To the Faculty Legislature, Santa Barbara Division:

The following summarizes the business of the College of Engineering Faculty Executive Committee (FEC) for 2012-13.

Summary of Actions:

**Academic and Program Reviews and Proposals**

*Request to Eliminate the Emphases within the Master’s Degree in Media Arts and Technology (M.A. and M.S.) and to Suspend Admissions to the M.A. in Media Arts and Technology* – FEC supports the proposal to eliminate the three emphases from the Master’s degree objectives in Media Arts and Technology and also to suspend admissions to the M.A. in Media Arts and Technology.

*Revised proposals for Technology Management Program, Masters of Technology Management and Academic Unit* – FEC was in favor of the creation of the academic unit and the masters degree program, and voted unanimously to support the proposals.

*Computer Engineering External Review* – FEC commented on the report and the program’s response. FEC felt the External Review Committee did a thorough investigation of the program and appeared to address the issues that were suggested by the FEC when it previously reviewed the Computer Engineering notebook. FEC support the thirteen recommendations that were suggested and find some of them to be a critical part of the future of the program.

In particular, FEC agree that there is a need for more formal communications between the Computer Engineering program and the ECE and CS departments, via a MOU and regular meetings between the CE Director and Department Chairs. FEC agree that the Director should be included in future Dean’s meetings with College of Engineering Department Chairs.

FEC support the request for the Director to have access to teaching evaluations for faculty teaching in the Computer Engineering discipline, to ensure high standards of teaching for these courses.

Funding for the program is at a minimum, and we agree that there should be an increase in the discretionary funding, and also recommend that the 50% staff position be increased to a 100% position for better support to the program.

Most importantly, FEC understand the importance of the capstone course sequence for seniors in Computer Engineering, and share the concern about the need to find faculty to take over this responsibility, given the retirement of the capstone coordinator. The FEC suggests that the workload for this duty be shared by more than one faculty (as it is with other College of Engineering departments), for continuity of the course. Also, a critical component for the capstone courses is hiring a lab tech to support the capstone projects to help share the workload with the designated faculty.

*Proposed Regulation for the Master of Technology Management* – FEC approved this regulation by unanimous vote.

*Increase in Units Required for Computer Engineering* – FEC voted unanimously to approve this proposal.
**Proposed Policy on Scheduling Courses** – FEC supports the policy being proposed as it addressed the need for better distribution of courses for improved classroom utilization. The policy will also enable students to have a broader selection of course choices, as there should be a reduction of course conflicts during the prime-time period. The increased options of standard meeting times for twice per week courses has already been adopted by some of our departments.

**Student Initiated Democratic Education (SIDE) Proposal** – FEC expressed the opinion that while the proposal is a novel approach to offering courses, there is concern about the lack of faculty oversight and student instructor eligibility.

Some specific concerns are:

- There appears to be limited time for the faculty mentor to monitor the instruction of the student’s instruction of the course. “Observing at least one seminar” is not adequate for a 10-week course.
- Faculty need to be more involved in courses to which grades are assigned. A team-teaching model seems more appropriate, and not just having an undergraduate teach a course on their own.
- The eligibility requirements for student instructors is too low. The proposed 2.85 GPA should be raised to at least a 3.25 GPA.

Ultimately, who is responsible for the class if there are any problems that arise during the quarter with either the faculty mentor or student instructor?

**Ph.D. Emphasis in Bioengineering** – FEC supports this proposal.

**Proposal to Adopt an Earlier Application Opening Date** – FEC has reviewed the proposal to adopt an earlier application opening date from October 1 to August 1. The FEC recognizes that this change will help UC be more competitive in attracting talented out-of-state and international students, will help outreach programs, will give applicants more time and will conform to the opening date of applications for admission at other highly selective universities.

This proposal will incur a modest amount of additional funds. The FEC also recognizes that changing the date will impact when decisions will need to be made concerning the annual list of changes to major and programs. It is important that, if the date is indeed changed, campuses and Departments are fully aware of this change several months before it takes effect so they can prepare accordingly.

**Research Centers**

**Proposal to Establish a Center for Nano-Medicine** – The FEC recognizes that the initial request is for a modest amount of funds for the center and that request has support from the EVC and the Deans. The FEC also recognizes that the establishment of a Center will help attract funding. The FEC is therefore supportive overall of the proposed Center but would like to offer the following constructive comments:

1. One could be concerned with the “medicine” scope of the proposed Center, given that there is no medical school at UCSB and that only one MD (Dr. Scott Grafton) is engaged in this proposal. It is the hope of the FEC that this Center will foster the collaboration with more medical doctors.

