Graduate Paper & Thesis Policies and Procedure

INTRODUCTION

In order to obtain an MSEE degree all students must complete a Graduate Paper or a Graduate Thesis. Of the minimum 30 credit hours needed to earn the degree, a typical student earns 24 to 27 credit hours from course work and the remaining credit hours from the Graduate Paper or MS Thesis.

Thesis and Graduate Paper credits do not affect the GPA. A grade of 'R' is given upon registration. At completion, the adviser approves the paper with his or her signature.

The Graduate Paper mandates a minimum of 3 credits while the Thesis credit mandates a minimum of 6 credits. You may register for these all at once or by increments of 1 credit.

OBJECTIVES

The purpose of both the paper and thesis is identical: to allow the student independent research experience in electrical engineering. Topics selected for these activities could include:

- Theoretical development,
- Simulation,
- Design and fabrication of circuits or systems and
- Software development.

PROCEDURES

When to Start?

The most advantageous time to start thinking about the research work is when you have completed about two thirds of the course work.

How to Get Started?

If you have a topic that you would like to explore, please give the office a call. We will match you with a professor who has similar interests. Before approaching the professor, prepare a one to two page summary of your ideas. This can be presented to the professor. Upon mutual agreement on the topic and the scope of your work, the professor becomes your adviser. If you do not have a firm idea about a topic, please call us; we will be able to arrange a professor to talk to you. The professor may have a research topic that you could be interested in.

REGISTRATION

If you are registering for a Graduate Paper, register for course EEEE-792, Section 1, the same way you would register for a course. If you are registering for a Thesis, register for EEEE-790 Section 1.
If your work is not completed by the end of the semester for which you registered for your final credit, you have one "free" semester to finish during which you do not need to register for any credits. If your work is not completed at the end of this semester, you are required to register for a continuation of Thesis/Graduate Paper, course EEEE-796 (Paper) or course EEEE-791 (Thesis). You will be charged tuition for one credit hour.

Once your work has been completed and your Thesis/Paper is approved and accepted, the EE department will certify you for graduation internally, provided all other graduate requirements have been met.

**GRADUATE PAPER**

The Graduate Paper differs from the Thesis mostly in formatting requirements. However, a Paper, unlike a Thesis, need not be approved by a faculty committee; the Adviser alone approves or disapproves the paper. The final document need not be leather bound, but should have a soft binding. A copy is not kept in the library.

You must work out a plan for frequent interactions and consultations with your adviser during the course of the research. A document generated without such consultation faces almost certain rejection.

**What Are The Formalities?**

The Graduate Paper is complete when your adviser approves it. He or she may ask you to give a presentation before faculty and students or may simply accept the written document. The final copy must also be signed by the Department Head.

**Format For The Graduate Paper**

You must write a final report describing your research work. It must be printed double-spaced on one side of a standard 8-1/2 x 11 sheet of paper. You are encouraged to bind the document. (Simple Cheshire binding costs around 50 cents/copy at the RIT copy center.)

**How Many Copies?**

One copy of the final document, signed by your adviser and department head, must be submitted to the Electrical & Microelectronic Engineering office. You and your adviser should each have a copy. Thus, the minimum number of copies is three though your supervisor at work or colleagues may want a copy as well.

**THESIS**

**Filing of Subject**

The candidate must select the subject of the Thesis in consultation with a graduate-committee Faculty member who agrees to act as the Thesis adviser. The candidate must report the subject of the Thesis and the name of his adviser to the graduate-committee chairman.
Preparation of Thesis

1. The thesis must be written in an acceptable literary style and meet the minimum requirements for correct sentence structure, spelling, punctuation and technical accuracy.
2. The thesis must be defended and accepted in final form at least 30 days before the completion of the semester in which it is expected the degree will be conferred. The original and two copies must be given to the Department Office after signed approval by the student's adviser. Two of these copies are for transmittal to the Institute Library and one to the faculty adviser.

