MEC Meeting Minutes
December 10, 2003  8:00am – 9:00am
240 Carpenter Hall Conference Room


Guests: Peter Jackson, Tara Mings

Absent: Bing Cady, Larry Cathles, Mike Hayes, Jim Jenkins, Richard Lovelace

Summary: Early Admit students and their effect on the M.Eng. Return Formula and the M.Eng. Financial Aid allocation; DSpace Project Report update; Systems Engineering update; University Recognition Ceremony reminder; Biomedical Engineering Progress Report; MAE S’04 Petition; and Adjournment

Jim Bartsch called the meeting to order at 8:03am.

Approval of November 12, 2003 Minutes:
The MEC approved the November 12, 2003 minutes as submitted.

Clarification of Early Admit Counts:
Mark Otis:
- **M.Eng. Return Formula**: Fields are currently credited for Early Admit (EA) students, but the College doesn’t receive anything from Day Hall for those students.
- **M.Eng. Financial Aid Allocation**: The EA students aren’t a factor in awarding M.Eng. financial aid.

Mark Eisner:
In the M.Eng. financial aid formula, do EAs count?

Mark Otis:
I am quite sure they are counted, but I’ll confirm this.

Mark Eisner:
We’re under the impression that EAs don’t count in figuring the amount of financial aid we receive. If the EAs aren’t counted, we’d rather have the fall semester counted rather than spring.

Mark Otis:
EAs are usually less than 50 students college-wide.

Jim Bartsch:
How are the EA students distributed?

Mark Eisner:
I would think CS has more than ½ of the EA students.

Claude Cohen:
Do all EA students finish in 1 extra semester? In our department, some finish in 1 year, but they take the EA option to lighten their load.
Graeme Bailey:
   The majority finishes within 1 extra semester. My usual rule is the only justifiable reason for taking more time is because something unexpected occurred or because the student and their project supervisor are excited about work they want to do.

Jim Bartsch:
   We will discuss this further next year.

**DSpace Progress Report:**
The DSpace subcommittee: Graeme Bailey, David Grubb, Mark Eisner, and John Belina and Mike Hayes. Graeme Bailey volunteered to be the subcommittee’s point of contact.

Mark Otis:
   My understanding is that Engineering is no longer the beta group. In January ‘04, students will have the option to post on DSpace. I’ve included a draft of the DSpace document that will be finalized and sent to all graduate students by the Graduate School. Some details that I’d like to point out to you are:
   - Paper submissions won’t be eliminated
   - Once approved, electronic files will be forwarded to CBS (formerly The CU Print Shop)
   - *Open* and *Closed* community options
   - Team projects: every team member must agree to have it released, or it will be held in the 5-year blackout with only the title, abstract and other meta data viewable.

   No agreement has been reached regarding confidential appendices.

   The M.Eng. Committee needs to give their feedback on the document so the necessary modifications can be made.

Mark Eisner:
   Do we have a separate set of guidelines and handouts for M.Eng. students? If so, how does the Graduate School material have to be modified in order to keep from confusing our students? Project reports are not mentioned in this draft document, but the cover letter from Allison Power does include a sentence regarding the M.Eng. reports. It’s a minor point, but with two sets of documentation, it could lead to confusion.

Graeme Bailey:
   The larger issue is the confidential appendix. Part of the art of contracting and consulting is understanding the provisions of confidentiality. The fields have judged the work to be of sufficient caliber; to what extent can that data be made public? Certain fields have access to extremely large amounts of highly sensitive corporate data – under those circumstances it’s probably not useful for any of that to be published online.

Mark Eisner:
   This isn’t a common occurrence, but the issue still needs to be addressed. Is this information being distributed right away?
Graeme Bailey:
I assume so because the deadline for submission is advertised as January 2, 2004. It’s distracting that the deadline for submission to DSpace is a week earlier than for traditional submissions.

Mark Eisner:
Do we have to decide now if we’re going to have our own approach and make sure that it’s reflected in the documents?

Graeme Bailey:
Yes.

Larry Newman:
We shouldn’t recommend that they do it this semester.

Mark Eisner:
M.S. and Ph.D. will be handled in January, and their documentation is likely to confuse our students.

Jim Bartsch:
I saw e-mail correspondence asking if we wanted to be part of this as a professional program. I believe the Graduate School is under the impression that we’re doing it ourselves because we’re a professional degree program. If that is going to change, we need to notify them immediately.

Mark Eisner:
Is it sufficient to notify our M.Eng. students who are finishing in January that this doesn’t apply and separate guidelines will come out for the M.Eng. I’d prefer to see something in each document clarifying the processes for the M.Eng. students.

David Grubb:
Page 3 includes Professional Masters as an option under Degree Type – we’re included.

Mark Eisner:
The thrust of the committee is that we would like to participate in electronic distribution, but we want a separate set of guidelines. We need to meet one more time with Grad School to request clarification on this document.

Jim Bartsch:
Graeme, can you mock this up?

Graeme Bailey:
I’m sure I can do that today.

Mark Eisner:
There are two things:
1. We need to change the Graduate School’s documentation to indicate the M.Eng. is treated in a second document; and
2. What is the second document? This second document might have something about group projects, and confidentiality, etc. (we have some time to create this document).

Matt Miller:
M.Eng. won’t participate this January?

Mark Eisner:
Correct. Presumably we will have everything together by May ’04.
Claude Cohen:
   Is the second document an addendum to the original document, or will it be completely separate?
Graeme Bailey:
   The ideal would be to create an addendum.
David Grubb:
   Communications I receive from the Graduate School make the assumption that their audience is M.S./Ph.D.
Jim Bartsch:
   We haven’t been terribly proactive about correcting their approach.

