April 28, 2000

TO: MARK RASHID, Chair
    COE Graduate Study Committee

FROM: DAVID GILCHRIST, Chair
      Graduate Council

SUBJECT: Graduate Program in Mechanical and Aeronautical Engineering – Degree Requirements

At its meeting of March 10, 2000, Graduate Council considered and approved Mechanical and Aeronautical Engineering’s March 1, 2000 revised proposal for changes in graduate degree requirements, contingent on the Program Review Committee liaison’s concurrence. Council’s Educational Policy Committee recommended Council’s approval of the proposed changes. The reason for Council’s caveat was that the MAE graduate program is currently under review. For your information, I have enclosed a copy of the “Policy Regulating Programmatic Changes Submitted for Review by Graduate Council”.

Subsequently, Prof. Miguel Marino, the PRC liaison for the MAE review, examined the proposed changes to the degree requirements and in a memo dated April 3, 2000 reported that, “The proposed changes do not conflict with the recommendations of the Ad Hoc Committee Report of the MAE Program Review.” Therefore, there are no objections to the changes and they are considered approved as of March 10, 2000.

/lsw

Enclosure

cc: B. Ravani
    S. Fann
    C.P. van Dam

cc without enclosure:
    C. González
    J. Hedrick
    R. Kraft
Proposed Programs of Study

The Department of Mechanical and Aeronautical Engineering offers programs of study leading to the degrees M.S., M.E., Ph.D., and D.Engr.. In addition to the general degree requirements for the college, the Mechanical and Aeronautical Engineering department has some special requirements, as indicated in the following discussion.

Master's Degree Programs

Master of Science (Plan I). A minimum total of 36 units and a thesis are required. Of this total, 24 units of upper-division and graduate courses in engineering are required and at least 20 of these units must be earned in graduate engineering (200 series) courses, exclusive of seminar and research courses (290C and 299). Courses used to satisfy this requirement must be taken on a letter-grade basis. In addition to the 24 course-unit requirement, the department also requires two one-unit seminar courses. These courses may be taken in the same quarter, if the student so desires, and the same course may be taken twice during different quarters to meet the requirement. Seminar courses are offered by the individual groups and divisions and are numbered as MAE 295 and MAE 296. The 36-unit requirement must include at least eight units of thesis research (MAE 299). The remainder of the 36-unit requirement may be comprised of research units (MAE 299) and/or other course units.

Master of Science (Plan II). A minimum total of 36 units of course work (24 units of which must be graduate-level courses within the Department of Mechanical and Aeronautical Engineering, designated MAE) is required. Courses used to satisfy this requirement must be taken on a letter-grade basis. An examination is required. The examination may be oral or written and may take the form of a technical report presented to a faculty committee.

Master of Engineering. A minimum total of 36 units is required. Of this total, 24 units of upper-division and graduate courses in engineering are required and at least 20 of these units must be earned in graduate engineering (200 series) courses, exclusive of seminar and research courses (290C and 299). Courses used to satisfy this requirement must be taken on a letter-grade basis. In addition to the 24 course-unit requirement, the department also requires two one-unit seminar courses. These courses may be taken in the same quarter, if the student so desires, and the same course may be taken twice during different quarters to meet the requirement. Seminar courses are offered by the individual groups and divisions and are numbered as MAE 295 and MAE 296. The 36-unit requirement must also include at least eight units of design project (MAE 299); students submitting the master of
engineering report must follow the instructions for Preparing and Submitting Theses and Dissertations for Higher Degrees from Graduate Studies. The remainder of the 36-unit requirement may be comprised of research (MAE 299) units and/or other course units.

Doctoral Degree Programs

Doctor of Philosophy. Students who are enrolled in the Doctor of Philosophy degree program must take a preliminary examination, administered by the department, at the first offering after entering the program. This examination is part of an evaluation by the department to insure the student is ready to pursue a doctoral program.

An approved Program of Study includes a minimum of 48 units of coursework, of which at least 24 must be graduate level courses at UC Davis. At least 40 units must be earned in graduate level courses. Courses taken during a MS program can be part of the 48-unit total. The 48 units of required coursework are divided among a 24 unit major of mechanical or aeronautical engineering and two complementary minor areas at 12 units each, or a single 32-unit major can be chosen with one 16-unit minor. These units are exclusive of seminar and research units. A dissertation is required.

A student must make an oral presentation of the dissertation before receiving the degree. The department also requires three one-unit seminar courses. These courses may be taken in the same quarter, if the student so desires, and the same course may be taken three times during different quarters to meet the requirement. Seminar courses are offered by the individual groups and divisions and numbered as MAE 295 and MAE 296.

Doctor of Engineering. Students who are enrolled in the Doctor of Engineering degree program must take a preliminary examination, administered by the department, at the first offering after entering the program. This examination is part of an evaluation by the department to insure the student is ready to pursue a doctoral program.

An approved Program of Study includes a minimum of 48 units of coursework, of which at least 24 must be graduate level courses at UC Davis. At least 40 units must be earned in graduate level courses. Courses taken during a MS program can be part of the 48-unit total. The 48 units of required coursework are divided among a 24 unit major of mechanical or aeronautical engineering and two complementary minor areas at 12 units each, or a single 32-unit major can be chosen with one 16-unit minor. These units are exclusive of seminar and research units. An engineering dissertation is required.
A student must make an oral presentation of the dissertation before receiving the degree. The department also requires three one-unit seminar courses. These courses may be taken in the same quarter, if the student so desires, and the same course may be taken three times during different quarters to meet the requirement. Seminar courses are offered by the individual groups and divisions and numbered as MAE 295 and MAE 296.