Master of Engineering Committee Meeting Minutes  
September 11, 2002, 8:00am – 9:00am  
240 Carpenter Hall

Attendees: Graeme Bailey, James Bartsch, John Belina, Claude Cohen, Scott Coldren, Mark Eisner, David Grubb, Mike Hayes, Associate Dean Isaacson, Fred Kulhawy, Bruce Kusse, Michel Louge, Larry Newman, Dawn Warren 

Guests: Michael Shuler 

Absent: Bing Cady, Larry Cathles, Jim Jenkins 

Jim Bartsch called the meeting to order at 8:05am.

Introductions: 
Jim requested that the MEC members introduce themselves.

Approval of April, 2002 MEC Minutes: 
The meeting minutes from the April 2002 MEC meeting were reviewed and unanimously approved.

Biomedical M.Eng. Program Proposal: 

Mike Shuler distributed two documents to the MEC. The first document, Biomedical Engineering (BME) Program Structure, September 18, 2001, was prepared by Mike Shuler and Interim Dean Harold Craighead and has been approved by all the Chairs, Directors, Deans of Arts & Sciences and CALS. The second document, DRAFT Suggested Structure for M.Eng. in BME, September 9, 2002, was revised by a committee of four last summer (Mike Shuler, Mike Isaacson, Bill Olbright and Don Bartel).

The BME Program currently offers an undergraduate BME option and will have responsibility for this proposed Master in Biomedical Engineering degree. The BME Program will have 12 core faculty members, 6 of which are going to be from the College of Engineering. Currently, Mike Shuler and David Putnam have been hired. The goal of the program is to prepare students for professional careers as engineers in the Biomedical field.

The DRAFT document dated September 9, 2002 details the curriculum requirements for the Biomedical M.Eng. degree program (please reference the online PDF attachments). Mike Shuler indicated that the curriculum would need to be flexible due to the variety of students who will apply for the program. By fall ‘04 they hope to have the program ready to accept students.

Mike Shuler indicated that they expect several constituencies to be served by this degree; Cornell undergraduates taking the undergraduate minor in BME, Law
students interested in a 5-year program in a traditional field and a M.Eng. in BME, non-CU undergraduates majoring in BME who are interested in a one-year M.Eng. program in BME as well as other engineering disciplines. An undergraduate program of study in BME is currently being considered for students majoring in the Biological Sciences. Jeff Doyle is in charge of that program, and they will be going through that process this year. The BME Program currently receives a large number of applicants from the Life Sciences for their MS/PhD program, and they speculate that they will be interested to learn of the 1-year+ professional masters degree in BME. There is an unusually large faction of students in the MS/PhD BME Program who are interested in the master degree program. Additionally, there is a significant salary differential in this field for students with an undergraduate degree as opposed to a master degree.

Mike Shuler asked for feedback from the MEC with a plan to make a more formal presentation later this semester. Concerns regarding the program prerequisites were addressed (students have been known to attempt to take as many as ½ of their prerequisite credits from their undergraduate major). Mike Shuler indicated that he has already seen that pattern. If a student enters without the proper background, they will need to make up those requirements on top of the required 30 credits. Mike Shuler also indicated that they hope to offer classes through the summer Co-Op program (in addition to 323 and 324 which are already offered). Bruce Kusse inquired about students who would want to do their projects off-campus. Bruce recommended that the BME program have a system in place to handle those requests.

Mike Shuler closed by indicating that they will refine the proposal and return to the MEC within the next couple of months.

**ORGSPE Updates:**

Mike Hayes reported that Mark Otis has accepted the position of Assistant Director of ORGSPE and will begin work on October 1, 2002. Mark is relocating from Walla Walla, Washington’s Whitman College. Mark possesses strong data skills that ORGSPE will rely on, and we are looking forward to his arrival.

The new Dean, W. Kent Fuchs will attend the October MEC meeting. He will report on his perspective of the M.Eng. program.

Mike Hayes apologized to the MEC for the ITA miscommunication that took place regarding screening interviews for international TAs. ORGSPE was supposed to remind the departments to have their int’l students report to ITA to schedule screening interviews, and we neglected to do that. There are still students needing to be screened -- please ensure that your int’l students get scheduled for screening.
Mike Hayes thanked the MEC members for sending students to ORGSPE for scholarship/general information.

Thanks were extended for the faculty’s participation in this year’s Graduate Orientation program.

Chemical & Biomolecular Engineering Petition:

Claude Cohen distributed a petition for an Early Admit student in Chemical & Biomolecular Engineering. The student began his M.Eng. in S’02, which is very difficult to do in Chemical & Biomolecular Engineering. He has done very well in the M.Eng. program, and he is asking for permission to take 22 credits in his final semester. The M.Eng. rules require a student petition to take more than 20 credits. A motion was made to approve the petition, all in favor. Approved.

M.Eng. Financial Return Discussion:

Michel Louge reminded the MEC of last semester’s discussion. A subcommittee (John Belina, Larry Newman, Scott Coldren, Mark Eisner and Michel Louge) met over the summer to discuss the issues. Michel distributed a handout explaining the current money trail, the non-linear formula, a comparison with a linear formula and the Subcommittee’s findings and recommendations. Please refer to the on-line PDF attachment. Mark Eisner pointed out an oversight in the comparison chart – the number of students (250) would have remained the same as in the non-linear formula. The Subcommittee came up with two findings:

- Financial returns should be consistent with our aim to make the M.Eng. programs prominent nationally by increasing their size and quality; and
- Although the current method has benefited all departments, the non-linear scheme has failed to encourage small Departments to grow, while creating inequities across the College.

The Subcommittee also came up with two recommendations:

- A linear financial return scheme should replace the current formula and be phased-in over a period of time to be decided by the Directors and Chairs. In this scheme, the return to an individual Department will be proportional to the number of M.Eng. students enrolled in that Department; and
- To provide incentives consistent with our objective to raise the program’s national prominence across the broadest number of Fields, we propose that monies from the tuition return be set aside to fund special initiatives. The funds will be allocated to the Fields or to the College by the MEC upon consideration of a short proposal. Preference would be given to ideas benefiting the broadest number of Fields.
Examples of initiatives:

- Development of information material (web, brochures, tapes);
- Creation of international BS/M.Eng. opportunities;
- Organization of a retreat to brainstorm development ideas;
- Looking for funds from Foundation sponsoring initiatives;

It was suggested that the vote be delayed until the October MEC meeting to give the MEC members time to take the information back to their Departments for feedback. Mark Eisner recommended that a third graph also be included that demonstrates what the returns are projected to be if the incentives are changed. Mike Hayes stressed that the MEC representatives discuss this proposed change with their Directors and Chairs because some Departments fund things off this return that could have a significant impact on the field.

Mark Eisner requested that the Subcommittee meet prior to the October MEC meeting. Michel agreed to delay the vote until the October meeting, however the findings and recommendations will remain the same. Jim Bartsch asked how the Director’s and Chairs will be notified of this pending issue, and it was decided that it is the responsibility of the MEC members to notify their department heads. The motion will be voted on in the October MEC meeting.

Adjourn Meeting

Meeting adjourned at 9:09am.