2. The FEC expressed some concerns that there is a certain disconnect between some members thought to be included by the Dean of Engineering (namely Samir Mitragotri and Frank Doyle) and those listed in the proposal. Are those two left off to avoid questions about the relationship of this new Center to the existing ICB and CBE? A much clearer picture for how these Centers will interact/overlap is needed.
3- The FEC expressed some concerns about the proliferation of bio-related Centers on campus with sometimes some of the same faculty as members. The FEC urges that Centers are well differentiated in mission.

Review of Policies and Proposals

Proposal to revise APM 700, Leaves of Absence – FEC thought it would have been helpful to have some background on what the motivation was behind making these changes, and what prompted the revisions, as that would have been useful to have as part of the discussion.

Rebenching Report – FEC supports this proposal. FEC encourages annual updates to the faculty about the progress being made, to ensure increased funding is being accomplished and that UCSB is reaching par with the other UC campuses.

APM 430 Policy for Visiting Scholars – FEC felt that the one-year time frame for appointments is restrictive, since many research projects that involve visiting scholars continue for longer than 12 months. A well-defined process for approving extensions to these appointments will need to be clarified. It was also suggested that clarification would be helpful for distinguishing this new title in relation to the existing Specialist Series, beyond the salary implications.

Proposed Open Access Policy –

➤ The FEC recognizes the unsustainable cost inflicted by commercial publishers and the strain it has put on our library system.

➤ The FEC recognizes that commercial publishers profit tremendously from the work that is done mainly by researchers around the world, including UC faculty, while at the same time the very same researchers (or their institutions) must pay to access the output of this labor. The labor includes not only the research, but also the review process, most of the editing and the membership on editorial boards.

➤ However, the FEC believes the current proposal does not address what is intended.

➤ This is not a problem for the UC community alone but for the research community at large.

➤ The FEC also believes that instead of focusing on working out a solution with for-profit publishing companies, the research community should strive to bypass those companies all together. We feel that this goal could be attained, although some leadership is required.

➤ Commercial publishing sell prestige and recognition, which prompt researchers to publish in these avenues need to break this cycle.

➤ Given the fact that the prestige is directly linked to the review process and the editorial board that accepts only top of the line research manuscripts, several existing organizations, or “societies,” have succeeded in establishing themselves as some of the main avenues where high-quality research is published (e.g. IEEE, SIAM, ACM, ACS, AIP, APS, etc.). These societies operate with modest budgets, fulfill the archival role, bypass commercial publishers and are clearly sustainable.

➤ Other models that bypass commercial publishers and that best fit individual research communities could be investigated. Although it may take strong leadership to initiate this process in fields that do not yet have such structures and may also require the will of established faculty to take the lead in shifting to alternative avenues of publishing, the FEC believes that the research community would be amenable to this idea.
Some apparent concerns with the current proposal and constructive suggestions:

- The FEC committee would be interested in knowing the cost of individual journals, which may prompt faculty members to reconsider the need for subscribing to them. The FEC also believes that many disciplines end up bearing the price for a select few fields, as the price for journals is probably not uniform across disciplines.

- How many UC faculty members are also editors in prestigious journals? Have those faculty weighed in on the current proposal?

- Various universities have instituted similar policies. The current proposal highlights the advantages, but not the problems and challenges they have encountered. Such feedback would be helpful.

- In the current proposal, the extent to which the proposed action will bring the cost down is uncertain. There is a lack of transparency on how much the system pays for each journal.

- There is a danger that academic freedom could be compromised. Currently, there is no language implying that UC holds any right to the work of its faculty (besides patents). This policy would be a drastic change to that policy. The FEC believes that UC should not be able to profit monetarily from our copyrighted work without our consent (at least this should be on par with existing patent policy).

APM-015, Faculty Conduct – FEC does not have any further comments on this issue.

Proposal to Change Senate Regulations 350D.2 and 300B.1- Some members of the FEC support this change while others have voiced their concerns. In particular, several members are of the opinion that this matter should be left at the discretion of each Department, as it is presently the case, rather than being changed as a senate regulation affecting every Department.

2012-2013 Committee Members:

Brad Chmelka  Chemical Engineering
Ed Kramer  Chemical Engineering
Richard Kemmerer  Computer Science
Tevfik Bultan  Computer Science
Shiv Chandrasekaran  Electrical and Computer Engineering
Kaustav Banerjee  Electrical and Computer Engineering
Michael Chabinyc  Materials
Steven DenBaars  Materials
Jeffrey Moehlis  Mechanical Engineering
Frederic Gibou  Mechanical Engineering (Chair)
Jenny Lei  Undergraduate Representative
Lara Deek  Graduate Representative
Rod Alferness  Dean (Ex Officio)
Glenn Beltz  Associate Dean (Ex Officio)
Terri Coleman  Assistant Dean (Coordinator)