Master's Thesis Track

A thesis should answer a significant question, which contributes to new knowledge and is generalizable beyond a single setting. Compared to a project, a thesis should be analytic, should systematically analyze data, and should develop and make appropriate inferences based on the analysis. A thesis should also result in a paper submitted to a conference, a journal, or other forms of public dissemination. More specifically, the difference between a capstone project and thesis is the technical depth of the work involved.

Software Engineering projects and theses both have a clear statement of the problem, a literature review, an analysis of results, and a statement of conclusions. The requirements for a project are less stringent than for the thesis. The thesis requires more depth and the student should develop a substantial understanding of the topic through library journal research, experimentation, etc. The thesis should take about as much effort as that devoted to two three-credit courses. The thesis report will be bound and reside in RIT Library's archives and at least ten years in the Software Engineering Department.

The purpose of a Master's thesis is to be of educational value to the student and to independently create and present a large, interesting, piece of work. Any acts of plagiarism or other acts of academic dishonesty will result in an automatic 'F' for the thesis. If you have any questions regarding plagiarism you should contact your committee chair before you complete your write up or make your presentation. Additionally, by forming your committee and registering for Thesis you have effectively created a contract between your chair and yourself. Your chair will contribute a substantial amount of time guiding activities. Failure to complete your thesis within the agreed upon schedule may result in receiving a grade of 'F'.

In either case, you will need to write a new Proposal, form a new committee, and register for thesis again. In both cases the 'F' will remain on your transcript. Additionally, by signing your proposal the committee members agree to serve on your committee for one year. After one year they can resign from the committee if they feel you are not making adequate progress.

Your Committee

Your thesis committee is composed of two members:
- chair
- reader

The function of the chair is to direct the technical aspects of your thesis and to ensure that your thesis meets the department's technical and administrative requirements. The chair and reader must be a member of the SE faculty. Normally, you will meet with your chair weekly.

Other faculty members within or outside the SE department may also review your work and make recommendations to your chair. All advisement will come directly from your chair. The chair and Graduate Coordinator must sign off on your Proposal before you register for project or thesis. It is most important that you establish a committee before you begin serious work on your project. Failure to do this may cause significant delay in the completion of your degree.

The 1-year Rule for Thesis

Your thesis proposal is valid for one year from the time of committee signature. After a period of one year the proposal is obsolete. By signing your proposal, the committee members agree to serve on your committee for one year. After one year, they can resign from the committee if they believe the student is not making adequate progress.

MS Thesis Proposal

Each student completing the MS Thesis track shall find a chairperson and a thesis topic.
- During SWEN-640, a pre-proposal is submitted and discussed.
- The student writes the proposal by the end of SWEN-640, and gets approval from the chairperson and Graduate Program Director
- The student corresponds with faculty chairperson on a regular basis.
- The student writes the thesis document, and the chairperson may have additional revisions to the outline.
- The student defends the thesis.

The request form should contain the following sections:
- A summary describing what you will do.
- An overview of the area of your thesis.
- A hypothesis or research questions.
- How the proposed work will be evaluated against existing work.
- Architectural overview of the planned system; i.e., the design specification. This may be less well understood, hence somewhat shorter.
- A list of the principal deliverables of your thesis and the form that these will be delivered, such as: technical paper or report, input/output examples or demonstration, code (the complete system should be given to your principal advisor archived on a single file, user manual, design documentation and maintenance manual).

MS Thesis Registration for Credit

To register for Thesis, you must give the office a copy of your Capstone/Thesis Registration Request Form signed by the Graduate Coordinator and the chairperson. The Department has a form for you to complete. If you do not finish your Thesis in the first term in which you register for credit, contact Chelsea O'Brien regarding registration of Continuation of Thesis.

Checklist for the Defense

The last step in the process is the defense. After the student has completed the write up of his/her work and the chair and the reader have approved it, the student defends his/her work during a 50-minute presentation. The defense is open to the public.

The student is required to follow the procedures outlined below:
- Schedule the defense and register that scheduling with the Software Engineering department office at least 10 days prior to the event; assure all committee members and the graduate program director are able to attend; reserve the room with the department staff.

- Assure that the room has all the facilities you require (board, markers, projectors, Internet connection, etc).
- Post announcements at least 10 days prior to the event.
- Verify with the department staff that all necessary paperwork has been completed (including current application for graduation).
- Review your presentation with at least one of your committee members, typically the committee chair, before presenting it formally. The defense should take 50 minutes, but you must allow time for questions and discussion. When you rehearse, it should take 40 minutes.
- A rehearsal is highly recommended.
- Prepare handouts for your presentation consisting of copies of your visuals in 4-up or 6-up form. Discuss with your committee chair how many copies to prepare.

MS Thesis Deliverables

The final paperwork for a thesis requires that you arrange for a bound copy of the thesis for the RIT Library and the SE Department. Visit the Wallace Center webpage (http://infoguides.rit.edu/thesis-services) for guidance on completing your Thesis. Please submit the following to the SE Department:
- the thesis binding receipt
- the thesis abstract
- the Thesis Cover Page

You will not be certified for your degree until these steps have been completed. Also all graduate students who complete a thesis are required to submit the thesis in two formats to the Wallace Center:
1. ProQuest
2. Print
*A standard fee applies and is the sole responsibility of the student.