College of Technology DRAFT Guidelines for Preparation of Master's Thesis

Executive Summary

- 1. Select thesis advisor.
- 2. Select a topic.
- 3. Select a committee.
- 4. Register for the thesis course with thesis advisor.
- 5. Start research.
- 6. Write thesis.
- 7. Defend thesis.
- 8. Publish thesis.

Thesis Option

Holliday (2003) identifies a thesis as an endeavor of more significance and difficulty than a research project. It involves:

- 1. Analyzing the problem or topic.
- 2. Conducting extensive research.
- 3. Summarizing findings from the research investigation.
- 4. Recommending additional research on the topic.
- 5. Drawing conclusions and making recommendations.
- 6. Documenting the results of the research.
- 7. Defending conclusions and recommendations.

Pre-Thesis Planning

Students contemplating a thesis should discuss their interests with as many individuals as possible to gain a broad perspective of the experience. Students will find their department faculty and graduate program advisor knowledgeable and willing to offer excellent suggestions and advice regarding an appropriate thesis topic.

The student should identify the thesis topic and develop a draft of the thesis proposal. The student is encouraged to discuss topic ideas and research direction with his/her faculty advisor and with other faculty who have an interest in the student's topic and who may be willing to serve as the student's thesis advisor or as a member of the thesis committee.

Questions to ask when evaluating your thesis topic:

- 1. Is there current interest in this topic in the field?
- 2. Is there is a gap in knowledge that work on this topic could help to fill?
- 3. Is it possible to focus on a manageable segment of this topic?
- 4. Identify a preliminary method of data collection that is acceptable to your advisor.
- 5. Is there a body of literature is available that is relevant to your topic?
- 6. Do you need financial assistance to carry out your research?
- 7. Is the data necessary to complete your work is easily accessible?
- 8. Define the project purpose, scope, objectives, and procedures.
- 9. What are the potential limitations of the study?
- 10. Are there any skills called on by the study that you have yet to acquire?

(http://www.cipa.cornell.edu/cip_writrequire.html)

The student should give considerable thought to the identification and planning of a thesis topic. Reviewing literature related to the student's interests is a very worthwhile activity and is strongly recommended. Also, the student should read a variety of research papers, abstracts, and proposals for content, methods and structure. Looking at completed master's theses will be a useful activity toward expanding inquiry skills and thought processes.

After the thesis advisor is selected, the student may register on-line for a thesis section. The student will need to see the Department Coordinator or faculty advisor to obtain the thesis section number.

Suggested Thesis Timeline

Below please find a suggested timeline. Individual timelines may vary from one student to another.

Fall Start Timeline	Spring Start Timeline	Recommended Task Completion	Overview	
Prior to the start of the term	Prior to the start of the term	 Select a thesis advisor. Select a topic. Register for a thesis section. 	Planning	
August September	January February	 Select a committee. Schedule the thesis proposal defense. Submit a one page proposal to the thesis committee at least one week prior to the thesis defense. 		
October November	March April	 Submit introduction to the thesis advisor. Submit chapters to the thesis advisor; student should be making significant progress toward writing his/her thesis. 	Research & Writing	
February	September	1. Submit conclusion and bibliography to the thesis advisor; student should have completed his/her thesis writing.		
March	October	 Schedule thesis defense. Revise and resubmit the thesis two weeks prior to defense. 	Submission & Examination	
April	November	 Once the committee has approved the thesis, submit an unbound copy of the thesis to the Director of Graduate students. Submit approved thesis for binding at least two weeks prior to the end of the term. 		
Prior to the end of term	Prior to the end of term	Submit copies of bound thesis.		

Scholarship Possibilities

Funding is usually specific to the area of expertise. You will want to research funding options during the pre-thesis planning as many scholarship applications are due months before the award is granted.