Presentation to Committee

The adviser for the Masters candidate submits the final Thesis to a Faculty Committee for examination and approval. This committee is appointed by the Thesis adviser and consists of three members of the graduate committee of the Department of Electrical & Microelectronic Engineering. Its approval is indicated by signatures on the title page of the original and the two required copies of the thesis.

Binding and Publication:

All copies must be signed by the Department Chair, Graduate Adviser and Committee Members before binding may take place.

A "permission to reproduce" form should be signed by the author and must accompany the Library copy. This form will be permanently bound into the Library copy.

It is the responsibility of the student to pay the necessary charges for reproduction and binding of the Thesis. The current charge is $13.00 per copy. This charge is to be paid to Student Financial Services and credited to the Wallace Library bindery account number 1-9-000-610-436-88.

A student who wishes to restrict or prohibit the reproduction of his or her Thesis (from the copy available in the Library) may use a special form from the library. This form is bound with the Thesis and prevents any unauthorized reproduction.

Organization of Thesis

The organization of a Thesis can vary considerably. This will depend upon the adviser, the nature of the Thesis, the field of study and the writer. However, every Thesis must contain a title page, abstract, table of contents, introduction, some form of historical review, and references.

The arrangement and nature of the parts of the Thesis body can be varied to improve the clarity of exposition. The following listing gives the arrangement of the parts of a typical Thesis:

1. Title Page
2. Preface or Foreword
3. Abstract
4. Table of Contents
5. List of Tables
6. List of Figures
7. List of Symbols
8. Introduction
9. Historical Review (or Literature Review)
10. Theory
11. Materials and Apparatus
12. Method of Procedure
13. Results
14. Discussion
15. Conclusions
16. References
17. Appendix
18. Bibliography

Descriptions of the important sections of the thesis and suggestions for the organizations of these sections are developed in the following pages.

Paper

At least 16-pound, at least 50% rag content, white unruled bond paper, trim size 8-1/2 x 11 inches, is to be used for all required copies of the Thesis. The text must be double-spaced and be printed on only one side of the paper.

Drawings and the insertion of symbols, which cannot be done on the typewriter, must be made on all copies with a fine pen and black drafting ink in a neat manner.

Margins

The margins around the text of all Thesis pages shall be:

- top 1-1/4 inches bottom 1-1/4 inches
- outside 1 inch binding side 1-1/2 inches

Quotations

Quotations can be single-spaced and separated from the text by a five-space indentation of the entire quotation. Quotations must be identified.

Headings

A consistent format should be used for headings and subheadings.

Pagination
The title page is considered page 1 of the Thesis. All other pages prior to the Introduction should be consecutively numbered in lower case Roman numerals. Beginning with the Introduction, Arabic numerals are to be used consecutively for all successive pages of the Thesis.

Footnotes

Footnotes are used for author comments, background information, literature citations and other supplementary points that are not developed in the text. Footnotes must be spaced such that the lower margin is the same as that of the other pages. It is suggested that the entire footnote be single-spaced and separated from the text by two lines of white space and a horizontal line.

References

References are to be numbered serially in the text with superscript numbers. The references themselves will be arranged in serial order at the end of the Thesis proper.

Equations

Equations should be neatly arranged between the right and left margins. Important equations should be numbered consistently and clearly with numbers in parentheses at the right edge of the line. The location of horizontal lines, parentheses, brackets, operators and other symbols should be made carefully so that there is no ambiguity in mathematical meaning.

Tables

Lengthy tables of data should ordinarily be placed on a separate page with a table number and title. The table number and title should be centered above the table. The table should be located on the page following its first mention in the text.

Reproduction Processes

Multiple copies of original drawings, graphs and illustrations required to complete each copy of the Thesis can be made by direct photographing, contact printing, ozalid printing, Xerox and Photo-offset printing. Blueprints, thermofax, varifax and similar processes are not acceptable. The copies must be on 16-pound, at least 50% rag bond paper.

NOTE: THE ELECTRICAL ENGINEERING OFFICE HAS COPIES OF ACCEPTED THESES AND GRADUATE PAPERS. YOU ARE ENCOURAGED TO CONSULT THESE DURING THE COURSE OF YOUR WORK.