



Davis Division Academic Senate

Request for Consultation Responses

Department Reconstitution Proposal - Chemical Engineering & Materials Science

May 13, 2015

The College of Engineering has requested review of a proposal to reconstitute the Department of Chemical Engineering and Materials Science into the Department of Chemical Engineering and the Department of Materials Science and Engineering. The proposal, with required approvals, is provided for feedback to inform the Academic Senate position.

CAP Oversight Committee

May 7, 2015 1:20 PM

The Committee on Academic Personnel (CAP) has reviewed the proposed reconstitution of the Department Chemical Engineering and Materials Science (CHMS) into separate units. CAP does not anticipate that the reconstitution will have any significant implication for the faculty merit and promotion cases it reviews.

CAP appreciates the desire of the CHMS faculty to proceed with the separation, as expressed by their near-unanimous supporting vote. Nevertheless, several points of concern arose during the CAP discussion, which should be carefully considered before proceeding to a final decision.

(1) Undergraduate enrollments in the Materials Science (MS) major have historically been lower than in most other Engineering majors. As noted by the College Executive Committee, the long-term viability of a department that lacks a vigorous undergraduate program is moot. CAP notes that such considerations were instrumental in motivating the recent merger of Applied Science with other Engineering departments.

(2) There are many departments on campus (including most Engineering departments) that incorporate disparate faculty groups. CAP is concerned that accepting the will of the faculty in a heterogeneous department as the primary motivation for approving a break up could set an undesirable precedent, prompting similar requests on the same grounds. Small departments incur the loss of economies of scale, and special difficulties in terms of administrative staffing, coverage of courses, approval of sabbaticals, etc.

(3) The College of Engineering expects an imminent change of leadership, and it seems inadvisable to take precipitate action on such an important decision at this time, which could be construed as presenting the incoming Dean with a fait accompli. It seems reasonable that the new Dean, who must contend with the consequences of the decision, should have an opportunity to participate in it.

Graduate Council

May 13, 2015 3:06 PM

Response continued on next page.

May 13, 2015

RFC: Department Reconstitution Proposal – Chemical Engineering & Materials Science

The Graduate Council, based on a memo from its APD Committee, forwards its recommendations for the aforementioned RFC.

The Academic Planning and Development (APD) Committee met on April 7, 2015, and considered the proposed departmental reconstitution.

Graduate council separates its comments into two areas: (1) concerning the departments that are charged with general administration, undergraduate instruction & research and (2) the two graduate programs associated with the current department.

The departmental support for the proposed reconstitution into two departments is close to unanimous. The two sections are already separated into different physical spaces, and in several ways are already operating in separate fashions. Material Sciences identity would be improved, but because it's the smaller of the two sections, will have potential issues associated with smaller departments. Many of these issues do not directly impact graduate education, but those pertaining to administrative structures including budgets and space, could have some adverse impacts on the smaller graduate program. Another issue is the conflict of interest for the current Dean, who is a member of one section of this department; would he oversee the reconstitution or ideally should the incoming Dean supervise it?

At the graduate level, the program offers separate degrees in each of the two areas, so little or no changes would be necessary from a curricula viewpoint. Current graduate program members will be initially members of both separate programs. Student will be able to move freely between programs. The smaller student numbers for the Materials Science program could present a challenge, such as the impact of fewer undergraduates on TA support for graduate students. In addition, there is ambiguity in the current bylaws for the program(s). Although two sets of degrees are offered, one set for each area, the bylaws are written as a single program. The Graduate Council letter endorsing the last set of bylaws mentions two programs, as does the title to the bylaws, but the rest of the wording within the bylaws generally seems to cover a single combined program. The complexity here is from the two separate sets of degrees offered, but apparently administered by one combined graduate program in terms of faculty governance. Separate bylaws will have to be created for each reconstituted graduate program, which should not present a difficulty, since each can most probably be substantially the same as the current single set of bylaws. It is also

not entirely clear if the graduate program membership is completely identical to that of the department faculty, and if not, did the graduate program accomplish a formal vote about the reconstitution? These two issues, of separate bylaws, and if a formal graduate program vote was taken, should be clarified before the graduate portion of the reconstitution progresses further.

Sincerely,

A handwritten signature in blue ink that reads "Kyaw Tha Paw U".

Kyaw Tha Paw U, Chair
Graduate Council

/vm

C: Gina Anderson, Academic Senate Executive Director

Planning & Budget

May 12, 2015 2:17 PM

Response continued on next page.

Department Reconstitution Proposal – Chemical Engineering & Materials Science

CPB discussed the Department Reconstitution Proposal for the Department of Chemical Engineering & Materials Science. CPB noted several concerns including,

- (1) Materials Science has a very low number of undergraduate students;
- (2) Materials Science has the longest time to degree in the College of Engineering, and finally
- (3) the lowest admission criteria requirements in the College of Engineering.

Given that a clearly elucidated plan for attracting and retaining top students in Materials Science has not been included in the proposal, CPB recommends that that the proposal not be approved until a plan is in place to show that Materials Science can reach sustainable levels of undergraduate teaching given the new budget model. In the short-term, Materials Science should look for departments in which there is opportunity for shared teaching loads (e.g., the arrangement Plant Sciences has with the College of Biological Sciences. A two to three year plan for achieving a teaching load comparable to the rest of the college should be provided before the plan is approved.

CPB also notes that there are recent examples of programs on campus that have been discontinued as a result of separating from other departments that serve a large number of undergraduates. A recent example is the Exercise Biology program. CPB urges caution in proceeding and looks forward to a more detailed, strategic plan.

Undergraduate Council

May 4, 2015 1:25 PM

UGC response to **Department Reconstitution Proposal - Chemical Engineering & Materials Science**

5/4/2015

Because the two majors supported by the current combined department will not change, Undergraduate Council sees no issue appropriate for it to comment upon. It doesn't understand why what seemed like a good idea twenty years ago is not a good idea now, but that is for others to consider.