Master of Engineering Committee Meeting Minutes
March 10, 2004     8:00 – 9:00am
240 Carpenter Hall

Attendees: Graeme Bailey, James Bartsch, John Belina, Scott Coldren, Mark Eisner,
David Grubb, Mike Hayes, Fred Kulhawy (represented by Patty Apgar)
Matt Miller, Larry Newman, Mark Otis, Michael Spencer, Dawn Warren
Absent: Bing Cady, Larry Cathles, Claude Cohen, Jim Jenkins, Richard Lovelace

Summary:
Biomedical M.Eng. Program Update, Electronic submission concerns, Applications,
Admissions and Financial Aid Progress Update, New Software Affecting Field
Concentration Naming, Review and Confirmation of M.Eng. Options, MEC Full Tuition
Awards Update, 2004 Engineering Graduate Research Symposium Reminder, Civil &
Environmental Engineering Student Petition, International TA Development Program
Update

Jim Bartsch called the meeting to order at 8:07am.

Approval of December 10, 2003 Minutes:
Approved unanimously.

Biomedical M.Eng. Program Update:
Mike Hayes:
The Biomedical M.Eng. Program has been approved, and they will be able to
admit for F’04. Currently they are recruiting at other schools, in addition to
accepting preliminary applications from Cornell students. Their ultimate goal is
to admit as many as 40 M.Eng. students, and I think they are shooting for 10-20
students for S’05. Mike Shuler is the Director, Dave Putnam and Larry Bonassar
are the primary faculty, and Bonnie Sisco is the GFA.
Mark Eisner:
Will Biomedical be included in the M.Eng. return formula?
Mike Hayes:
I’m not sure. I’m confident that they will be included at some point.
David Grubb:
Are the Directors & Chairs in favor of the return formula change?
Mike Hayes:
We have given the Directors & Chairs 3 return formula options to review:
1) Straight percentage split
2) Floating percentage
3) Target enrollment
There will be no allocation change for 2004-05 AY, but there will definitely be a
change in 2005-06.

Based on feedback, the floating percentage will probably be the formula we settle
on (we recover an amount of money at the college level, and everything else is
allocated out). The target enrollment model didn’t resonate very well with Directors & Chairs. We know that 308 students is the bottom threshold -- current enrollment numbers are 427. We used 360 students for the model presentations.

Matt Miller:
The formula Michel was involved with – what happened with it? Is this his work coming to fruition? Are there elements of his work in here?

Mike Hayes:
Absolutely. Kent provided the Directors & Chairs with 3 options, and although Michel’s formula isn’t currently on the table, this change is in the spirit of Michel and the committee’s work.

**Electronic submission concerns:**

Jim Bartsch:
Professor Cooke is looking for feedback from us on DSpace. He has moved ahead with the Consent form, which retains copyright.

Graeme Bailey:
I submitted some rising electronic submission concerns about 2-3 weeks ago to the DSpace Subcommittee, and I’ve received zero feedback to date – forcing me to assume that they have no problem with the information. We will be happy to have people submit electronically, subject to whatever guidelines the field may wish to include. I believe that Professor Cooke wants fields to encourage electronic submission.

Mike Hayes:
Tell Bob to copy Kent or Mike Spencer on correspondence to encourage it.

Graeme Bailey:
The real question is are the fields OK with it or are they ambivalent?

Matt Miller:
The students will be interested in it.

Mark Eisner:
It’s just one more step, but we did it last year and it went fine.

Graeme Bailey:
We have the support of these 2 fields, but are other fields actively prepared to encourage it?

Jim Bartsch:
Would it be appropriate for the students to receive a paper from the GFA reminding them about the electronic submission? It seems that this approach will satisfy Bob, and it might save some trees too.

Mike Hayes:
Draft up a spirit thing and our office will distribute it.

Mark Eisner:
Can I suggest that it go out about the time students are thinking about the production of their thesis – the 15th or so of April with an annual reminder?

