

**UNIVERSITY OF DETROIT MERCY
COLLEGE OF ENGINEERING AND SCIENCE
RULES FOR CONDUCTING GRADUATE RESEARCH
February 24, 2010 Revision**

MASTER'S THESIS REQUIREMENTS

Master's candidates who elect the thesis option must present a thesis related to their field of specialization. This thesis should illustrate that the candidate has attained an in-depth understanding of the concepts in his/her field of specialization, has applied these concepts effectively in a detailed examination of a limited problem, and has skillfully employed the fundamentals of research and scholarship. Furthermore, it is to be written according to the form identified in these regulations. Departments may specify additional rules.

The master's thesis must be completed and accepted not later than two years after course requirements have been fulfilled. A student failing to meet this timeline may request an extension; said request must be approved by the Dean or his/her designated Associate Dean, after consultation with the primary faculty advisor. In the event the request for extension is denied, the student will be dismissed from the program; however, in the case of the Master's Degree, the student may opt to complete a non-thesis Master's degree within a time period that is approved by his/her department chairperson. In the event the extension is approved, the conditions and duration of the extension shall be spelled out in the letter granting the extension.

DOCTORAL DISSERTATION REQUIREMENTS

Doctoral candidates in Engineering must develop a dissertation related to their field of specialization. This dissertation is the report of an original in-depth work, structured to result in a refereed publication, carried on by the candidate under the direction of his/her advisor and graduate committee. It shall be written according to the form identified in these regulations and any additional rules specified by the student's department. The candidate should familiarize him/her self with any other rules of their major department.

The steps in writing the dissertation and the mechanics of preparing it are the same as for the thesis.

The doctoral dissertation must be completed and accepted not later than seven years after being accepted into the doctoral program. A student failing to meet this timeline may request an extension; said request must be approved by the Associate Dean for Academic Affairs. In the event the request for extension is denied, the student will be dismissed. In the event the extension is approved, the conditions and duration of the extension shall be spelled out in the letter granting the extension.

RESEARCH STEPS

Step I. Selection of Research Advisor (Doctoral and Masters)

The student should follow the procedures outlined in the Graduate Catalog for the department in which he/she is registered. The selection of a research advisor should be made by the end of the second term of study and requires the written approval of the faculty advisor and the chairperson of the department. Record of the selection of the advisor must be placed in the student's academic record and, if needed, the form must be completed to change the student's advisor of record accordingly.

Research should not commence and thesis/dissertation credit not registered for until the documentation referred to in the previous paragraph has been submitted.

In the event that a student wishes to change advisors, he/she must obtain the written permission of both the new advisor and the chairperson. The new advisor may require a significant change in direction of the research activity.

Step II. Selection of the Dissertation Committee (Doctoral only)

The role of the Dissertation Committee is to oversee the student's progress toward completion of the degree.

A Dissertation committee consists of a minimum of five members. One must be a faculty member or practitioner from outside UDM. Another must be from outside the student's major program.

As soon as possible, but at least within the term following identification of the advisor, the student and advisor will select at least three members of the Dissertation Committee (not counting the advisor). The chair will place a letter signed by all committee members in the student's record indicating the committee appointment.

The complete committee must be formed prior to the presentation of the Research Proposal.

Step III. Research Proposal (Doctoral only)

The candidate must, under the direction of his/her advisor, prepare four copies of a proposal, outline and bibliography of the selected topic (one copy for the student, one for the advisor, one for the chairperson and one for the Dean). These documents may be provided in print or as a single electronic Portable Document File (pdf) at the advisor's discretion.

The student will meet Committee members and the Dean/Associate Dean or designee and present a written and oral Research Proposal. This proposal must have prior approval of the research advisor. This proposal will contain:

- a detailed description of the proposed research project including the significance of the research to the field of practice;
- a review of the current literature;
- a description of the theoretical, numerical and/or experimental methods to be used;
- a tentative timetable for completion of the project.

The Committee and student will discuss this proposal as well as contingency plans should the research not turn out as expected. After this discussion, the student will modify the proposal as requested by the Committee and return it to the Committee for further consideration. The student, advisor, committee members and chairperson of the department will sign the final proposal. A copy will be sent to the Dean's Office for concurrence. The original will be placed in the student's record; each person involved will receive a copy.

Step IV. Research Process (Doctoral and Masters)

The student will keep the advisor (and committee for doctoral students) apprised of their progress at the very least once per term. For doctoral students, any proposed deviation from this research plan will need the written approval of the Committee; a substantial shift in the research objectives or focus will require written approval of the Committee and the concurrence of the Dean/Associate Dean.

Step V. Writing the Thesis/Dissertation

For doctoral dissertations, it is the responsibility of the student to submit a draft of the dissertation to the advisor no later than the beginning of the term in which graduation is anticipated. For master's theses, a draft thesis should be submitted by the student to the advisor no later than six weeks before the end of the term in which graduation is anticipated. Students should be aware that it is common to revise the manuscript several times before a suitable draft is produced.