- SPIE: http://spie.org/communityServices/StudentsAndEducators/index.cfm?fuseaction=students_scholarships
- Sensors Council: http://www.ewh.ieee.org/tc/sensors/Scholarship/Sensors Council GE Scholarship 2006
 post.pdf

More opportunities exist; you will need to search for scholarships based on your topic of research.

Thesis Committee

The student and thesis advisor will jointly identify the student's thesis committee. A thesis committee should be comprised of at least three faculty members, one of whom should be the thesis advisor. At least two members of the committee must be from the student's department and the third person may be from outside the department.

Once the student's thesis committee has been identified, the student should request Departmental and College approval of the committee. The student should complete the Appointment of Thesis Committee form (see attached for MS and MT forms) and submit a copy to his/her department chair and college dean. Once all signatures have been obtained, a copy should be forwarded to the graduate advisor to place in the student folder. The student may proceed with scheduling a thesis proposal meeting as soon as the committee has been approved.

Thesis Proposal Defense

The student should meet informally with the thesis committee and each committee member to achieve direction for and assistance with the development of the thesis topic and proposal. The student and the committee chair jointly determine when a thesis proposal defense meeting should be called to formalize the thesis proposal. To avoid any misunderstanding, the student should not proceed with the research until the thesis topic and proposal have been approved by the thesis committee.

The student should request and schedule a proposal defense meeting which is agreeable to all members of the committee. The student should provide a copy of the thesis proposal to all committee members at least one week prior to the scheduled meeting.

A meeting will not be considered official if the thesis proposal is not distributed as prescribed or if less than three committee members are present at the proposal defense. The outcome of the proposal defense meeting should be clear to the student as well as to committee members. The proposal will be accepted, accepted with modification, or rejected. Once the proposal is accepted and the student begins writing, the student should work closely with thesis committee throughout writing the thesis to receive feedback and stay on track.

Citing Sources

The College of Technology* does not mandate citation styles, but you must cite your sources and cite them consistently. Here are some helpful links to assist you with citation:

- Citation Styles: http://www.bedfordstmartins.com/online/citex.html
- Landmark's Son of a Citation Machine: http://citationmachine.net/index.php?new_style=1#here
- Wikipedia Citation Templates: http://en.wikipedia.org/wiki/Wikipedia:Template_messages/Sources_of_articles/Generic_c itations
- IEEE: http://www.ieee.org/portal/site
- Chicago Style: http://library.osu.edu/sites/guides/chicagogd.php
- * The Human Development Consumer Science department prefers you to use the APA style. Please consult with your thesis advisor when choosing a citation style.

Thesis Quality

When you write and defend your thesis, keep the following guidelines in mind:

A poor quality thesis:

- Shows a cursory examination of the topic.
- Makes little use of existing data sources.
- Fails to examine primary sources.
- Shows little comprehension of crucial texts or research in the subject matter.
- Lacks adequate organization.

A quality thesis:

- Treats the topic in a competent, straightforward way.
- Shows a good grasp of the material.
- Makes use of existing data sources in a competent fashion or shows a good acquaintance with primary sources and current research.
- Shows a solid comprehension of research in the subject matter
- Sustains a line of argumentation throughout the thesis

A high quality thesis

• Shows all of the above qualities of a quality thesis as well as some measure of originality in research.

Originality is defined as developing new data; treating existing data in an original or particularly compelling way; developing new or particularly compelling theoretical arguments; interpreting existing research in an original or particularly compelling way; or bringing primary or secondary materials and research together to sustain a new, comprehensive or compelling interpretation. In general, a thigh quality thesis either shows some measure of originality in its argument or empirical base; or is in some other way striking or new.

(http://www.bsos.umd.edu/gvpt/honors/thesis.htm)

Thesis Defense

When a consensus has been reached by the student and his/her thesis advisor that the thesis is ready to defend, the thesis advisor will instruct the student to schedule a thesis defense meeting. The student will schedule a thesis defense meeting at a time when all committee members can be present. The student must distribute the thesis to all committee members at least two weeks in advance of the thesis defense meeting.

