The Thesis or Project for a Degree with Distinction
Computer Science and Engineering Department
College of Arts and Sciences

Undergraduate students are encouraged to conduct original research and/or engage in comparable scholarly endeavor, and subsequently write an undergraduate thesis based on their investigations or present a project incorporating the results of the endeavor.

A thesis should approach the form and quality of a Master’s thesis, but need not be as long or as broad in scope. It should be substantially more extensive than a term paper. The thesis must be the result of independent, sustained thought and intellectual curiosity. A survey of the literature about a particular topic is not sufficient however novel it may be. Ideally, there should be a clear formulation of a problem or question, a scholarly study which illuminates it, and a conclusion supported by evidence. A bibliography and reference to existing literature in the field should be included where appropriate.

A project is an acceptable product in the case of a scholarly endeavor that might not be in the form which would meet the narrow definition of a "thesis". The project may take the form of a software and/or hardware product that exhibits the novel, creative, scholarly efforts of the student. As such the project must be more than a demonstration of programming skills in implementing currently existing designs and algorithms. In short, the effort must have a significant scholarly component. The project should include a written report and appropriate documentation.

Initial Preparation

Students interested in a thesis or project should approach faculty members for advice in selecting the topic of study and in accomplishing their research. This should begin by the end of the Junior year. The student must choose a topic and be accepted by a Department faculty member as a research advisee. This faculty member will be the primary co-advisor. The chief undergraduate advisor will typically serve as the student’s secondary co-advisor. The Department office will keep copies of all theses and projects and will make them available for review and use as examples of past work.

Research

During the research phase, the student may (but is not required to) enroll for up to 3 hours per semester for up to 2 semesters in CSCE 399H for time to devote to the research. This credit will count toward the Program’s depth requirement.

Proposal

In the semester prior to graduation a thesis/project proposal must be prepared by the student that provides a brief introduction to the research, the problems to be focused on, and an outline of the planned work. The proposal must be submitted to the Department office along with a Thesis Prospectus Form signed by the co-advisors. The Department will then add the signatures of the Department Faculty Distinction Evaluation Committee, or return the submission to the student with the reasons for the Committee’s refusal. In the case of interdisciplinary research, the student and co-advisors must also propose to the Department Chair appropriate substitutions from the other relevant department(s) to the Evaluation Committee.
Comprehensive Examination

When the thesis or project is completed and approved by the co-advisors, it is submitted to the other members of the Evaluation Committee, and the student’s Comprehensive Examination is scheduled at a time mutually agreed upon by the student and the Evaluation Committee members. Although it is not likely to last that long, an examination should be scheduled for a 2 hour period. The Comprehensive Examination will be primarily an oral thesis/project defense and include a formal seminar-type presentation with appropriate visual aids that is open to the public. The student should expect to field questions and points of clarification from the audience during the presentation. Following the formal presentation the examination will continue with only the Evaluation Committee and co-advisors present. They are likely to pose additional questions about the research and appropriate directions for future research as well as questions that test the student’s background knowledge in computer science and his/her ability to use such knowledge in formulating conclusions and predictions.

Evaluation

Immediately after the Comprehensive Examination the student will be asked to leave the room while the Evaluation Committee and co-advisors discuss the student’s performance and the quality of his/her work. Generally the student will be informed of the Committee’s conclusions before the Committee disbands. The Evaluation Committee may require minor revisions in the work, and the corrected work must be ready for submittal within a week. The work, the Co-Advisor Evaluation Form completed by the primary co-advisor, and the Final Department Evaluation Form, completed by the secondary co-advisor, are submitted to the College of Arts & Sciences for degrees with Distinction and/or to the Director of the Honor Program.

Specific Deadlines

- Selecting a Research Advisor and starting research: At least by the third semester prior to graduation.
- Submittal of a Thesis/Project Prospectus: By the end of the semester prior to the planned Comprehensive Examination (defense).
- Submittal of the thesis/project to the Evaluation Committee: At least one week prior to the scheduled Comprehensive Examination (defense).
- Comprehensive Examination deadlines for Distinction Theses/Projects:

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<th>Spring</th>
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<td>March 18, 2002</td>
<td>July 5, 2002</td>
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- Submittal of corrected Distinction Thesis/Project and all faculty evaluation reports to the College of Arts & Sciences: One week after the deadline for the Comprehensive Examination (See above dates).