The advisor may require that successive chapters of the thesis/dissertation be delivered as they are drafted. This is especially true with regard to the first two or three chapters. It should be made clear to the candidate that if they go ahead on their own without consulting the advisor, they will be held responsible should the topic be determined to be unacceptable, or should substantial revisions and changes be judged necessary or advisable.

It is the responsibility of the advisor to assure that the thesis/dissertation is technically correct and is written in a clear, concise manner following standard rules of English grammar and syntax, or require the student to seek external reviewers to correct grammatical errors and writing style issues.

Advisors will check for plagiarism and proper citations. The mechanism for this should be turnitin.com.

Before the candidate distributes the final document, the thesis/dissertation must be approved in its tentative complete form by the advisor.

Step VI. Final Selection of the Masters thesis committee. (Masters)

Some departments may require a Masters Committee. If you are a Masters student, consult your department chair to determine if you must form a committee.

Before the expected last term of study, the student and advisor will finalize the masters committee. The Masters Thesis Committee will, at the advisor's discretion, consist of two or three members. A note listing the final committee selection will be placed in the student's record.

Step VII. Oral Defense and Dissertation Review

Doctoral students must schedule their Oral Defense to occur at least three weeks before the end of the term in which graduation is anticipated, and a final draft of the dissertation must be distributed at least two weeks prior to the Oral Defense.

Masters students must schedule their Oral Defense to occur at least two weeks before the end of the term in which graduation is anticipated, and a final draft of the thesis must be distributed at least one week prior to the Oral Defense.

Masters and Doctoral oral defenses must be scheduled at a time that the Dean or his/her designee can attend. The advisor must publicize the public defense to the students and faculty of the college at least two weeks prior to the defense. The Dean or designee must be present at the defense.

Following the student's presentation at the defense, all visitors to the defense will have an opportunity to ask questions after which they will be excused. Then, committee members and the Dean/designee will question the candidate; then the candidate will be excused prior to deliberations as to the acceptability of the thesis/dissertation or additional requirements.

Following the Oral Defense, the student will modify the thesis/dissertation or perform additional research as requested by the Committee and return it in print or as a pdf file to the committee members for approval. The final draft will be submitted to the committee chairperson, if applicable, and the chairperson of the department. A copy will also be sent to the Dean's Office. The student will make any corrections requested.

Only after a thesis/dissertation has been modified to the satisfaction of all parties involved, will they sign the cover page and, where relevant, the committee signature page, indicating acceptance of the final document. It is the responsibility of the student to prepare the required number of copies of the final thesis/dissertation according to the policies defined below.

Step VII. Distribution

Upon acceptance of the thesis/dissertation, a copy of the signed thesis/dissertation cover sheet must be submitted to the Records Office for inclusion in the student's academic record.

For a master's thesis, the student must provide the Engineering & Science Records Office with one bound copy of the completed and accepted thesis including the signed cover page. An electronic copy in the form of a pdf file must also be submitted to the department.

For a doctoral dissertation, the student must provide four copies of the final thesis/dissertation including the signed cover page to the library for binding. An electronic copy in the form of a pdf file must also be submitted to the department. The library shall distribute the four copies as follows: one to the library, one to the College, one for the dissertation abstracts, and one for the advisor.

The department may request additional copies of dissertations/theses.

MECHANICS OF PREPARING THE THESIS/DISSERTATION

Paper

White, 8-1/2 x 11" standard paper

Font and Capitalization

Font for all main text shall be 12pt Times New Roman

Title Page

Follow the form of the standard Engineering and Science thesis/dissertation cover page

Page Numbering

- Lower-case Roman numerals for the preliminary matter (table of contents, list of figures, list of tables, etc.)
- Arabic numerals without punctuation, numbered consecutively throughout the document
- The page number should be centered just above the bottom margin for all pages

Margins

- The left margin must be 1-1/2 inches
- The right margin must be 1 inch
- The bottom margin must be 1 inch
- The top margin must be 1 inch except on the "first page" and on pages beginning parts of the thesis (e.g. the outline, first pages of new chapters, etc.) for which the top margin is 1-1/2 inches
- The text must be left justified but not full justified

Spacing

Double-space everything except preliminary matter, footnotes, bibliography and blocked-in quotations which shall be single-spaced

Indentation

Standard indentation is 1/2 inch. Paragraphs shall be indented. Block-in long quotations (more than three typed lines) by indenting 1/2 inch on both left and right.

Quoting

Use quotation marks for direct quotations of less than three lines. Block-in longer quotations

References

Expectations on the format requirements for references may vary by department. Consult your department Chairperson and thesis advisor for your requirements.

Neatness

The original copy must be neatly prepared and free from obvious errors. The other copies may be reproduced as long as they are clear and legible. Do not bind, staple or punch holes in any copy of the thesis/dissertation.