## Guide to Independent Studies Colby College Department of Computer Science

What is an independent study? An independent study is a course in which a student conducts an independent project under the direction of a faculty sponsor. An independent study must have an academic purpose, such as research. Although this may result in significant software development, producing software should not be the main purpose. A student applying for an independent study should be able to describe their learning goals in terms of concepts to be learned in depth – not in terms of tools. The purpose of an independent study is to gain a deep understanding of a topic not normally covered by courses offered by the department. Topics that contribute directly to the research program of the computer science faculty will be more likely to be accepted.

Who should apply for an independent study? Computer science majors with a cumulative (college-wide) GPA of at least 3.25 and a history of independence may consider applying for an independent study. We encourage students who are interested in pursuing Honors in computer science to identify a potential project and to discuss that project with one or more faculty members. This should be done in the spring of your junior year or in the summer between your junior and senior years.

How to apply for an independent study. If you are interested in an independent study, then you should contact potential faculty sponsors to discuss the possibility of working with them. If the project is accepted by a faculty sponsor, you will be invited to register for the independent study course (CS491/492 for regular independent studies, CS481/482 for minor capstone independent studies, or CS483/484 for honors independent studies).

How many credits? For each credit, you should expect to spend 3-4 hours per week during a fall/spring semester or 10 hours per week during JanPlan. In January you are limited to a maximum of 3 credits.

There are minimum credit requirements for independent studies used to fulfill certain requirements:

- Minor in computer science: at least 3 credits if the capstone is a CS-supervised project, at least 4 credits if the capstone is done as an IS in the student's major department. A capstone project may be spread across 2 semesters (or a semester and JanPlan).
- Honors in computer science: at least 7 credits over two semesters (or a semester and Jan-Plan).
- An elective course in computer science: 3 credits in January term or 4 credits during a regular semester.

Minor in Computer Science. One option for completing the capstone in the minor is to enroll in an independent study of at least 4 credits in your major department with a significant computing component. In rare circumstances, it may be more appropriate to enroll in an independent study in the computer science department. In that case, you should enroll for at least 3 credits.