Jim Bartsch:
The time line looks good. If we can keep this moving forward, that will satisfy Professor Cooke. If we provide the students with the core information, the actual program is easy enough for them to do.

Graeme Bailey:
You can report back to Bob that the document will be out within the week or so.

Applications, Admissions and Financial Aid Progress Update:
Mark Eisner:
I thought it would be useful to go around the table and report on how each department is doing in terms of the process as well as the product. OR&IE applications are down, but the quality is up. The Graduate School flow is slow, and the printed applications are hard to read. The M.Eng. Financial Aid budget could have been earlier. Visa issues are going to hurt, and our International student quality is high. A dozen of our M.Eng. candidates were at least as good as our Ph.D. candidates. We met with students to discuss their potential interest in pursuing a Ph.D., but they want to do an M.Eng. I tell our M.Eng. students interested in a Ph.D. that the M.Eng. program isn’t really designed for that purpose, but I know A&EP doesn’t have that philosophy. I’m wondering if we might see some good Ph.D. candidates in the future.

Graeme Bailey:
The quality of our external applicants is up. Our internal applicant quality isn’t as strong. Many of our undergraduate students are going to industry. The Undergraduate Club was less organized than usual which made it difficult to attract as many students. The caliber of the Ph.D. students is high. Overall, our applicant numbers are down. Total enrollment numbers are unclear at this point. Visa issues continue to be a problem. Overall quality this AY is a little lower than in previous years. I’m being cautious re: full-time admitting. I took in 120-138 students this past AY, I may aim for 90-100 for ‘04-05. International applicants seem to be the same, but I anticipate a much lower yield because of visa problems. I echo Mark’s comments about information from the Graduate School being slow. I am on the General Committee at the Graduate School, and I passed on our concerns last month and I’ll pass them on at the upcoming meeting.

Mark Eisner:
An article on the front page of the Wall Street Journal this morning reported that schools around the country are complaining that international enrollments are down 30-40% due to the visa problems.

On another note, ORIE has a surprising number of high-quality, self-funded international students. We need some kind of honorary fellowship to entice these self-funded students--something they can put on their resume and makes them feel that they can favor us over some other institution.

Mike Hayes:
That is clearly a priority in the upcoming capital campaign.
Graeme Bailey:
The fellowship doesn’t need to be for significant amounts of money, it just needs a name.

John Belina:
Our applications are consistent with last year – maybe a few less admits. Mark Savage, Director of Engineering Career Services, commented that 50% of the students in CS, ECE, and MAE are going to graduate school because of the job market.

Regarding international students, I don’t think the reduction in applications is all visa-related -- the students aren’t able to find employment. Co-Op is frantic to find employers willing to hire international students.

Mike Hayes:
Mike Spencer and I attended a conference last week, and we learned that India and China are becoming more aggressive about keeping their students within their countries.

John Belina:
Our internal students are having trouble getting work. They are looking at graduate schools when standards have been raised.

David Grubb:
We have fewer international applicants. Some students in our department use the M.Eng. as a path to their Ph.D. although we don’t advertise it as such.

Patty Apgar:
Applications are down slightly, but the external quality is up – the quality of the CU undergraduates (excluding a few outstanding Singaporean self-funded students) is a little lower. My concern is getting the I-20s to the international students in time. Tuition was decided on at the end of January, and the Graduate School is just now sending the Financial Responsibility Forms (FRF) to the students. By the time the students receive the FRF and submit their funding certificates, it’s going to be April.

Mark Eisner:
I'd like to bring that back to the financial aid issue. We decided not to send out the admission letters to international students who were candidates for financial aid because those letters call for the certification of finances, and we couldn’t tell them how much money they were going to get because we didn’t know how much money we were getting. Some of our international students won’t get here because the late admission letters will delay the processing of their visas.

