Embedded Systems Master of Science Proposal

2. Senate Budget Review Committee

MEMORANDUM

TO: Louis Esposito, Vice President for Academic Affairs and Provost

FROM: Michael B. Smith, Chair
Senate Budget Review Committee

RE: Committee response to the Proposals for Master of Science Programs in Embedded Systems and Information Systems Engineering from the Department of Computer Science and Engineering

DATE: March 1, 2001

This memorandum summarizes the Senate Budget Review Committee's review of the items listed above, reflecting the consensus reached by the committee during its meeting on February 20, 2001. The original draft of the report on the Nursing/Health Science Task Force was written by Marc Lipman, and the original draft of the report on the two Master of Science Degrees was written by Pat Nicosia. The committee chair organized these drafts (lightly edited) into this final memorandum after committee members contributed suggestions for revisions. Committee members who contributed to the discussion were: Buck Dillon, Marc Lipman, Austin Murphy, Pat Nicosia, Mohinder Parkash, Michael Smith, and Gloria Sosa.

MASTER OF SCIENCE PROGRAMS IN EMBEDDED SYSTEMS

The Senate Budget Review Committee reviewed the two proposals for a Master of Science in Information Systems Engineering and a Master of Science in Embedded Systems. Both programs appear to be expansions of existing masters programs with the difference being a set of four core courses that will be added to the schools curriculum for each masters program, thus giving a total of 8 new courses. We believe the proposals to be sound financially and support the addition of these two new masters programs in the School of Engineering and Computer Science.

Our deliberations focused on the following points:

(1) Though eight courses are being added, all will be taught by existing faculty. The department will accomplish this by reducing the frequency of the offerings of courses with low enrollments.

(2) We assume that the other courses taken as part of each program will just increase the enrollment in already existing courses, and that additional sections will not be needed.

(3) No student support is requested, unlike some of the other masters programs. This is most likely due to the fact that employers will pay at least the tuition and possibly the fees for their employees.

(4) The enrollment projection of 20 per year for Information Systems Engineering and 16 per year for Embedded Systems appears reasonable based on the location of Oakland University and the fact that there are no similar programs in the state.

(5) The programs are more than self sufficient based on the projection of tuition revenues compared to the projected costs. A new faculty position is not projected until the fourth year for each program, which is sufficient to determine whether the program is viable. After three years the department can better assess the true need for the additional faculty position. If truly needed, there will be funds available based on projected revenue.

(6) It appears that library resources, needed computer hardware, software and other program needs are already in place.

It was noted that there is a minor flaw in the revenue projection. Both programs assume that students will take 12 credits per year. Both programs require 32 credits of instruction. The revenue projections for each program show students taking 12 credits per year for each of three years. In the third year there will only be 8 credits remaining. Thus, for the Information Systems Engineering Program, the steady state tuition revenue was overstated by $17,680 and for the Embedded Systems program the tuition revenue was overstated by $14,144. But we feel that this error does not negate the self sufficiency of both programs. The projection for part time faculty, graduate assistants, and secretarial support could be understated, but again the revenue is such that, even if additional funding became necessary, the revenues would still exceed expenditures, especially during the first three years. Whether or not the budget is sufficient may well be dependent on the ability of existing faculty to teach the new courses as noted above. After three years, when a new faculty member is requested, the results to date can determine whether or not to proceed on the hire.