PROFESSOR ROBERT POWELL, Chair  
Graduate Program in Chemical Engineering  
Graduate Program in Materials Science and Engineering  

RE: Bylaws for the graduate programs in Chemical Engineering and  
Materials Science and Engineering  

Dear Bob:  

At its meeting of June 9, 2009, Graduate Council considered and approved the Bylaws for the graduate programs in Chemical Engineering and Materials Science and Engineering with a small revision on page 4:  

“The Department Chair is the Graduate Program Chair but can delegate that responsibility the day-to-day responsibilities to…”.

Attached is a copy of the bylaws reflecting Council’s approval date and the change noted above. A copy should be kept in the program files, made available to the members, and be used for future revisions of the bylaws. The Office of Graduate Studies will also keep a copy.  

Sincerely,  

JOHN F. GUNION, Chair  
Graduate Council  

/aw  
Enclosure  

cc: Department Manager de Ropp  
Graduate Program Staff Johnson
ARTICLE I. OBJECTIVE

The Graduate Program in Chemical Engineering and Materials Science administers the following programs in conformance with the regulations of the Graduate Council and the Office of Graduate Studies of the University of California, Davis: Chemical Engineering (MS Plan I, MS Plan II and PhD) and Materials Science and Engineering (MS Plan I, Master of Engineering, Graduate Certificate Program and PhD).

Discipline: Chemical engineering is the profession in which knowledge of mathematics, chemistry, and other natural sciences gained by study, experience, and practice is applied with judgment to develop economic ways of using materials and energy for the benefit of mankind. Materials Science and Engineering is concerned with the application of materials in devices, machinery and other structures and studies how the material structure, and the resulting properties and performance, are controlled by its processing.

Mission: The mission of the Chemical Engineering and Materials Science Graduate Program at the University of California, Davis is to advance through teaching and research programs the frontiers of chemical engineering, biochemical engineering, and materials science and engineering and to educate graduate students with a sense of professionalism and community.

ARTICLE II. MEMBERSHIP

A. Criteria for Membership in the Graduate Program

1. Disciplinary expertise, research area, and accomplishments.
   Membership in the Program shall be limited to faculty of the University of California who are qualified to guide candidates towards Doctor of Philosophy and Master of Science degrees in Chemical Engineering and Materials Science and who participate in the activities of the Program. Membership is based on disciplinary expertise and is independent of specific department appointment or Academic Senate membership. Emeritus faculty can hold membership in the Program.

2. Appointment.
   All faculty members in the Department of Chemical Engineering and Materials Science are automatically members of the Graduate Program subject to review as articulated in Article II.E. Non-departmental faculty can become members of the Graduate Program following the process in Article II.C and will be appointed for a three-year term subject to review and re-appointment.

3. Active research-appropriate to the discipline(s) encompassed by the program.
   Members are required to provide evidence of independent research in Chemical Engineering and Materials Science commensurate with the expectations of the University of California as outlined in APM 210-1-d (2).

4. Voting rights, per Graduate Council policy and Academic Senate Rule 55.
   All active members are eligible to vote.

B. Rights and Privileges
   Members of the Graduate Program in Chemical Engineering and Materials Science may:
a. Serve as major professor and thesis/dissertation adviser for students earning a graduate degree in Chemical Engineering or Materials Science and Engineering.
b. Serve as chair on masters or doctoral committees, including guidance, preliminary examination, qualifying examination, and thesis/dissertation research committees. Faculty may not serve as a member of the qualifying examination committee for his/her own student.
c. Serve as a member on guidance, preliminary examination, qualifying examination, and thesis/dissertation committees for masters and doctoral students, subject to restrictions by Graduate Studies. Non-members of the graduate program can serve as members (but not as chair) of guidance, qualifying examination, and thesis/dissertation committees, subject to restrictions by Graduate Studies.

C. Application Process

1. Nominations.
   Any member of the Chemical Engineering and Materials Science Graduate Program may nominate a faculty member to become a member of the Program. Nominees must meet criteria described in Article II.A. A nomination will consist of a letter to the Chair of the program expressing interest in becoming a member and a copy of the applicant’s curriculum vitae. Voting on a membership will be done using a secure web-based voting system. The application will be sent to all the Program members, and the majority will determine the approval of membership. Upon the election of a new member, said person shall be sent a letter of invitation by the Graduate Program Chair and be considered a member only in the event of an affirmative reply.