The defense meeting will be open to the university community. All committee members must be in attendance at the thesis defense. As with the proposal defense meeting, the outcome of the thesis defense meeting should be clear to the student. Timelines should be established for the final thesis copy to be submitted for committee approval. The student should refer to the University academic calendar for deadlines to submit the final draft and bound copies of the thesis.

Once the committee has approved the final draft of the thesis, one copy of the unbound thesis must be submitted to the College of Technology, Associate Dean for Research and Graduate Studies. This must be done at least two weeks prior to the deadline for submitting bound copies of thesis printed in the class schedule. After final approval by the Director of Graduate Studies, the thesis can be taken for binding.

Organization of Thesis

The original and copies of the thesis MUST include the following items IN THE ORDER LISTED:

- 1. Blank sheet of bond paper at the beginning of each copy submitted.
- 2. Copyright page (optional).
- 3. Title Page (must show month and year of graduation see example).
- 4. Signature page (see example). All three required copies must have ORIGINAL SIGNATURES of the committee and the student.
- 5. Acknowledgment (optional).
- 6. Abstract Title Page (optional must show month and year of graduation see example).
- 7. Abstract (optional University Microfilms, Inc. requires abstracts be no longer than 150 words.).
- 8. Table of Contents.
- 9. Text.
- 10. References.
- 11. Blank sheet of bond paper at the end of each copy submitted.

Style Requirements

Although there is no prescribed style for the completed thesis, there are several style manuals available which may prove helpful. The student should contact the thesis advisor to discuss the style manual to be used. Above all, it is important to be consistent throughout the entire thesis. Decide how you wish to structure your manuscript and be consistent throughout it.

Specifications for Binding

- 1. Paper: For the University copies you must use at least 20 lb., 8 1/2" X 11" white bond with 50% rag content (50% cotton paper). For your own copies, do not use less than 13 lb. paper (25% cotton).
- 2. Type: The type must be from a typewriter, typesetting, or letter quality printer. "Correspondence quality," "near-letter quality" and dot matrix methods are not acceptable. (The thesis must be double-spaced.)
- 3. Margins: The left margin should be one and one-half inches (1-1/2). The right, top and bottom margins should be one inch (1) each.

Binding the Thesis

Several companies in the Houston area have expertise in bookbinding and are familiar with the University of Houston thesis requirements for binding and engraving. Most departments use:

Legacy Bookbinding Plus
Contact: Erika Capristo and Raul Romero
6999 W. Little York, Suite K
Houston, TX 77040
713-934-7738 (phone) 713-299-2582 (cell)

It is the student's responsibility to have the thesis bound. Proof of binding, in the form of a receipt from the binding company, must be submitted to the Graduate Program Advisor prior to the last day of classes.

It is the student's responsibility to have the original and the copies bound before submitting them to the College.

Students who select the thesis option for their Master's degree must submit the original to the department and two copies of the bound thesis to the Graduate Advisor in the Academic Service Center (Room 108, T1). If the student wishes to make his/her thesis available for check-out at the library, please submit a third bound copy of the thesis to the Graduate Advisor. The bound copies are retained by the University for reference purposes, including library loans.

Thesis Microfilming and Copyright Instructions

Students who are interested in having their thesis microfilmed and copyrighted should contact University Microfilms, Inc. (UMI) at the following address for additional information:

University Microfilms, Inc. 300 North Zeeb Road P.O. Box 1346 Ann Arbor, MI 48106-1346 713-761-4700 or 1-800-521-0600 www.umi.com All theses to be copyrighted must also be microfilmed. Microfilming and copyrighting information is also available from the graduate program advisor (Room 108, T1).

Master's theses that are copyrighted and microfilmed must include an abstract. The abstract is double-spaced and must not exceed 150 words.

