To the Faculty Legislature, Santa Barbara Division:

The following summarizes the business of the College of Engineering Faculty Executive Committee (FEC) for 2015-16.

Summary of Actions:

**ME 167 Online Course – Winter 2016**

The College of Engineering Faculty Executive Committee was asked to review the online course proposal for Mechanical Engineering 167 titled "Structural Analysis. The committee voted to approve the course and supports its impact in adding to the diversity of electives in Mechanical Engineering; however several issues were brought up that the committee felt should be considered prior to proceeding to the next stage of course approval.

Specifically, the committee voted to approve the proposed course with the optional recommendation to:

[1] Clarify how many hours of TA time would be required. Additionally, details of the time commitment of the professor should be included.

[2] Further details regarding student engagement would be helpful as it moves forward. For instance, greater detail regarding how online student interaction will be facilitated and how many hours of interaction with students should be presented.

[3] It should be made clear in the proposal that this course is an elective.

Thank you for submitting the course proposal and the Executive Committee supports its implementation.

**Electrical & Computer Engineering Data Notebook**

The College of Engineering Faculty Executive Committee was asked to review and comment on the Data Notebook accompanying the Program Review of the Electrical and Computer Engineering program. The Data Notebook contents were circulated among committee members and no comments or concerns were raised. The Notebook was found to be adequate.
Engineering 3 Online Course – Summer 2016

The College of Engineering Faculty Executive Committee was asked to review the online course proposal for Engineering 3 titled “Introduction to Programming”. The committee voted to approve the course; however, several issues were brought up that the committee felt should be considered prior to proceeding to the next stage of course approval.

Specifically, the committee voted to approve the proposed course with the recommendation to:

[1] Address how many students will be enrolled in the course. How will enrollment be capped, and at what number?

[2] What pools of students will the course be limited to? Will it be open to extension students? The proposal mentions potential community college transfers. How will these be identified?

[3] Given that courses teaching proficiency in Matlab are of interest to a large number of students nationally, the committee advises developing a thoughtful plan for managing student enrollment.

[4] Further details regarding student engagement would be helpful as it moves forward. For instance, how many hours per student will the teaching assistants and instructor commit to the course?

[5] The evaluation plan could use additional metrics. Relying on the standard online course feedback (ESCI) and online surveys typically garners low student participation. Perhaps a more detailed plan for benchmarking to traditional classroom courses would improve the case (above and beyond comparison of final grade distributions).

Thank you for submitting the course proposal and the Executive Committee supports its implementation.

Sexual Violence and Sexual Harassment Policy Revisions.v.2

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

Red Binder Revisions

The College of Engineering Faculty Executive Committee was asked to comment on the draft changes to the Red Binder academic personnel, policy, and procedure manual. While the majority of the proposed changes drew no comment from the committee, portions of the proposed revision to section I-4 Eligibility, Deferral, and
Mandatory review elicited concern. Specifically, the committee is concerned regarding the elimination of text ensuring that a justified extension of the tenure clock does not carry with it an expectation of performance beyond that expected within a normal tenure time frame. The elimination of the paragraph quoted below seems to remove this protection:

“Assistant Professors or Lecturers with Potential Security of Employment who have been approved for an extension of the tenure clock should not be expected to have produced more or performed at a higher level than faculty who have not extended the tenure clock. The file is to be evaluated without prejudice as if the work were done in the normal period of service”

The motivation for removing this text is sought by the committee, in particular with regard to the reasoning for removing this protection afforded assistant professors forced into seeking a deferral.

Thank you very much for soliciting the committee’s response to the proposed policy changes.

Chemical Engineering curriculum proposal

The College of Engineering FEC met on November 4, 2015 and reviewed and approved Chemical Engineering’s curriculum proposal.

Establishing Ph.D. program for Technology Management Program (TMP)

The College of Engineering Faculty Executive Committee has reviewed the recently submitted proposal for establishing a Ph.D. program in the Technology Management Program (TMP) during its Oct. 14th, November 4th and 18th meetings. The FEC welcomes the establishment of the new Ph.D. program as a valuable next step in the evolution and continued success of the newly established TMP program. The plan submitted for review by the committee was highly regarded, and committee members feel that it provides the necessary roadmap for both the successful launch and continued management of the doctoral program.

Following its discussion, the committee voted unanimously in favor of establishing the program in TMP.

Computer Engineering curriculum proposal

The College of Engineering FEC met on January 25, 2016 and reviewed and approved Computer Engineering’s curriculum proposal.
Electrical Engineering curriculum proposal

The College of Engineering FEC met on January 25, 2016 and reviewed and approved Electrical Engineering’s curriculum proposal.