2. Anticipated Contributions by Members.
   a. Maintain an active research program commensurate with the expectations of the University of California with regular publications in peer-reviewed journals that represent scholarly areas consistent with the programmatic themes of the Department. The members should provide an appropriate research environment for graduate students in the graduate program.
   b. Take an active role in the administration of the graduate program by being willing to serve as a member on departmental committees related to the graduate programs such as the Graduate Affairs Committee and any ad-hoc committees that are set up to address graduate program issues.
   c. Assist in the recruiting of new students to the program through individual efforts and participating in the annual departmental Graduate Student Recruiting Weekend.
   d. Undertake teaching assignments, as invited and in consultation with the Chair, that benefit the Program. The specific expectation is that the faculty member will teach at a minimum one course (or its equivalent) assigned by the Chair each three year term.
   e. Serve on guidance committees, preliminary exam committees, qualifying exam committees and thesis/dissertation committees for masters and doctoral students.
   f. Serve as the thesis/dissertation adviser for graduate students in the programs.

Materials Science and Chemical Engineering Graduate Program members with departmental appointments outside of the Department of Chemical Engineering and Materials Science (Department) will be appointed for three year terms. During that period, the member shall demonstrate to the Graduate Affairs Committee (GAC) of the Department that s/he is fulfilling items a through f above. To facilitate membership review, the GAC requires that the non-Departmental graduate program member provide documentation for items a-f at each review cycle and when requesting an additional three year term.
Members serving as major professors are required to:

- Honor the financial offer made to new graduate students working under the direction of the faculty member. The Department will provide the details of the financial offer to the faculty adviser, and the faculty member should not accept students on unfunded projects. During a hiatus in extramural support, the faculty adviser should consult with the Department Chair for a possible bridge loan or TA/AI funding. It is the responsibility of the faculty adviser to inform the graduate student if extramural funding for the student's research project is in jeopardy. At least six months of advance notice should be given to the Department Chair and the student so that other funding alternatives can be explored.

- Provide graduate student advisees with specific requirements for achieving their desired degree objective in a timely manner. The departmental goal for time to degree for the PhD is twelve academic quarters (not including the summer) for students entering the program with a B.S. in Chemical Engineering or Materials Science and nine academic quarters (not including the summer) for students entering with a MS degree. To achieve this goal the member must assist the student in progressing through the program and periodically evaluate the student's progress in research and in meeting program milestones. The student and the faculty adviser should collaboratively "define success" for the project chosen.

- Fill out the departmental progress form for each student when assigning an S/U grade for ECH or EMS 299 credits. Reasons for any unsatisfactory performance on dissertation research or recommended course work should be stated clearly to the student in a written evaluation.

- Maintain a mutually agreeable schedule of advising conferences with each advisee, including an annual review on the progress, direction, and duration of the project. The result of this annual review should take the form of a written report to the student (and placed in the student's file) summarizing the review.

- Ensure that the objectives regarding time-to-degree are attainable. This shall include, but not be limited to, meeting with the student and the dissertation committee after the student's Qualifying Exam to discuss points raised by the Qualifying Exam committee regarding the direction of the research, and meeting with the student and the dissertation committee after the student has been in residence for three years to discuss the progress of research and what must be accomplished to complete the degree.

D. Emeritus.

A member who retires from UCD may elect to continue active participation in the program. Emeritus may teach graduate courses as deemed appropriate by the program, and may serve on administrative and student committees. Emeritus faculty may participate and vote in graduate matters only, and will not have voting rights regarding department personnel actions, department budget decisions or undergraduate program matters.

E. Verification of Continued Membership.

Membership in the Program will be reviewed at three year intervals by the Graduate Affairs Committee. Members may not vote for themselves. Members will be evaluated based on the criteria listed in Article II.C.2. A majority vote of the eligible voters of the Graduate Affairs Committee is required for maintenance of membership.

F. Membership Appeal Process.

Terminated members or those denied membership will be notified in writing of the decision and given an opportunity to counter argue and to provide additional supporting information. This appeal will be sent to the entire membership of the program, and the majority will determine whether to uphold or
overturn the termination/denial. Applicants denied membership or members denied renewal of membership may make a final appeal to the Dean of Graduate Studies.

ARTICLE III. ADMINISTRATION

The administration of the program and its activities will be vested in the Graduate Program Chair (see Article IV) and in the Graduate Affairs Committee (see Article V). The standing committee of the Program consists of the Graduate Affairs Committee. See Article V for more details.

ARTICLE IV. PROGRAM CHAIR

A. Appointment of the Chair.

The Department Chair is the Graduate Program Chair but can delegate the day-to-day responsibilities to any member of the graduate program who will then serve as Graduate Program Chair. Henceforth in this document, either the Department Chair or delegated faculty member will be referred to as the Graduate Program Chair. However, even with the delegation of responsibilities, the Department Chair is the official, graduate program Chair.

The term of service of the Graduate Program Chair will coincide with Department Chair. The Program Chair is responsible to the Chancellor through the Dean of the Office of Graduate Studies, the Dean of the College of Engineering and to the Department Chair.