Patty Apgar:
We send the admission letter indicating that financial aid decisions will be made later. We ask them to certify as much as possible, and if they receive financial aid later, that’s great. At least they have the form there and ready to be submitted the minute they hear from us regarding financial assistance.

Graeme Bailey:
Last semester we had several discussions with the Graduate School because we were trying to get I-20 materials to the students who wanted to arrive in January. The Graduate School’s priorities were not in line with ours at the time.
Mark Eisner:
There are too many organizations involved. Everyone needs to act quickly in order for the process to work.

Graeme Bailey:
There are too few certified people authorized to process I-20s.

Matt Miller:
Mark (Eisner), what do your financial aid packages look like in general?

Mark Eisner:
They are either zero, $5,000 or $12,000. If the student receives a teaching assistantship, the total will come to $12,000. We’re trying to compete with state schools. Make us neutral with institutions such as Berkeley.

Mike Hayes:
Can’t we get the Financial Responsibility Form posted on-line?

Patty Apgar:
I’ve been doing that. I asked the Graduate School to send me one and I send it electronically to our students.

Mike Hayes:
I have a meeting with Sarah Hale this afternoon – I’ll mention it to her.

Larry Newman:
Applications are up, acceptances up, and quality is improving – I’m optimistic for a larger class. We had 4 students join in S’04.

Mark Eisner:
Are you able to accommodate spring admits doing the SE option from other fields?

Larry Newman:
Yes. The 2 courses in Systems can be taken out of sequence, although we don’t recommend it. --If they are coming in as an Early Admit, they don’t really have a choice, and we understand that. A larger problem is that they will have a 2-semester project where they work on the last half of one project and then work on the first half of a different project their final semester. We accommodate that too.

Matt Miller:
Our numbers are steady. We haven’t received a lot of international applicants since I’ve been the M.Eng. Representative (2-years). Many of our own students apply, and the mean GPA in that pool is probably the same. The extremes were different – we had really good students and then we had a pool of students who aren’t as strong. The minimum GPA is no longer 2.7 for MAE students to be accepted into the M.Eng. program, and I think that has changed things a bit. Our domestic external applicants are strong. We’ve had an increased number of Early Admits – we accepted 6-7 excellent EA students in S’04.

Mark Eisner:
It will be interesting to see how many get jobs and don’t return for F’04? That’s a problem that we’re anticipating in OR. Getting the word out that it’s not an automatic admit seems to increase the application rate among our own undergraduates -- it becomes a prestigious program in their eyes.
Matt Miller:
We had that discussion, and that’s what prompted me to convince our faculty to
go after another pool of students. I think it has helped a little bit.

Jim Bartsch:
BEE’s admit numbers were up last year, and I think this year will be about the
same. We’re seeing a really strong pool of applicants, but we’re also seeing the
students who can’t find work and are contemplating M.Eng. as a last resort. I’m
also noticing that the applications are arriving late.

New Software Affecting Field Concentration Naming:
David Grubb:
This came up at a recent CCGB meeting. David Gries did a presentation on
promoting the regularization of our concentrations, options, minors, etc.

Mike Hayes:
Part of this stems from the ABET study. Undergraduate departments were being
called fields, and they aren’t – we have undergraduate majors and graduate fields.
ABET is an undergraduate study. Maybe David should attend one of our
meetings to discuss this.

Mark Eisner:
The Graduate Admission Form needs to be updated to include the word “option.”

Larry Newman:
Perhaps a better term would be “M.Eng. option.”

Review and Confirmation of M.Eng. Options:
Mark Otis:
This matrix is a historical document that obviously needs to be updated. We have
put on hold all development of our web site because Administration has taken an
initiative to bring in a web developer to address the navigation issue.

Jim Bartsch:
Systems doesn’t have a square dot on the M.Eng. options sheet.

Mike Hayes:
Biomedical Engineering needs to be added, as well.

Mark Eisner:
The columns should be labeled appropriately as fields.

