

Guidelines for Independent Research

An important component of the undergraduate major in Computer Science is research. Undergraduate research prepares students for the demands of both graduate school and the job market. Research opportunities allow students to apply what they have learned in their lower-level and upper-level courses in a variety of ways. Research opportunities also allow for students to not only see, but understand how the Computer Science faculty members engage in their work outside of the classroom.

The Department of Computer Science encourages all of its students to engage in research; ideally, this type of project should epitomize the mission of the undergraduate major. In order to promote student interest and activity in research areas of the field, the department offers students the ability to complete a research project for credit by taking CMSC 499. A student may engage in research by either serving as an assistant to an ongoing project that has been initiated by a faculty member, or he or she may initiate his or her own research project with a faculty sponsor.

Completing an Independent Research Project (CMSC 499) differs from completing an Independent Study (CMSC 498A); in the latter, students are asked to work with a faculty member on a subject of study in a tutorial fashion. The Independent Research Project requires that students write a preliminary proposal explaining what they expect to accomplish during the course of their research project.

With the assistance and guidance of their faculty sponsors, students will accomplish their proposed research and write a research paper or produce a website or other product detailing the work that they have completed over the course of the semester.

How to complete Independent Research:

1. Schedule a meeting with a faculty member and ask him or her to be your sponsor for Independent Research.
2. If the faculty member agrees to become your faculty sponsor, determine the scope of your research and outline the work that you will be doing throughout the semester. At this time, the faculty member should explain to you how he or she plans to evaluate your work.
3. Write a brief proposal of your research project-- 300- 500 typed words--outlining what you plan to accomplish during the course of the semester.
4. Fill out an Application for Undergraduate Independent Research form; you can obtain one of these forms from the Computer Science Undergraduate Education Office (A.V. Williams 1119). Make sure that you get your faculty sponsor to sign the application form.
5. Bring your research proposal along with the application form and turn them both in to the Computer Science Undergraduate Education Office.