B. Duties of the Chair.

1. providing academic leadership for the program by developing and implementing program policies;
2. representing the interests of the program to campus and university administrators;
3. calling and presiding at meetings of the Graduate Affairs Committee;
4. calling and presiding at meetings of the Program;
5. being responsible for coordinating all administrative matters related to the Program with the Office of Graduate Studies;
6. managing the Program’s budget;
7. submitting course change or approval forms;
8. being responsible for the accuracy of all publications related to the Program, including web pages and catalogue copy;
9. managing program reviews and other administrative tasks;
10. nominating Graduate Advisors for appointment.

The Program Chair is expected to seek the advice of Program members in a systematic way and to provide for the conduct of Program affairs in an orderly fashion through meetings of the faculty and of standing committees. The chair is also expected to seek student advice on matters of concern to students enrolled in the Program. The chair is assisted in the tasks involved in carrying out his or her responsibilities by the Graduate Affairs Committee and such other means as specified in the Program Bylaws.

ARTICLE V. COMMITTEES

A. Graduate Affairs Committee.

Appointment:
The committee is comprised of at least twenty percent of the members of the program, including the Graduate Program Chair. The Graduate Affairs Committee members will be appointed by the Graduate Program Chair to represent the research areas of the department as are they currently listed under “research” on the Chemical Engineering and Materials Science website. The
appointments will be for one year and can be extended up to three years. The Program Chair will appoint the Chair of the Committee.

**Duties:**

a. Assist the Graduate Program Chair in administering the graduate program.

b. Make fellowship decisions.

c. Decide on Program graduate admission policy.

d. Appoint standing and ad hoc committees as it deems necessary to properly administer the activities of the Program.

e. Review petitions from graduate students that do not fall in the jurisdiction of the Graduate Program Advisors (see Article VII).

f. Assist in the recruitment of graduate students.

g. Make recommendations to the Program Chair on admissions.

h. Maintain open communication with the graduate students.

i. Maintain a quorum to conduct business. In the Graduate Affairs Committee a quorum will be a simple majority of the committee.

j. Administer the applications for membership and membership renewals (see Article II)

**ARTICLE VI. STUDENT REPRESENTATIVES**

Graduate students in the Department have organized a Graduate Student Organization (GSO) that serves as a liaison between graduate students and faculty/staff. The president of GSO is the Departmental graduate student representative. The student representative organizes a Student-Faculty forum each spring and attends the annual meeting of the Chemical Engineering and Materials Science Program.

**ARTICLE VII. GRADUATE ADVISORS**

Graduate advisers are appointed in compliance with the policies and procedures of the Graduate Council and the Office of Graduate Studies. The Department Chair will make recommendations to the Office of Graduate Studies for Graduate Adviser appointments. Two graduate advisers will be appointed: one for Chemical Engineering graduate students and one for Materials Science and Engineering graduate students. The appointments will be for at least a two-year period. Each Graduate adviser is responsible for the following:

1. Review the program of study for every graduate student.

2. Review and act on each petition submitted by a graduate student to drop or add courses or to take courses on an S/U basis. Make recommendations on petitions of graduate students to drop or add courses beyond the fifth week of classes.

3. Review and approve student petitions for Planned Educational Leave (PELP).

4. Review and approve petitions for advancement to candidacy for the Master’s degree and recommendations for the composition of committees for Master’s theses or comprehensive examinations.

5. Recommend, after consultation with the student and the student’s major professor, the composition of the Qualifying Examination Committee.

6. Recommend, after consultation with the student and the student’s major professor, the composition of the dissertation committee.

7. Review and approve petitions for advancement to candidacy for the doctoral degree.

8. Carry out periodic review of student progress towards degree objectives, and, in particular, file an annual report with Office of Graduate Studies concerning each student’s progress toward completion of degree requirements.

9. Determine if a programmatic requirement has been met by the completion of an equivalent course taken at another institution.
ARTICLE VIII. MEETINGS

The Graduate Program Chair shall call at least one regular meeting of the Program each academic year and special meetings as deemed necessary or desirable by the Graduate Affairs Committee. Additional meetings can be called by petition of at least one quarter of the members. Members who are away from campus may participate via teleconference.

ARTICLE IX. QUORUM

A quorum for the purpose of modifying bylaws, establishing graduate program membership, or establishing graduate program policy must be voted on by 50+% of the eligible members and passage requires a 50+% supporting vote. Balloting will be done by a secure web-based voting system. At least seven calendar days will be allowed for expression of opinions about the proposal.

ARTICLE X. AMENDMENTS

These Bylaws may be amended by the approval of 50+% of all members voting, provided a quorum is established. Written notice of a proposed amendment shall be sent to each member of the Program at least ten calendar days prior to a meeting at which the amendment is to be proposed and discussed. All amendments and revisions will be submitted to Graduate Council for review and approval.