   The Committee will review this document. The issue of addendum or separate document is up in the air?
Graeme Bailey:
   We will move to keep it an addendum
Jim Bartsch:
   Mike Hayes will be the primary contact with the Graduate School.
Mark Otis:
   I’ll also let Graduate School know an addendum will be coming.
Graeme Bailey:
   We have 4 fields represented in the subcommittee. As you browse through this, and discover situations that wouldn’t occur for your department, please let us know.
Matt Miller:
   How will the college be made aware of this document?
Mark Eisner:
   The Allison Power memo is a draft and hasn’t been distributed officially, but its audience is Directors of Graduate Studies.
Jim Bartsch:
   Our charge is to read the document, talk with your DGS if you have questions, and report specific M.Eng. issues to Graeme.

**Systems Engineering Update:**
Larry Newman introduced Peter Jackson, Systems Engineering Director, to the Committee.

Peter Jackson:
   The Systems Engineering Program is alive and well, and continuing to grow. The definition we prefer to use to describe Systems Engineering (SE) is: Applying scientific method to the design of systems.

   We focus on management process as well as Systems Engineering technical process (scientific method).

   Prior to 1995, several College of Engineering fields taught aspects of Systems Engineering. Industry requested that we put educational programs together for
Systems Engineering, and in 1997 we began talking about the creation of the department.

In 1999 the MEC granted us approval to offer Systems as an option. We have ASE I and ASE II being offered via distance learning. We have also developed a short course in Systems Engineering. This year we added a minor at the M.S./Ph.D. level. We had a number of Ph.D. students enrolled in our Systems classes last year requesting a minor in this area. Systems voted on it in September ‘03, and the Graduate Committee has approved it as a minor.

A number of faculty in numerous other fields comprise the organizing body of SE. We have no intention of becoming a separate academic department.

The SE option is well advertised and is growing, and in 2001 we received approval from the state to grant degrees for the M.Eng. in Systems.

Mark Eisner:
In your earlier presentation, you referred to the concept of the “T-shaped” engineer (individual is deep in one area, but has the breadth to look at a system across disciplines) – is this still applicable?

Peter Jackson:
Yes. Companies who want to hire a Systems Engineer look for the T-shaped engineer.

Mark Eisner:
Can a student who didn’t do an undergraduate in engineering do an M.Eng. in Systems?

Larry Newman:
It depends on their background. If it’s a technical field like Physics, it’s possible.

Mark Eisner:
And they qualify as “T-shaped?”

Larry Newman:
Yes, if they come from a technical background.

Graeme Bailey:
How effective is the distance learning component?

Peter Jackson:
It’s working very well. Larry and I interviewed a number of students who had taken ASE I at GM, and they were very positive about the course, and they found the tool useful with regard to what they were working on.

Peter Jackson:
ASE I and II have been growing in enrollment (this year about 90 students). 35-40 students will sign-up for the option.

The on-campus M.Eng. program is small, and we’ll work on growing these numbers this year. We are hiring in 2 fields to support the program – we’ve hired in OR, and there are authorizations for searches in MAE and CEE.
A short course for Applied Materials has been developed, and we have a contract with them to offer it 4 times in the next year. We plan to grow our Distance Learning offerings, and we’re working with different departments on getting some certificate programs off the ground.

On the research side of SE, we are going to implement a minor in M.S./Ph.D., we’re continuing to talk about a Ph.D. in Systems, and we’ll enhance the visibility of our research in the SE community.

Matt Miller:
How does Applied Materials buy the short course?

Peter Jackson:
We designed it to be a 1-week executive education program. We structured a contract on a per student basis. The company pays for 2 faculty members to go to their site to teach the program.

Larry Newman:
Applied Materials also paid for the development costs.

Peter Jackson:
We’re also looking at making this generic and turning it into a web-based, for credit course to grow visibility and revenue.

Matt Miller:
Similar to the executive MBA short-course format?

Peter Jackson:
Yes.

John Belina:
Could a subset of the short-course material be turned into a seminar series offered on-campus early in the fall for our own students?

Peter Jackson:
That’s an interesting idea. I’ll present it to the Executive Committee. I’d think we’d want to boil the information down further – 3 hours.

John Belina:
Without the hands-on part – exposure to the SE ideas and requirements is good at the beginning as they are starting their M.Eng. projects.

Graeme Bailey:
Do you think it would be more valuable to have the hands-on part? Possibly offer it a week before the academic year begins to get them going?

Peter Jackson:
We’re faculty-constrained currently, but as our resources grow I think it’s a great idea. I think you’d see the pay-off from it.

University Recognition Ceremony:

Mark Otis:
The December Recognition Reception will be held on Saturday, December 20th in Barton Hall from 11:00am - 1:30pm.

Jim Bartsch:
The deadline for reserving faculty regalia is December 12th. I think this is a good idea, and I hope it’s well attended.
**Biomedical Engineering Progress Report:**

Mark Otis:

The Graduate School contacted the external evaluator later than originally planned. The evaluator will make their evaluation soon.

Claude Cohen:

Then it goes to Albany?

Jim Bartsch:

I think it’s externally evaluated and that report is included with the report when it’s sent to Albany. We’ve had a number of students in our field asking how to apply for this.

**MAE Petition:**

Matt Miller:

The student falls below the 2.7 GPA requirement. I support admitting the student, and I’ve included two letters of recommendation (one from Ephrahim Garcia and one from Paul Dawson). Ephrahim has agreed to serve as the Project Advisor.

Jim Bartsch:

You mentioned a 3.0 GPA for his first semester, is that the provision?

Matt Miller:

Yes, his S’04 GPA must be 3.0 or better.

The MEC members voted unanimously to admit the student to the program.

Matt Miller introduced Tara Mings, Karen Biesecker’s temporary replacement.

**Adjourn:**

Meeting adjourned at 8:56am.