

Senior Honors in Computer Science Department of Computer Science

Student Qualifications

Highly qualified majors are invited by the department chair to apply for admission to the Honors program. Students not invited may petition the department chair to enter the Honors program. To be graduated with a designation of “Honors in Computer Science,” students must satisfactorily complete a senior Honors Report and graduate with a minimum GPA of 3.5 in the major and 3.0 in all college work.

The Honors designation does not carry academic credit. Rather, it is intended as a special project that reflects the student's ability to go above and beyond the usual course work and carries significant prestige for graduation. The Honors designation appears on the student's transcript.

How to Submit a Proposal

Students who have been invited by the department chair to apply for the Honors program and who wish to undertake an Honors project must do the following:

- Identify a faculty member who is willing to mentor their Honors project.
- Complete the proposal form below with the help of a faculty member.
- Submit the initial draft of the proposal to the Honors program director by the drop date in the semester prior to the student's graduation semester. The proposal should be submitted electronically as a Word or PDF document.

Requirements

An Honors project must go beyond normal course work, and it may incorporate methods and ideas from multiple courses. As a guideline, students should expect to spend time equivalent to an upper-level, three-hour Computer Science course. Senior Honors students must prepare an Honors Report. The Honors Report should contain the following:

- **Introduction:** An explanation of the motivation and the goals of the project.
- **Background:** A summary of concepts and tools necessary to understand the project.
- **Related work:** A review of existing research, projects, or products similar to yours, with appropriate citations.
- **Method:** A description of the steps you took in your implementation or the thought process you used in the solving of your problem.
- **Results, Conclusions, and Analysis:** A summary and analysis of your findings, and, where appropriate, a comparison with existing work.
- **Future Research:** A summary of future work that would be an appropriate outgrowth of your project.
- **References**

They must present their work to Computer Science students and faculty in a seminar setting. The report must be submitted to the faculty mentor one week prior to the College deadline for departments to designate Honors graduates. (Please consult with the Honors program director for this specific date.) The faculty mentor will supply details on the format for the paper and presentation. Scheduling for presentations will be done by the department and will occur sometime during the last two weeks of the semester of graduation.

Possible Proposal Format

While the following format is not required, it does represent an acceptable proposal format and will assist the student in organizing and planning. Regardless of the format chosen, the proposal must be well organized and well written, including proper grammar, spelling, and clarity.

- Problem statement.

- Problem significance.
- Background and existing work with appropriate citations.
- Preliminary work by student (if any).
Proposed work with a brief schedule or timeline for completion of the project. (If a research report is proposed, a hypothesis should be included.)

Archival Policy

All Honors proposals and reports will be archived in an appropriate departmental archive.

Important Checkpoints

- Submit Honors Project Proposal to the program director by the "drop date" in the semester prior to the student's graduation semester.
- Submit Honors Project Report to your faculty mentor one week prior to the College deadline for departments to designate Honors graduates. (Ask Computer Science Department administrative assistant for this date.)
- Make an oral presentation of the project in the last two weeks of the semester of graduation (to be scheduled by the department administrative assistant).

**Senior Honors in Computer Science
Project Proposal**

Student: _____

Faculty mentor: _____

Project title: _____

Description of the project: (Attachments may be added as necessary.)

Student signature

Date

Faculty mentor signature

Date

Department chair signature

Date