson  
Professor of Mechanical Engineering  
Head of the Department of Mechanical Engineering

### Master's Committee Page Example

The thesis of John J. Doe was reviewed and approved by the following:

Charles L. Merkle

Professor of Mechanical Engineering Thesis Advisor

Stefan T. Thynell

Associate Professor of Mechanical Engineering

Kenneth K. Kuo

Distinguished Professor of Mechanical Engineering

Jeffrey L. Kohler

Associate Professor of Mining Engineering

Richard C. Benson

Professor of Mechanical Engineering

Head of the Department of Mechanical Engineering

## Example Table of Contents

### TABLE OF CONTENTS

|                                                      |        |
|------------------------------------------------------|--------|
| List of Tables .....                                 | v      |
| List of Figures.....                                 | vi     |
| Acknowledgements.....                                | ix     |
| <br>Chapter 1. INTRODUCTION .....                    | <br>1  |
| The Role of the Thesis and Dissertation Office ..... | 1      |
| Responsibility for the Thesis .....                  | 1      |
| Electronic Submission.....                           | 2      |
| <br>Chapter 2. TECHNICAL REQUIREMENTS .....          | <br>5  |
| Paper... ..                                          | 5      |
| Print and Photocopy Quality.....                     | 5      |
| Typing Specifications.....                           | 6      |
| <br>Appendix A: Sample Pages .....                   | <br>19 |
| <br>Appendix B: Forms and Deadlines .....            | <br>25 |
| <br>Bibliography.....                                | <br>30 |

## Example List of Figures

### LIST OF FIGURES

|                                  |    |
|----------------------------------|----|
| Figure 1.1 Title of figure ..... | 14 |
| Figure 1.2 Title of figure ..... | 16 |
| Figure 1.3 Title of figure ..... | 17 |
| Figure 1.4 Title of figure ..... | 18 |
| Figure 1.6 Title of figure ..... | 20 |
| Figure 1.7 Title of figure ..... | 21 |
| Figure 1.8 Title of figure ..... | 23 |
|                                  |    |
| Figure 2.1 Title of figure ..... | 25 |
| Figure 2.2 Title of figure ..... | 27 |
| Figure 2.3 Title of figure ..... | 28 |
| Figure 2.4 Title of figure ..... | 29 |
| Figure 2.6 Title of figure ..... | 34 |
| Figure 2.7 Title of figure ..... | 37 |
| Figure 2.8 Title of figure ..... | 40 |

**Example List of Tables****LIST OF TABLES**

|                                |    |
|--------------------------------|----|
| Table 1.1 Title of table ..... | 20 |
| Table 2.1 Title of table ..... | 26 |
| Table 2.2 Title of table ..... | 30 |
| Table 3.1 Title of table ..... | 35 |
| Table 3.2 Title of table.....  | 45 |
| Table 3.3 Title of table.....  | 48 |
| Table 4.1 Title of table.....  | 77 |
| Table 5 Title of table.....    | 81 |

## **SURVEY OF EARNED DOCTORATES**

To complete the Survey of Earned Doctorates (SED), [go to the Fox Graduate School's SED page](#).

## **ALTERNATIVE MEDIA REQUEST**

This publication is available in alternative media upon request. Please [contact OTD](#) to request an alternative media format of this publication and we will be happy to help.

The University is committed to equal access to programs, facilities, admission, and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information, or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University's educational mission, and will not be tolerated.

Direct all inquiries regarding nondiscrimination policy to:

Office of Equal Opportunity and Access

The Pennsylvania State University

502 Rider Building

University Park, PA 16801

Email: [oeoa@psu.edu](mailto:oeoa@psu.edu)

Tel (814) 863-0471