Mark Eisner:
How are the options resources lined up with the fact that people can choose these,
based on the field they are in? The students signed up to take these options are
from other fields, so you never counted them when you were looking at your
resource requirements.

We are now offering an Information Technology option – should it be included?

John Belina:
The MEC approves the options for the M.Eng. Program – they can’t be self-
declared.

Graeme Bailey:
Maybe I’ll suggest that we propose an Information Science Option at the next meeting.

Mark Otis:
I’ll put it on the agenda.

Jim Bartsch:
In the meantime, either John, our historian, or Mark will find out more before the April meeting.

MEC Full Tuition Awards Update:
Mark Otis:
The Financial Aid Subcommittee ranked 10 excellent students. Phone calls will be made today. The top 3 applicants are from OR (2) and ME.

David Grubb:
Confidentiality issues might be a problem, but I’d like to know what type of qualifications these students possess.

Jim Bartsch:
No one under a 3.8 ever made the top cut.

Graeme Bailey:
GPAs fluctuate from one university to another – I would recommend pulling the two top people from your field for consideration.

2004 Engineering Graduate Research Symposium Reminder:
Mark Otis:
The Faculty Abstract Panel is currently being sought. We’ll accept abstract applications through Thursday. We hope to see you all at the event on April 1st.

Civil & Environmental Engineering Student Petition:
Patty Apgar:
This student didn’t do well in her undergraduate program, but she is determined to do the M.Eng. Program. Professor Hover suggested that she re-apply and take classes extramurally. She has done that, and she did well in her coursework. She has good work experience in the design industry. The student has taken an active role. We feel she deserves a chance to do the M.Eng., and she’s strongly supported by Professor Kulhawy and Professor Hover. They have reviewed her courses/grades and feel she is qualified to pursue the program. We are petitioning for a Provisional Admit with a minimum of a 3.0 the first semester.

Matt Miller:
How did she decide on her extramural courses?

Patty Apgar:
Those were the courses that Professor Hover suggested she take.

The MEC Committee motioned to accept the student provisionally. Approved.

International TA Development Program Update:
Mike Hayes:
You will receive an e-mail update from me next week on ITADP. The ITADP went through an external review, and all of the exemptions that were in existence have been pulled. We’re currently working in resolving that for next year. Most likely we won’t have a summer program requirement, it will be a program that we run in-house through the College the first couple of weeks of school. Technically, any international student having student contact has to go through this program. We had 29 students who should have been screened in F’03, and only 4 got screened. We’re lucky to have this break.

Patty Apgar:  
What should I tell our students for F’04?

Mike Hayes:  
We are recommending that you tell the students there will be a TA Development Program that they will be required to participate in. It will be run concurrently with the College TA Development program – no need for students to come early, but the TAs can’t work with the students until they have received all 15 hours of their language training.

John Belina:  
We can’t use TAs until approximately the 4th week of classes?

Scott Coldren:  
The Department pays $500 stipends for students to come early.

Mike Hayes:  
Technically, our M.Eng. students should be paying $500 for the training. ITADP is reviewing our curriculum and comparing it against theirs. If we include a language requirement, there’s a T, Th, F, Sat retreat scheduled for international students, and ITADP will do the screening. All M.Eng. student TAs need to be screened by ITADP.

Graeme Bailey:  
Our primary concern is getting them into the classroom quickly. It would be helpful to know exactly what the requirements are.

Mike Hayes:  
ITADP doesn’t know what their program will look like for the F’04 yet.

Graeme Bailey:  
If you can give us a rough idea of the content of the program, I’ll know what we’re talking about, and we might be able to offer suggestions on how to get it to work. Getting students into the classroom in week 4 isn’t much help. The critical time for students is in the beginning of the semester – they evaluate if they are getting the support they will need throughout the class.

Mike Hayes:  
The reality is that we go this route or you send your students through the ITADP program and pay $500 for each student. Your budgets can’t withstand that.

Adjournment:  
The meeting was adjourned at 9:12am.