Retirement Options Task Force Report

The Faculty Executive Committee (FEC) for the College of Engineering was asked to comment on the recently proposed changes to the University of California Retirement Plan (UCRP). The FEC recognizes the necessity of addressing the massive unfunded liability of UCRP in order to preserve the fund’s integrity for future generations of employees, and furthermore the FEC supports and appreciates the value of acting now, before the liability becomes insurmountable. However, concerns were raised regarding the mechanisms and long-term plans for addressing this issue and their resulting impact on the competitiveness of the UC system. The primary concerns of the committee focused on the following issues:

[1] The committee’s deliberations (as well as the UCRPs Task Force report) recognized the revised UCRP pension tier as a substantial reduction in total employee compensation. This raises concerns regarding how competitive UC will remain in attracting and retaining top faculty, especially given that UC currently lags behind its peers in direct salary compensation. Absent a clear long-term plan of how this compensation deficit will be addressed—which is notably vague in the Task Force Report—the FEC felt that the proposed plan is yet another erosion of faculty compensation and of UC competitiveness. The FEC felt a clear and detailed commitment from UC on how this challenge will be met is needed.

[2] One concern voiced was to what extent other possible revisions to the UCRP system were considered. For instance, were comparisons with revised benefit tiers with caps weighted by contributions into the UCRP system or other more sophisticated mechanisms of grading the UCRP benefits more closely aligned with total pay into the system (as opposed to the highest 36 months) considered? If so, then some reasoning as to why the current proposed plans were favored is requested. If not, then this seems like an important avenue to explore prior to enacting an overhaul of UCRP.

[3] One thing that remains unclear in the proposed UCRP plan is: If this plan is enacted, will it solve the problem? Projections into the future viability of the UCRP fund seem overly generous even in scenarios where the new tier is enacted. Does more need to be done, and if so, what future commitments from the state can UC expect?

The FEC very much appreciated the chance to comment on this important issue and is sympathetic to the tough decisions that must be made. We look forward to working to help preserve the viability of the UC retirement fund as well as ensure that UC remains a draw for top faculty talent far into the future.
Simultaneous Enrollment Minimum Units

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

Cyber Security Awareness Training

An issue was brought before the Faculty Executive Committee (FEC) of the College of Engineering regarding the recent mandate of annual cyber security awareness training for all faculty. Concern was voiced by faculty members in multiple departments in the College of Engineering that the growing number of institutional training mandates presents an increasing burden on the faculty. Namely, faculty voiced the following concerns regarding the increasing cumulative burden of training mandates:

[1] Mandating that each employee in the UC system must dedicate one hour per year to the new regimen of cyber security training represents a substantial cost in lost productivity. Properly accounting for the value of this lost time in a cost-benefit analysis would better motivate the implementation of sunset provisions or reduced time allotments for repeat/refresher training. The current protocol of piling on new open-ended training mandates reflects little regard for their mounting cost to the UC system.

[2] Once trained, the FEC saw little justification why a full one hour repeat course is needed annually. Reducing the refresher training program’s time span to something that is truly a refresher training was one recommendation put forward. Or alternatively, allow direct assessment of the targeted awareness goals in lieu of watching the current video training. This will greatly reduce lost faculty time while still ensuring that faculty are aware of cyber security issues.

[3] The failure to institute a sunset provision on new training requirements creates an unbounded, ever increasing time commitment from faculty and draws their efforts away from core university functions (teaching, research, service). The cumulative total of this lost time commitment should be accounted for in issuing new training mandates.

While the FEC recognizes the importance of faculty being educated in cyber security awareness, the time/monetary cost of the latest open-ended training mandate seems disproportionate to the risk and should be modified. The FEC strongly recommends both the introduction of a sunset provision as well as restructured/reduced refresher training modules. Thank you very much for your consideration of this matter.
Electrical Engineering Senior Electives

The College of Engineering FEC reviewed and approved your request to add a narrative portion and clarify Electrical Engineering’s Senior Electives to EE students.

Computer Science – adding Science Electives to the Approved List

The College of Engineering FEC met on February 22, 2016 and reviewed and approved Computer Science’s proposal to add additional science electives to their list of approved courses.

