

### Final Homework and CAD Project

This assignment is due at *4pm on Monday, May 2.*

**Grading.** This entire assignment is worth approximately 22% of your final grade. It consists of two parts: (i) SIS CAD tool technology mapping application (Handout #34a), and (ii) CAD programming problem (Handouts #34b-f and any additional handouts to be added on clarifications, etc.); Part (i) is a small final homework assignment, which should not take much work; it is worth 2% of your final course grade. Part (ii) is the final CAD programming project; it is worth 20% of your final course grade.

**Working in Groups.** For the small homework (part (i) above), you must work *solo* and hand in your individual assignment. For the final CAD mini-project (part (ii) above), you are *allowed to work in a group-of-two*. You both get the same grade. However, solo submissions are also allowed.

1. **CAD Tool Tutorial: Introduction to Technology Mapping Using SIS.** This tutorial and problem is an introduction to technology mapping using the UC Berkeley “SIS” framework. *See Handout #34a for details.*
2. **CAD Programming Mini-Project.** This problem is the final CAD mini-project; it is worth 20% of your course grade. It allows you the opportunity to create and test out your own CAD tool for the optimal retiming of a synchronous digital system, under two cost functions. *See Handouts #34b-f, and others for details.*