

ECE Curriculum Committee Meeting Minutes for February 25, 2010

Members present: Tanguil Basar, Stephen Bishop, Andreas Cangellaris, Kent Choquette, Todd Coleman, Lynford Goddard, Douglas Jones, Erhan Kudeki, Stephen Levinson, Michael Oelze, Sanjay Patel

1. The Minutes of the February 18, 2010 meeting were approved with minor corrections.
2. ECE Department Head Andreas Cangellaris told the Committee that he believes computing has become such an important element of virtually all electrical, electronic, and computing equipment these days that we ought to rethink how it impacts all of our students and how we embed it in both of our curricula. He stated that the Computer Engineering Area Committee and faculty have been discussing this for some time and that there is an emerging sense that we should take a clean-slate look at our curricula, and that they may be open to very substantial changes. (He mentioned, as an example of the extent of willingness to consider change, even the idea of a merged ECE curriculum was among those discussed.) Andreas believes that there is an opportunity here for ECE to take the lead in defining a third-millennium computing education both for EEs and CompEs, and to emphasize the central role of ECE disciplines (not just CS) in driving the ongoing information technology revolution.

Doug Jones stated that the Curriculum Committee is now engaged in forming a list of essential computing topics for both curricula, but has too many other pending tasks to progress beyond that until next year. Andreas acknowledged the many tasks already assigned to the Curriculum Committee this semester, but said that he wants significant progress this semester toward exploring possibilities for reengineering the way we organize and teach computing in our curricula. He said he wants to create an ad-hoc committee, formed largely of willing Curriculum Committee members but with a few other faculty members who might also contribute unique insight on this particular topic. He said we have a forward-looking Computer Engineering Area Committee and a progressive Curriculum Committee that are both considering these issues right now, so he would like to move forward very quickly.

Steve Levinson expressed great concern about forming a separate committee for this task. He believes that the (entire) Curriculum Committee is the best and most representative body to address this issue, and fears that a separate body may produce inferior results that don't capture the full wisdom of the faculty, or ideas that the Curriculum Committee will in any event necessarily extensively review and revise later. Doug Jones said that he was unwilling to commit the full Committee to additional meetings this semester to accelerate progress, and that any sub- or ad-hoc committee would use our list of essential topics as a starting point to brainstorm about creative ideas for how to better embed those in our curricula. Andreas pointed out that any committee would consist largely of Curriculum Committee members. Steve Levinson remained unconvinced. After further discussion, the Chair called for volunteers to serve on such a committee; Steve Levinson, Sanjay Patel, Erhan Kudeki, and Doug Jones volunteered to serve.

3. A brief discussion about the list of essential computing topics followed. Sanjay Patel (who was absent last week) was asked to give his opinions on the topics selected and rejected last week. Sanjay essentially agreed with all of them, although he noted that certain topics (such as recursion) might be needed as prerequisites for the CS technical electives, and that this might be an additional constraint to consider.
4. The Committee adjourned at 2:49 PM.

These minutes drafted by D.L. Jones, March 4, 2010; Last updated March 4, 2010