Report from the Joint Committee of the Administration and Academic Senate, Faculty Discipline

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

Five-Year Planning Perspective, 2016-2021

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

Search Waivers for UC Academic Appointees. Guiding Principles

The Faculty Executive Committee (FEC) of the College of Engineering was asked to review and comment on the new university policy regarding search waivers. After meeting to discuss the issue, the FEC identified several problems, which have been frustrating for faculty in the recent past and represent likely unforeseen consequences of the policy. Several pointed examples came to the forefront of the discussion:

[1] There is currently no provision for hiring a graduate student external to the university with on-campus funds. This is something that should nominally fall under the research provision of the policy, but does not always do so due to the new faculty requirement. Once a faculty member is here, hiring an external graduate student now must be channeled through an open search, which is a tremendous waste of both the faculty member’s, staff’s, and applicants’ time. A member of the FEC has recently undergone this process, and it presents a needless limitation. We request a hiring provision for external graduate students to be added.

[2] Some faculty members have complained regarding issues compensating close, long-term collaborators external to the university for time spent working in their group or travel or material support at UCSB. This often involves granting an appointment as visiting faculty and again has resulted in an open search created.
This is a tremendous waste of time and effort unforeseen by the blanket restriction of open searches.

[3] There are mounting concerns and examples being voiced regarding the failure to apply the waiver policy by the personnel office even in situations where a waiver is clearly warranted. Nominally cases raised in the previous point [2] should be granted waivers under the “true” visitor exemption; however this does not seem to always be happening.

[4] Although not explicitly mentioned in the new waiver policy, some faculty raised concerns regarding current restrictions on hiring consultants previously employed at UC. Namely, the embargo period of 2 years seems unreasonably long. We would like to see this shortened to 1 year or less and potential exceptions granted for uniquely qualified candidates.

Thank you very much for the opportunity to comment.

**Computer Engineering Program proposal**

The FEC has reviewed the recent request for a modified course series for Computer Engineering majors. Specifically, the request to remove general Chemistry 1a and replace it with Math 6a as major requirements was discussed by committee members. Before reconvening to vote on the issue, the committee has requested two additional pieces of information: The first is that the committee requests that impact statements/letters from both Mathematics and Chemistry be solicited and included with the request. The committee was particularly curious about the Mathematics department’s ability to accommodate the additional student load. The second request is to please provide a clearer plan and rationale for the change. Namely, some portions of the letter were difficult to interpret. For instance, it wasn’t clear why 6a was being added in lieu of 6b, since the proposal states “ECE students are required to take both Ma6a and Ma6b as preparation for ECE130ab, which are required prerequisites for all advanced signals and controls upper division classes offered in the department.” A little more detail regarding the department’s motivation and the plan envisioned for the impacted students would very helpful. We would like to hold the final vote on April 11th, so an update before then would be appreciated. Thanks very much, and we look forward to hearing from you soon.

**ECE Program Report**

The Faculty Executive Committee (FEC) of the College of Engineering was asked to comment on the recent program review report for the Electrical and Computer Engineering (ECE) program. The committee met on April 11th and reviewed both the external committee’s report and the department’s response. Both the committee’s report and the department response provide a proactive vision for strengthening the already stellar program in ECE. The committee found that the
department’s response to the external committee’s comments reflects a commitment to building a diverse faculty and graduate student base as well as a commitment to excellence in undergraduate education within the space/resource limitations ECE currently faces. Another point stressed within the report was the need to strengthen ECE outside of its current high visibility areas of excellence and to preempt retirements via forward thinking hiring. The FEC fully supports this approach and advocates for the resources ECE requires for both maintaining and expanding its world-class reputation for excellence in research. No other issues were raised in the FEC’s review of the report and departmental response.

**Adding ENGR 195ABC as approved Departmental Electives**

On May 9, 2016, the FEC reviewed and approved Mechanical Engineering’s request to add ENGR 195A, ENGR 195B and ENGR 195C to the Mechanical Engineering list of Approved Engineering Electives.

**2015-2016 Committee Members**

Stephen Wilson (Chair), Materials
John Gilbert (Winter – Spring 16), Computer Science
Jianwen Su (Fall 15, Winter 16), Computer Science
Mike Doherty, Chemical Engineering
Mike Gordon, Chemical Engineering
Carl Meinhart (Fall 15, Winter 16), Mechanical Engineering
Matthew Begley (Vice-Chair), Mechanical Engineering
Dmitri Strukov, Electrical and Computer Engineering
Clint Schow, Electrical and Computer Engineering
Frank Zok, Materials
Dean Rod Alferness, College of Engineering
Associate Dean Glenn Beltz, College of Engineering
Eric Swenson, Undergraduate student representative
Justin Pearson, Graduate student representative
Tiffany Sabado, Staff Coordinator