COPYRIGHT PAGE EXAMPLE (optional)

COPYRIGHTED BY

YOUR NAME

Month and Year of Graduation**

A Thesis Presented to the Faculty of the Department of _____ University of Houston In Partial Fulfillment of the Requirements for the Degree Master of Technology/Master of Science (your degree)

By

Your Name

Month and Year of Graduation**

^{**}Spring Graduates - May, XXXX Summer Graduates - August, XXXX Fall Graduates - December, XXXX

SIGNATURE PAGE EXAMPLE

Associate Dean for Research and Graduate Studies, College of Technology

TITLE OF THESIS

	Your Name
	APPROVED:
	Committee Chair, Degree
	Committee Member, Degree
	Committee Member, Degree
Associate Dean for Research and Graduate	Donortmont Chair's Name Dogge
Studies Name, Degree	Department Chair's Name, Degree Department of

ACKNOWLEDGEMENTS PAGE EXAMPLE (optional)

ACKNOWLEDGEMENTS

Any acknowledgments included in your thesis should begin like this and continue.

Acknowledgements must be double-spaced.

ABSTRACT TITLE PAGE EXAMPLE (optional)

TITLE OF THESIS					
An Abstract of A Thesis					
Presented to					
the Faculty of the Department of					
University of Houston					
In Partial Fulfillment					
of the Requirements for the Degree					
Master of Technology/Master of Science (your degree)					
Ву					

Your Name

Month and Year of Graduation**

^{**}Spring Graduates - May, XXXX Summer Graduates - August, XXXX Fall Graduates - December, XXXX

ABSTRACT PAGE SAMPLE (optional)

ABSTRACT

The abstract of a Master's thesis should begin like this and continue. The abstract must be double-spaced and cannot exceed 150 words in length.

Appointment of Thesis Committee for the Master of Technology Degree

Department of ______ College of Technology, University of Houston

Student Name:		Date:	
Home Phone: Work			
Social Security Number: _		Anticipated Graduation Date:	
TENTATIVE THESIS TIT	LE:		
Faculty members who have are as follows:	agreed to serve on t	he Thesis Committee for the above named studen	
		Office Phone:	
Department:	E-mail:	Initials:	
Committee Member:		Office Phone:	
Department:	E-mail:	Initials:	
Committee Member:		Office Phone:	
Department:	E-mail:	Initials:	
Committee Member:		Office Phone:	
Department:	E-mail:	Initials:	
Approved:Departmen	t Chair	Date:	
Approved:Associate I	Dean of Research and	Date:d Graduate Studies	

Appointment of Thesis Committee for the Master of Science Degree

Department of Industrial Technology College of Technology, University of Houston

Student Name:		Date:	
Address:			
		Work Phone:	
Social Security Number:		Anticipated Graduation Date:	
are as follows:		the Thesis Committee for the above named student	
		Office Phone:	
Department:	E-mail:	Initials:	
Committee Member:		Office Phone:	
Department:	E-mail:	Initials:	
Committee Member:		Office Phone:	
Department:	E-mail:	Initials:	
Committee Member:		Office Phone:	
		Initials:	
Approved:	Chair	Date:	
Approved:Associate D	Dean of Research an	Date: d Graduate Studies	
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Bibliography

(2006). Academics. Retrieved September 19, 2006, from Cornell University, Cornell Institute for Public Affairs Web site: http://www.cipa.cornell.edu/cip_writrequire.html

Elkin, Stephen. "Thesis Writing." <u>Government and Politics Honors Program</u>. (2003). University of Maryland. 19 Sep 2006 http://www.bsos.umd.edu/gvpt/honors/thesis.htm.

Holliday, Allen (2003). Master's Project and Thesis Guidelines. Retrieved September 11, 2006, from http://www.fullerton.edu/ECS/files/CS_ProjGuidelines.pdf#search=%22thesis%20endeavor%20of%20more %20significance%22